

July 17, 2018

Honorable David J. Redl  
Assistant Secretary for Communications and Information and  
Administrator, National Telecommunications and Information Administration  
U.S. Department of Commerce  
Washington, DC 20230

Via email to [iipp2018@ntia.doc.gov](mailto:iipp2018@ntia.doc.gov)

RE: International Internet Policy Priorities [Docket No. 180124068–8068–01]

Dear Assistant Secretary Redl:

planet.ECO LLC dba (“.ECO®”) appreciates the opportunity afforded by the NTIA to comment and provide a small glimpse of information previously sent to, and dismissed by, the previous administration.

The mismanagement of IANA Functions Contract SA1301-12-CN-0035 has resulted in the mis-delegation of “.eco” followed by the wrongful IANA Functions Stewardship Transition that must be unwound.

In response to NOI Section II. D<sup>1</sup> .ECO® presents its understanding of the SA1301-12-CN-0035, root zone management and accountability followed by its response.

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<sup>1</sup> <https://www.ntia.doc.gov/files/ntia/publications/fr-rfc-international-internet-policy-priorities-06052018.pdf>



## Introduction

.ECO® is a United States small business<sup>2</sup> and the exclusive trademark owner of “.eco”<sup>3</sup>. .ECO® is also an interested and affected party of IANA Functions Contract SA1301-12-CN-0035 /Applicant # 1-1710-92415<sup>4</sup>, all in accordance with Clause C.1.3.

Since 2008, .ECO® has been offering services under the “.ECO” mark in the nature of website promotion and affiliate programs for selling over the Internet, so that customers can create income from such sites. Amongst other things, .ECO® also offered services under the mark “.ECO” related to domain name registrations, which can be located at:  
<http://www.ECODomainServices.com>.

.ECO® sought to naturally expand its business and trademark services<sup>5</sup> by participating in this Federal Requirement, applying to be delegated the “.eco” gTLD and providing Domain name registry services, per Clause C.2.9.2d<sup>6</sup>. .ECO® paid the required \$185,000 application fee, all in accordance with Clause B.2.

## IANA Functions Contract SA1301-12-CN-0035

On July 2, 2012, the U.S. Department of Commerce (DoC), National Telecommunications and Information Administration (NTIA) initiated a no-cost, non-appropriated Contract SA1301-12-CN-0035 to maintain the continuity and stability of IANA Functions, which included certain responsibilities associated with the Internet DNS and explicit approval authority over the root zone management<sup>7</sup>.

Contracting Officers<sup>8</sup> overseeing Contract SA1301-12-CN-0035, as with all Federal Contracts, were responsible for ensuring performance of all necessary

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<sup>2</sup> [SAM.GOV Registration for Planet.Eco LLC / 078467089 / 7CL99](https://sam.gov/record/078467089/7CL99)

<sup>3</sup> <https://drive.google.com/file/d/1KbQkFiZWA7Q8Vzym0wxsWpzNI0kBgIbl/view?usp=sharing>

<sup>4</sup> [https://www.ntia.doc.gov/files/ntia/publications/sf\\_26\\_pg\\_1-2-final\\_award\\_and\\_sacs.pdf](https://www.ntia.doc.gov/files/ntia/publications/sf_26_pg_1-2-final_award_and_sacs.pdf)

<sup>5</sup> See Trademark Manual of Examining Procedure (TMEP) §1207.01(a)(v).

<sup>6</sup> See Clause C.2.9.2d Delegation and Redelegation of a Generic Top Level Domain (gTLD), Page 8

<sup>7</sup> ICANN, VeriSign and the Department of Commerce have worked collaboratively to automate certain aspects of DNS root zone management. The new automated system, simplifies and expedites the process top-level domain name administrators must engage in to modify the information they maintain with ICANN.

<https://www.iana.org/help/rzm-system>

<sup>8</sup> [Contracting Officers](#) Correspondence with .ECO®



actions for effective contracting, ensuring compliance with the terms of the contract, and safeguarding the interests of the United States in its contractual relationships<sup>9</sup>. “The Contracting Officer is the only person authorized to make or approve any changes in any of the requirements of this contract”, all in accordance with Clause G1.

The IANA Functions Contract consisted of three (3) root zone management partners<sup>10</sup> who performed a series of checks and balances in the gTLD Delegation process to ensure Root Zone File Change Request, “*are reviewed several times by multiple parties, and ensured not to impact secure and stable Root Zone operation before implementation. The process also ensures accuracy for the changes by ensuring that TLD Managers review and positively confirm the correctness of the change, and confirming the accuracy of changes by using the DNS protocol to reconcile the proposed changes to the DNS Root Zone*”<sup>11</sup>

The administration approved the following root zone management process, incorporated into the Contract Clause 1.2.9.2(1), which reads:

**1.2.9.2(1) Facilitate and Coordinate Root Zone**

ICANN will use its established process, described below, that are well understood by the various parties involved in Root Zone Management in order to continue to facilitate and coordinate the root zone’s contents.

Using the language of the Solicitation, and in accordance with the existing process workflow, a TLD manager will submit a change request to the IANA Functions Operator (ICANN), which will then be processed and evaluated according to the type of change being requested. Once the various checks are satisfactorily conducted, the request will be transmitted to the Administrator, NTIA, for authorization. Following successful authorization, the Root Zone Maintainer, Verisign, will execute changes to the root zone file. Finally, ICANN as the IANA Functions Operator will implement the authorized changes to the WHOIS database and the request will be completed.

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<sup>9</sup> [FAR 1.602-2 Responsibilities.](#)

<sup>10</sup> The process flow for root zone management involves three roles that are performed by three different entities through two separate legal agreements: the Contractor as the IANA Functions Operator, NTIA as the Administrator, and VeriSign (or any successor entity as designated by the U.S. Department of Commerce) as articulated in Cooperative Agreement Amendment 11, as the Root Zone Maintainer, [per the IANA functions contract, p15.](#)

<sup>11</sup> [Clause - 1.2.9.2.a Root Zone File Change Request Management](#) - (IANA functions contract), p120.

Simplified below are 3 (Step 1, Step 8 and Step 10) of the 12 steps<sup>12</sup> required for processing a gTLD delegation:

1. ICANN now the former Government Contractor<sup>13</sup> (“Government Contractor”) acts as the IANA Functions Operator and accepts change request for those seeking gTLD delegation.

See Step 1 below:

| 1           | SUBMIT CHANGE REQUEST  |
|-------------|--|
| Description | A change request is submitted by requestor, typically through ICANN’s IANA Root Zone Management website.. ese requests will typically be lodged through ICANN’s IANA Root Zone Management website. The software used for processing standard root zone change requests is an existing system that was developed by ICANN and coordinates operations for updating the root zone with the Administrator and Root Zone Maintainer. Should a requestor not to use this |

2. NTIA/Department of Commerce Contracting Officer makes authorization for gTLD delegation.

See Step 8 below:

| 8           | AUTHORIZATION   |
|-------------|---|
| Description | Changes to the DNS Root Zone File, as well as changes to the DNS Root Zone WHOIS Database, are transmitted to the Administrator for authorization. Such changes cannot be enacted without explicit positive authorization from the Administrator. Once a request has passed review and is ready for transmittal to the Administrator for authorization, the system will instantiate a Change Request in the Root Zone Maintainer’s system using the EPP protocol. At this stage of the process, the Root Zone Maintainer’s system will hold the request as pending until it receives proper authorization from the Administrator. |

3. VeriSign acts as the Root Zone Maintainer (per the Cooperative Agreement with VeriSign) – makes update to the root zone file, inserting, deleting or modifying gTLDs.

See Step 10 below:

| 10          | ROOT ZONE FILE CHANGE  |
|-------------|--|
| Description | Root Zone File changes are implemented by the Root Zone Maintainer following authorization by the Administrator. |

<sup>12</sup> Figure 1.2-39. Top-Level Root Zone Change **12 Step-by-Step Description** - (IANA functions contract) [https://www.ntia.doc.gov/files/ntia/publications/icann\\_volume\\_i\\_elecsub\\_part\\_1\\_of\\_3.pdf](https://www.ntia.doc.gov/files/ntia/publications/icann_volume_i_elecsub_part_1_of_3.pdf), p113

<sup>13</sup> Note: On October 21, 2016 the IANA Function Contract was officially Closed-Out. Making ICANN a former Government Contractor. <https://www.ntia.doc.gov/files/ntia/publications/sa1301-12-cn-0035001-10212016.pdf>

## Multistakeholder Approach to Internet Governance - Question – II. D1:

### **Should the IANA Stewardship Transition be unwound?**

YES. *“Without a correctly functioning Root Zone, the ongoing stability of the Domain Name System is compromised”*.<sup>14</sup> Such compromises may lead to vulnerabilities, not limited to various Critical Infrastructures of the United States that may impact its security and safety.

### **If yes, WHY?**

.ECO® strongly believes the IANA Transition should be unwound due to actions and/or inactions of the previous administration and previous DoC Contracting Officers<sup>15</sup> and their mutual failure to properly oversee the performance of Contract SA1301-12-CN-0035 and allowing improper root zone management. The previous administration willfully allowed Government Contractor to perform the contract as if it were already transitioned and allowed Government Contractor to fail complying with its contract and US Laws. In its performance, Government Contractor has already shown that it will not follow United States federal procurement and trademark rules, laws, or regulations.

The rush for the transition of root zone management and other IANA Functions to Government Contractor is troublesome due to the previous administration ignoring reported accountability, mechanism and transparency issues. .ECO® has firsthand experience of disparate treatment received from Government Contractor, who was allowed to perform the IANA Functions Contract while creating unfair competitive advantages for the benefit of its former Government Contractor Board Members, Key Executives and multi-stakeholder members, applying for the “.eco” gTLD, hereinafter (“.eco conflicted contender companies”).

Throughout the performance of Contract SA1301-12-CN-0035, .ECO® filed repeated complaints with the previous administration via the DoC/NTIA<sup>16</sup>

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<sup>14</sup> Clause - 1.2.9.2.a Root Zone File Change Request Management - (IANA functions contract) [https://www.ntia.doc.gov/files/ntia/publications/icann\\_volume\\_i\\_elecsub\\_part\\_1\\_of\\_3.pdf](https://www.ntia.doc.gov/files/ntia/publications/icann_volume_i_elecsub_part_1_of_3.pdf), p120

<sup>15</sup> 1352.201-70 Contracting Officer's Authority - The Contracting Officer is the only person authorized to make or approve any changes in any of the requirements of this contract, and, notwithstanding any provisions contained elsewhere in this contract, the said authority remains solely in the Contracting Officer. In the event the contractor makes any changes at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract terms and conditions, including price.

<sup>16</sup> [.ECO Agency Communications](#)

and other agencies, including complaints of conflicts of interest and trademark infringement. Instead of receiving assistance, .ECO® was misguided and given non-responsive answers, leaving the complaints unresolved. The actions and/or inactions of the agencies under the previous administration led to the interference of .ECO®'s freedom to operate, advertise, expand its business and trademark, which continues to cause irreparable harm to .ECO®.

The Contracting Officers failed to safeguard the interests of the United States, failed to investigate repeated complaints filed by .ECO®, and failed to ensure the Government Contractor would comply with all contractual terms.

The allowed mismanagement of the Contract by the Government Contractor allowed a contract closeout which appears to be contrary to federal procurement law. The IANA Functions Transition, based upon our experience, brings increased threats to economic growth, innovation and Critical Infrastructure.

As it pertains to improper root zone management, Conflicts of Interest played a role in the issuance of more than 20% of all gTLD awards were collectively designated to the three (3) .eco conflicted contender companies, all competing for “.eco”. These conflicted companies and members created gTLD policies and procedures and thus had advance, “inside” knowledge of the application processes their gTLD competitors did not possess. Moreover, it has been reported that all Community Priority gTLD awards<sup>17</sup> were made only to conflicted contender companies.

This is in contradiction to the following Code of Federal Regulation which should have applied:

*“Government business shall be conducted in a manner above reproach and, except as authorized by statute or regulation, with complete impartiality and with preferential treatment for none. Transactions relating to the expenditure of public funds require the highest degree of public trust and an impeccable standard of conduct. The general rule is to avoid strictly any conflict of interest or even the appearance of a conflict of interest in Government-contractor relationships. While many Federal laws and regulations place restrictions on the actions of Government personnel, their official conduct must, in addition, be such that they would have no reluctance to make a full public disclosure of their actions.” - 48 CFR 3.101-1<sup>18</sup>*

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<sup>17</sup> [Dot Registry CEO vs ICANN](#)

<sup>18</sup> 1.602-2 -- Responsibilities. - <http://farsite.hill.af.mil/reghtml/regsfar2afmcfars/fardfars/far/01.htm>

The IANA Functions Contract page<sup>19</sup> reveals that only one Contracting Officer, during the performance of Contract SA1301-12-CN-0035, attempted to correct one error to safeguard the public by replacing three (3) Key Personnel, which included the "Conflict of Interest Officer"<sup>20</sup>, all in accordance with Clause H.B, KEY PERSONNEL (CAR 1352.237-75). This action alone, however, did nothing to mitigate existing conflicts .ECO® reported to the Contractor Officer.

The term "allowed", used in this document, should not be misconstrued to equate with "authorized", particularly when Critical Infrastructures of the US are involved and the IANA Functions Contract Page does not show any amendments supporting such allowances.

The Government Contractor was allowed to violate repeated clauses incorporated into Contract SA1301-12-CN-0035.

After the IANA Functions Transition was announced in 2014, the allowed improprieties increased. More complaints to the previous administration were filed. The administration knew or should have known that Government Contractor was:

- *known, and repeatedly reported by .ECO® for having conflicts of interest and accountability issues<sup>21</sup>, yet was still allowed the transition of IANA Functions Stewardship.*
- *allowed but not contractually "authorized" to perform outside of its contractual scope.*
- *allowed to breach Contract SA1301-12-CN-0035.*
- *allowed to improperly award delegation of ".eco" to Former Government Contractor Key Executive Jacob Malthouse, co-founder of Big Room Inc, without the proper warrant of a Contracting Officer.*
- *allowed to usurp United States Trademark Law by inappropriately designating TLD Manager applicant.*
- *allowed, via 2014 TMEP trademark rule 1215.02(d)(iii)<sup>22</sup> to be considered in the issuances of trademarks. Government Contractor, a non-governmental entity did not have the warranted authority to delegate gTLD applicants and was unable to determine final gTLD delegation.*

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<sup>19</sup> <https://www.ntia.doc.gov/page/iana-functions-purchase-order>

<sup>20</sup> [https://www.ntia.doc.gov/files/ntia/publications/iana\\_mod\\_m0005\\_key\\_pers\\_change\\_corrected.pdf](https://www.ntia.doc.gov/files/ntia/publications/iana_mod_m0005_key_pers_change_corrected.pdf)

<sup>21</sup> 15 U.S. Code § 657 - Oversight of Regulatory Enforcement assistance request - SBA [ONO](#)

<sup>22</sup> [1215.02\(d\)\(iii\) Registry Agreement/ICANN Contract](#)

.ECO® has sought assistance from the SBA regarding Conflict of Interest involving the 3 conflicted contender companies, created to capitalize from their unfair competitive advantages, that submitted competing gTLD applications for .ECO®'s application for the “.eco” TLD.<sup>23</sup> No action was taken.

.ECO® repeatedly raised significant concerns, including those related to improper root zone management to the administration. Letters were sent to former Madam Secretary Penny Pritzker, former Assistant Secretary Lawrence Strickling and Director of Acquisitions Barry Berkowitz.<sup>24 25 26 27 28 29</sup>

Via the Clause I.35, FAR 52.233-1 DISPUTES a dispute was also filed.<sup>30 31</sup> .ECO® never received a Contracting Officer's Final Decision.

Rather than further investigating .ECO®'s complaints about the Contracting Officer's administration or lack thereof, pertaining to Contract SA1301-12-CN-0035, Assistant Secretary Strickling dismissed .ECO®'s complaints and referred .ECO® back to the improperly performing Government Contractor, stating, *“None of your claims has merit ... I suggest, as my staff has previously advised you, that .ECO® contract ICANN's (the Government Contractor) Ombudsman”*.<sup>32</sup>

In August 2016 Contracting Officer authorized award delegation of the “.eco” gTLD, based off an Environmental Community Priority Mechanism. This mechanism is unknown in FAR and was not created by the Federal Government. Rather, this mechanism is a rule Big Room co-created with Government Contractor and began applying for since 2007.<sup>33</sup> Government Contractor or other stakeholders which confers preferential treatment to only insider applicants and conflicted contender companies, in the case of “.eco”, usurped US trademark law. In 2007 Big Room Inc.'s co-founder was an Executive working for the Government Contractor, while concurrently applying for its so-called Priority – 5 (five) years ahead of the Contract SA1301-12-CN-0035 and the gTLD application

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<sup>23</sup> [DoC/ONO](#)

<sup>24</sup> [Request for Assistance with Personnel Compliance in IANA Contract # SA1301-12-CN-0035...](#)

<sup>25</sup> [Re: Request for Response to letter sent August 31, 2015](#)

<sup>26</sup> [Can you please assist and direct us to the proper Contracting Officer, as it relates to SA1301-12-CN-0035?](#)

<sup>27</sup> [Re: Error in New gTLD Program String Delegation Readiness Report.docx Contract # SA1301-12-CN-0035](#)

<sup>28</sup> [Where is the CO Madam Secretary?](#)

<sup>29</sup> [From Director of Acquisition – Your new CO is Ajayi Akinsola](#)

<sup>30</sup> [Dispute Email](#)

<sup>31</sup> [Dispute Letter to Agency](#)

<sup>32</sup> [Response from NTIA/DoC](#)

<sup>33</sup> [2007-11-01 Big Room & The Environmental Community Priority](#)

window opening.<sup>34</sup> Moreover, the Community Priority Mechanism was not officially completed by Government contractor until September 27, 2013<sup>35</sup> and the EIU did not complete its corresponding policy and procedures until August 7, 2014.<sup>36</sup>

On December 7, 2016 after the administration allowed the mis-delegation and root zone file change of “.eco”, on October 1, 2016 Assistant Secretary Strickling announced the Completion of the IANA Functions Contract and its transition to Government Contractor<sup>37</sup>.

## And HOW?

.ECO®, suggests this administration investigate and review the correspondences and claims it has made to the previous administration and NTIA, since January 2014, and hopes to contribute to its decision on how and what proper measures to take to unwind the transition, as full contractual compliance from Government Contractor was not met. Thereafter, US Government may decide if it should retender and compete a new procurement to prospective entities that will comply with all US laws and Federal Procurement regulations.

## Conclusion

It is worthy to note that Domain name registry services are identical and/or highly related to the services expressly covered by (.eco®; Registration No. 3,716,170) for “Domain Name Related Services.”<sup>38</sup>

Every year since the issuance of the trademark, .ECO® has been allowed to be interfered<sup>39</sup> with and attacked by .eco conflicted contender companies, seeking rights to “.eco” for Domain name registry services. 2 (two) of the conflicted contender companies failed 3 (three) applications for U.S. “.ECO”

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<sup>34</sup> <http://www.bigroom.ca/team/index.htm> and [Big Room Index page May 7, 2008](#)

<sup>35</sup> [Community Priority Evaluation \(CPE\) Guidelines – by The Economist Intelligence Unit](#)

<sup>36</sup> [COMMUNITY PRIORITY EVALUATION PANEL AND ITS PROCESSES](#)

<sup>37</sup> [2016-12-07 Asst. Sec. Strickling and the IANA Functions Contract](#)

<sup>38</sup> See U.S. Trademark Application Serial No. 77,523,015 doc.10 (filed July 15, 2008) (stating that Registrant’s ‘.eco’ mark encompasses “domain name related services”). Registrant’s ‘.eco’ mark also comprises “any goods or services in the registrant’s normal fields of expansion.” See *id.*; see Trademark Manual of Examining Procedure (TMEP) §1207.01(a)(v).

<sup>39</sup> <http://tsdr.uspto.gov/documentviewer?caseld=sn87423036&docId=SUL20180207165754#docIndex=2&page=1>



trademark rights<sup>40 41 42</sup> and subjected .ECO® to 6 (six) frivolous trademark attempts for litigation that have been allowed to be filed in TTAB by .eco conflicted contender companies. All attempts to cancel or oppose .ECO® registration and subsequent applications, have failed. All cases have resulting in withdrawals<sup>43 44 45</sup>, .ECO® being granted Motion to Dismiss<sup>46</sup>, or Dismiss with Prejudice<sup>47</sup>. The most recent pending opposition filing is the only exception, in which the tribunal struck four out of five claims asserted by Big Room Inc and a motion to dismiss awaits final judgement<sup>48</sup>.

Government Contractor was allowed to abuse its authority and did so by designating hundreds of gTLD award delegations to 3 .eco conflicted contender companies despite the determinations made by the United States Patent and Trademark Office. Preferred insiders that assisted in co-creating gTLD policies and procedures, ignoring the interests of .ECO® and ignored laws rules and regulations pertaining to Federal Procurement and Trademarks were rewarded for their participation.

Arbitrarily being allowed to exclude .ECO® from having its equal opportunity to participate in Internet activity is simply not a multi-stakeholder approach that can be sustainable and serves as a strong indicator of what to expect in the future.

Can the United States Government trust that long-term accountability and transparency issues involving root zone management and Internet Governance can and will simply auto-correct?

Root zone management impacts: Critical Infrastructures, The Internet of Things and Industrially Significant Technologies; all of which our county has and will continue to become more reliant upon.

The previous administration was well aware of unresolved accountability structures and mechanisms issues prior to the Contract Closeout. Therefore, the

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<sup>40</sup> [Dead .ECO TM 1 Application](#)

<sup>41</sup> [Dead .ECO TM 2 Application](#)

<sup>42</sup> [Dead .ECO TM 3 Application](#)

<sup>43</sup> Withdrawn TTAB Proceeding1 92055197 <http://ttabvue.uspto.gov/ttabvue/v?pno=92055197&pty=CAN&eno=10>

<sup>44</sup> Withdrawn TTAB Proceeding2 92055469 <http://ttabvue.uspto.gov/ttabvue/v?pno=92055469&pty=CAN&eno=12>

<sup>45</sup> Withdrawn TTAB Proceeding3 92060403 <http://ttabvue.uspto.gov/ttabvue/v?pno=92060403&pty=CAN&eno=17>

<sup>46</sup> Motion to Dismiss Granted 92060403 <http://ttabvue.uspto.gov/ttabvue/v?pno=92060403&pty=CAN&eno=17>

<sup>47</sup> [.ECO® Motion to Dismiss with Prejudice Granted 92051924](#)

<sup>48</sup> [Motion to Dismiss with prejudice for Failure to State a Claim Pending TTAB Proceeding 91231750](#)

actions and/or inactions of the previous administration, allowing the IANA Functions Stewardship Transition to proceed is, disturbing. This action is tantamount to the Government Contractor wrongfully being entrusted with the *unbridled discretion* to perform more improper root zone management, in its own interest and the interest of conflicted cohorts, indefinitely.

In light of the foregoing .ECO® reaffirms, in the interests of the United States Government, the performance of the IANA Functions, accountability, transparency and stewardship must remain above reproach.<sup>49</sup> Accordingly, the premature IANA Functions Stewardship Transition must be unwound from Government Contractor.

Sincerely,

/Jean D. William/

Jean D. William  
CEO/Co-Founder

/Willie Moses Boone/

Willie Moses Boone  
President/Co-Founder

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<sup>49</sup> "Government business shall be conducted in a manner above reproach and, except as authorized by statute or regulation, with complete impartiality and with preferential treatment for none..." - 48 CFR 3.101-1

Table 15 above details the number of individuals that could be exposed to received noise levels that could cause TTS or Level B harassment for the work at the project site relative to the total stock abundance. The numbers of animals authorized to be taken for all species will be considered small relative to the relevant stocks or populations even if each estimated instance of take occurred to a new individual. The total percent of the population (if each instance was a separate individual) for which take is requested is less than eight percent for all stocks (Table 15). Based on the analysis contained herein of the activity (including the mitigation and monitoring measures) and the anticipated take of marine mammals, NMFS finds that small numbers of marine mammals will be taken relative to the population size of the affected species or stocks.

#### Unmitigable Adverse Impact Analysis and Determination

There are no relevant subsistence uses of the affected marine mammal stocks or species implicated by this action. Therefore, NMFS has determined that the total taking of affected species or stocks will not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence purposes.

#### Endangered Species Act (ESA)

Section 7(a)(2) of the Endangered Species Act of 1973 (ESA: 16 U.S.C. 1531 *et seq.*) requires that each Federal agency insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. To ensure ESA compliance for the issuance of IHAs, NMFS consults internally, in this case with the West Coast Region Protected Resources Division Office, whenever we propose to authorize take for endangered or threatened species.

No incidental take of ESA-listed species is authorized or expected to result from this activity. Therefore, NMFS has determined that consultation under Section 7 of the ESA is not required for this action.

#### Authorization

NMFS has issued an IHA to Caltrans for the harassment of small numbers of marine mammals incidental to the dismantling and reuse of the original East Span of the San Francisco–Oakland Bay Bridge in the San Francisco Bay provided the previously mentioned

mitigation, monitoring, and reporting requirements.

Dated: May 31, 2018.

**Donna S. Wieting,**

*Director, Office of Protected Resources,  
National Marine Fisheries Service.*

[FR Doc. 2018–12043 Filed 6–4–18; 8:45 am]

**BILLING CODE 3510–22–P**

## DEPARTMENT OF COMMERCE

### National Telecommunications and Information Administration

[Docket No. 180124068–8068–01]

RIN 0660–XC041

#### International Internet Policy Priorities

**AGENCY:** National Telecommunications and Information Administration, U.S. Department of Commerce.

**ACTION:** Notice of inquiry.

**SUMMARY:** Recognizing the vital importance of the internet and digital communications to U.S. innovation, prosperity, education, and civic and cultural life, the National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce has made it a top priority to encourage growth and innovation for the internet and internet-enabled economy. Towards that end, NTIA is seeking comments and recommendations from all interested stakeholders on its international internet policy priorities for 2018 and beyond. These comments will help inform NTIA to identify priority issues and help NTIA effectively leverage its resources and expertise to address those issues.

**DATES:** Comments are due on or before 5 p.m. Eastern Time on July 2, 2018.

**ADDRESSES:** Written comments may be submitted by email to [iipp2018@ntia.doc.gov](mailto:iipp2018@ntia.doc.gov). Comments submitted by email should be machine-readable and should not be copy-protected. Written comments also may be submitted by mail to the National Telecommunications and Information Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Room 4725, Attn: Fiona Alexander, Washington, DC 20230.

#### FOR FURTHER INFORMATION CONTACT:

Fiona Alexander, National Telecommunications and Information Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Room 4706, Washington, DC 20230; telephone (202) 482–1866; email [falexander@ntia.doc.gov](mailto:falexander@ntia.doc.gov). Please direct media inquiries to NTIA's Office of

Public Affairs, (202) 482–7002, or at [press@ntia.doc.gov](mailto:press@ntia.doc.gov).

#### SUPPLEMENTARY INFORMATION:

*Background:* Within the U.S. Department of Commerce, the National Telecommunications and Information Administration (NTIA) is the Executive Branch agency responsible for advising the President on telecommunications and information policy.<sup>1</sup> NTIA was established in 1978 in response to the growing national consensus that “telecommunications and information are vital to the public welfare, national security, and competitiveness of the United States,” and that, “rapid technological advances being made in the telecommunications and information fields make it imperative that the United States maintain effective national and international policies and programs capable of taking advantage of continued advancements.”<sup>2</sup>

In the 40 years since its inception, NTIA has made growth and innovation in communications technologies—most recently internet communications—a cornerstone of its mission. The Administration's 2017 National Security Strategy reaffirmed that “[t]he flow of data and an open, interoperable internet are inseparable from the success of the U.S. economy,” and stated unequivocally that, “the United States will advocate for open, interoperable communications, with minimal barriers to the global exchange of information and services.”<sup>3</sup>

*NTIA's Office of International Affairs:* The Office of International Affairs (OIA) leads NTIA's overseas work. It plays a central role in the formulation of the U.S. Government's international information and communications technology policies, particularly with respect to the internet and the internet-enabled economy. OIA's diverse policymaking efforts include protecting and promoting an open and interoperable internet, advocating for the free flow of information, and strengthening the global marketplace for American digital products and services.

OIA advances these and related priorities at such global venues as the International Telecommunication Union (ITU), the internet Governance Forum (IGF), the Asia-Pacific Economic Cooperation (APEC) forum, the Organization of American States (OAS) the Organization for Economic Cooperation and Development (OECD),

<sup>1</sup> 47 U.S.C. 902(b)(2)(D).

<sup>2</sup> 47 U.S.C. 901(b)(1–6).

<sup>3</sup> Executive Office of the President, *The National Security Strategy of the United States of America* (Dec. 2017), <https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf>.

the G7 and G20 forums, as well as through international trade negotiations and bilateral and multilateral dialogues. In addition, OIA leads NTIA's role as the expert Executive Branch agency responsible for issues related to the internet's Domain Name System (DNS). In this regard, OIA oversees legal agreements related to the management of the .us and .edu top-level domain names, and represents the U.S. Government in its interactions with the internet Corporation for Assigned Names and Numbers (ICANN), the not-for-profit corporation that coordinates the DNS, including serving as the official U.S. representative to the Governmental Advisory Committee (GAC).<sup>4</sup>

Through this Notice, NTIA is soliciting comments and recommendations from stakeholders on its international internet policy priorities. These comments will help NTIA and the U.S. Government identify the most important issues facing the internet globally. They will also help NTIA leverage its resources and policy expertise most effectively to respond to stakeholders' priorities and interests. Comments are welcomed from all interested stakeholders—including the private sector, the technical community, academia, government, civil society, and interested individuals.

For the purposes of this notice of inquiry, OIA has organized questions into four broad categories: (1) The free flow of information and jurisdiction; (2) the multistakeholder approach to internet governance; (3) privacy and security; and (4) emerging technologies and trends. NTIA seeks public input on any and/or all of these four categories.

*The Free Flow of Information and Jurisdiction:* NTIA tracks and responds to global developments pertaining to free flow of information and internet-related jurisdictional issues. The free flow of information is critical not only to the protection of free speech online, but to the continued growth of the global economy. Certain governments, however, are increasingly imposing restrictions on the free movement of data. These restrictions may be put in place for legitimate reasons—such as concerns about privacy, taxation, and law enforcement access to data—but they are often undertaken for far less valid reasons, such as domestic surveillance and protectionism. In either case, restrictions on the free flow of information are jeopardizing the economic, social, and educational opportunities provided by the internet.

<sup>4</sup> More information about ICANN and the GAC are available on ICANN's website at [www.icann.org](http://www.icann.org).

Perhaps even more importantly, the free flow of information on the internet enables basic human rights, such as the freedom of expression. Yet here there is similarly an emerging trend of repressive governments restricting access to information that they deem to be politically or socially objectionable. This is pursued through various means, such as by blocking certain applications, impeding the use of Virtual Private Networks (VPNs), or through the total shutdown of internet communications within national territories. These actions often violate internet users' rights to freedom of expression, association, and peaceful assembly.

Relatedly, there is an emerging trend of national courts issuing judgments on internet-related court cases that risk forcing American companies to globally remove information hosted online. Problematically, what may be censored information in one country could be protected speech in other countries, including the United States. Such jurisdictional disputes illustrate the tension between a global, borderless internet and national sovereignty. NTIA is seeking input from all stakeholders on potential responses to these, and related, jurisdictional challenges.

*Multistakeholder Approach to internet Governance:* NTIA has strongly advocated for the multistakeholder approach to internet governance and policy development. NTIA's advocacy of the multistakeholder approach is reflected in its support of organizations and forums utilizing the approach, including ICANN, the Internet Engineering Task Force (IETF), Regional Internet Registries (RIRs), the IGF, and others. In addition to these bodies and forums, NTIA strives to build support for the approach within multilateral institutions, such as the ITU, and through bilateral engagement.

One of NTIA's primary initiatives in the area of multistakeholder internet governance was the privatization of the management of the DNS. This was completed in October 2016 when the contract between NTIA and ICANN for the performance of the Internet Assigned Names and Numbers (IANA) functions expired.<sup>5</sup> NTIA seeks public input from all stakeholders on what U.S. priorities should be now within ICANN and broader DNS policy.

Another area of emphasis for NTIA has been the promotion of the IGF, which serves as a global platform for multistakeholder dialogues on internet-

<sup>5</sup> The IANA functions include the coordination and allocation of domain names, internet protocol and autonomous system numbers, and other internet protocol resources.

related public policy issues. Unlike other United Nations processes, the IGF program is organized by the multistakeholder community, not by governments alone. NTIA has been involved in the IGF since its inception, having served as a lead negotiator at the UN World Summit on the Information Society (WSIS), as well as serving a member of the IGF Multistakeholder Advisory Group and its intercessional work.<sup>6</sup> NTIA seeks public input from all stakeholders on opportunities for IGF improvement.

*Privacy and Security:* NTIA, as an agency within the U.S. Department of Commerce, approaches cybersecurity from a commercial perspective. This means that NTIA's policy work is grounded in the belief that cybersecurity risks should be viewed not exclusively as a national security threat, but as a threat to economic growth and innovation. As the 2017 National Security Strategy notes, a "strong, defensible cyber infrastructure fosters economic growth, protects our liberties, and advances our national security."<sup>7</sup> Internationally, OIA approaches cybersecurity with an understanding that the cyber threat is a global problem that requires international coordination. Accordingly, OIA has worked within the OECD, APEC, the IGF, and elsewhere, to promote strong, industry-led cybersecurity risk-management practices.<sup>8</sup>

In the area of privacy and data protection, NTIA has worked overseas to advocate for smart and non-discriminatory privacy rules. While different countries are going to take different approaches to protecting citizens' privacy, NTIA argues that these differences need not impede global commerce. NTIA works with colleagues from the International Trade Administration (ITA) and the Federal Trade Commission (FTC) to advance interoperable privacy regimes and mechanisms, such as the APEC Cross-

<sup>6</sup> The IGF organizes various types of Intercessional Work during the year, the outputs from which are discussed during the event. Best Practice Forums, Dynamic Coalitions, and National and Regional Initiatives, amongst other efforts, constitute the IGF's Intercessional Work. Further information is available at: <https://intgovforum.org/multilingual/content/intercessional-work>.

<sup>7</sup> 2017 National Security Strategy, supra n. 4.

<sup>8</sup> For example, at the IGF2017, OIA engaged in an Open Forum session on cybersecurity and multistakeholder processes. The transcript and video from this meeting is available at <https://www.intgovforum.org/multilingual/content/igf-2017-day-3-room-ix-of70-cybersecurity-20-leveraging-the-multistakeholder-model-to>.

Border Rules (CBPRs) and the E.U.-U.S. Privacy Shield Arrangement.<sup>9</sup>

*Emerging Technologies and Trends:* NTIA also advocates for policies that enable entrepreneurs and innovators to take risks and to find global markets for new digital products and services. This advocacy often draws NTIA into discussions about access to broadband internet service, digital literacy, intellectual property, and technological standardization. Over the last decade, these discussions have intensified, as many countries have invested greater resources into developing national innovation strategies, and have increasingly brought those ideas into international forums, such as APEC and the OECD. Over the coming years, these discussions will increasingly focus on issues such as the economic and social impacts of artificial intelligence, the workforce changes brought on by automation and new internet-enabled business models, and the growth of blockchain applications, to name a few. NTIA welcomes comments on how OIA should participate in international discussions of these issues, as well as other issues related to emerging technologies and trends.

#### Request for Comments

*Instructions for Commenters:* NTIA invites comments on the full range of questions presented by this Notice, including issues that are not specifically raised. Commenters are encouraged to address any or all of the following questions. Comments that contain references to specific court cases, studies, and/or research should include copies of the referenced materials with the submitted comments. Commenters should include the name of the person or organization filing the comment, as well as a page number on each page of their submissions. All comments received are a part of the public record and will generally be posted on the NTIA website, <http://www.ntia.doc.gov/>, without change. All personal identifying information (for example, name or address) voluntarily submitted by the commenter may be publicly accessible. Do not submit confidential business information or otherwise sensitive or protected information.

<sup>9</sup> See Department of Commerce, *Fact Sheet: Overview of the EU-U.S. Privacy Shield Framework* (Feb. 29, 2106), <https://www.commerce.gov/news/fact-sheets/2016/02/fact-sheet-overview-eu-us-privacy-shield-framework>; see also Department of Commerce, Press Release, *Joint Press Statement from Secretary Ross and Commissioner Jourova on the Privacy Shield Review* (Sept. 20, 2017), <https://www.commerce.gov/news/press-releases/2017/09/joint-press-statement-secretary-ross-and-commissioner-jourova-privacy>.

#### I. The Free Flow of Information and Jurisdiction

A. What are the challenges to the free flow of information online?

B. Which foreign laws and policies restrict the free flow of information online? What is the impact on U.S. companies and users in general?

C. Have courts in other countries issued internet-related judgments that apply national laws to the global internet? What have been the practical effects on U.S. companies of such judgements? What have the effects been on users?

D. What are the challenges to freedom of expression online?

E. What should be the role of all stakeholders globally—governments, companies, technical experts, civil society and end users—in ensuring free expression online?

F. What role can NTIA play in helping to reduce restrictions on the free flow of information over the internet and ensuring free expression online?

G. In which international organizations or venues might NTIA most effectively advocate for the free flow of information and freedom of expression? What specific actions should NTIA and the U.S. Government take?

H. How might NTIA better assist with jurisdictional challenges on the internet?

#### II. Multistakeholder Approach to Internet Governance

A. Does the multistakeholder approach continue to support an environment for the internet to grow and thrive? If so, why? If not, why not?

B. Are there public policy areas in which the multistakeholder approach works best? If yes, what are those areas and why? Are there areas in which the multistakeholder approach does not work effectively? If there are, what are those areas and why?

C. Are the existing accountability structures within multistakeholder internet governance sufficient? If not, why not? What improvements can be made?

D. Should the IANA Stewardship Transition be unwound? If yes, why and how? If not, why not?

E. What should be NTIA's priorities within ICANN and the GAC?

F. Are there any other DNS related activities NTIA should pursue? If yes, please describe.

G. Are there barriers to engagement at the IGF? If so, how can we lower these barriers?

H. Are there improvements that can be made to the IGF's structure,

organization, planning processes, or intercessional work programs? If so, what are they?

I. What, if any, action can NTIA take to help raise awareness about the IGF and foster stakeholder engagement?

J. What role should multilateral organizations play in internet governance?

#### III. Privacy and Security

A. In what ways are cybersecurity threats harming international commerce? In what ways are responses to those threats harming international commerce?

B. Which international venues are the most appropriate to address questions of digital privacy? What privacy issues should NTIA prioritize in those international venues?

#### IV. Emerging Technologies and Trends

A. What emerging technologies and trends should be the focus of international policy discussions? Please provide specific examples.

B. In which international venues should conversations about emerging technology and trends take place? Which international venues are the most effective? Which are the least effective?

C. What are the current best practices for promoting innovation and investment for emerging technologies? Are these best practices universal, or are they dependent upon a country's level of economic development? How should NTIA promote these best practices?

For any response, commenters may wish to consider describing specific goals and actions that NTIA, the Department, or the U.S. Government in general, might take (on its own or in conjunction with the private sector) to achieve those goals; the benefits and costs associated with the action; whether the proposal is agency-specific or interagency; the rationale and evidence to support it; and the roles of other stakeholders.

Dated: May 31, 2018.

**David J. Redl,**

*Assistant Secretary for Communications and Information.*

[FR Doc. 2018–12075 Filed 6–4–18; 8:45 am]

**BILLING CODE 3510–60–P**

#### CONSUMER PRODUCT SAFETY COMMISSION

[Docket No. CPSC–2018–0006]

#### Draft Guidelines for Determining Age Appropriateness of Toys; Notice of Extension of Comment Period

**AGENCY:** U.S. Consumer Product Safety Commission.

**ALERT - June 11, 2018:** Entities registering in SAM must submit a [notarized letter](#) appointing their authorized Entity Administrator. Read our [updated FAQs](#) to learn more about [changes to the notarized letter review process and other system improvements coming in June.](#)

## Entity Dashboard

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Planet.Eco LLC  
DUNS: 078467089 CAGE Code: 7CL99  
Status: Active  
Expiration Date: 08/31/2018  
Purpose of Registration: All Awards

45 W North St  
Stamford, CT, 06902-2218 ,  
UNITED STATES

### Entity Overview

#### Entity Registration Summary

Name: Planet.Eco LLC  
Doing Business As: .ECO  
Business Type: Business or Organization  
Last Updated By: Jean William  
Registration Status: Active  
Activation Date: 08/31/2017  
Expiration Date: 08/31/2018

#### Exclusion Summary

Active Exclusion Records? No



IBM v1.P.14.20180629-1105  
WWW4

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**From:** TMOOfficialNotices@USPTO.GOV  
**Sent:** Monday, August 10, 2015 11:00 PM  
**To:** mosesboone@planetdoteco.com  
**Cc:** jeanwilliam@planetdoteco.com ; mosesboone@thedoteco.com  
**Subject:** Official USPTO Notice of Acknowledgement Section 15: U.S. Trademark RN 3716170: .ECO

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**U.S. Registration Number:** 3716170  
**U.S. Registration Date:** Nov 24, 2009  
**Mark:** .ECO  
**Owner:** Planet.eco, LLC

**U.S. Serial Number:** 77452991

Aug 10, 2015

## NOTICE OF ACKNOWLEDGEMENT UNDER SECTION 15

The declaration of incontestability filed for the above-identified registration meets the requirements of Section 15 of the Trademark Act, 15 U.S.C. §1065. **The Section 15 declaration is acknowledged.**

TRADEMARK SPECIALIST  
POST-REGISTRATION DIVISION  
571-272-9500

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### REQUIREMENTS FOR MAINTAINING A FEDERAL TRADEMARK REGISTRATION

**WARNING: Your registration will be canceled if you do not file the documents below during the specified time periods.**

#### Requirements in the First Ten Years

##### What and When to File:

**First Filing Deadline:** You must file a declaration of use (or excusable nonuse) between the 5th and 6th years after the registration date. See 15 U.S.C. §§1058, 1141k. If the declaration is accepted, the registration will continue in force for the remainder of the ten-year period, calculated from the registration date, unless canceled by an order of the Commissioner for Trademarks or a Federal Court.

**Second Filing Deadline:** You must file a declaration of use (or excusable nonuse) **and** an application for renewal between the 9th and 10th years after the registration date.\* See 15 U.S.C. §§1058, 1059.

#### Requirements in Successive Ten-Year Periods

**What and When to File:** You must file a declaration of use (or excusable nonuse) **and** an application for renewal between every 9th and 10th-year period, calculated from the registration date.\* See 15 U.S.C. §§1058, 1059.

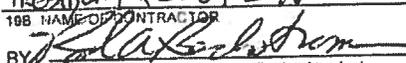
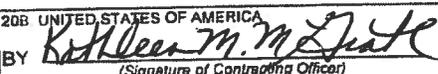
#### Grace Period Filings

The above documents will be considered as timely if filed within six months after the deadlines listed above with the payment of an additional fee.

**\*ATTENTION MADRID PROTOCOL REGISTRANTS:** The holder of an international registration with an extension of protection to the United States under the Madrid Protocol must timely file the declarations of use (or excusable nonuse) referenced above directly with the USPTO. The time periods for filing are based on the U.S. registration date (not the international registration date). The deadlines and grace periods for the declarations of use (or excusable nonuse) are identical to those for nationally issued registrations. See 15 U.S.C. §§1058, 1141k. However, owners of international registrations do not file renewal applications at the USPTO. Instead, the holder must file a renewal of the underlying international registration at the International Bureau of the World Intellectual Property Organization, under Article 7 of the Madrid Protocol, before the expiration of each ten-year term of protection, calculated from the date of the international registration. See 15 U.S.C. §1141j. For more information and renewal forms for the international registration, see <http://www.wipo.int/madrid/en/>.

**\*\*\*The USPTO WILL NOT SEND ANY FURTHER NOTICE OR REMINDER OF THESE REQUIREMENTS. THE REGISTRANT SHOULD CONTACT THE USPTO ONE YEAR BEFORE THE EXPIRATION OF THE TIME PERIODS SHOWN ABOVE TO DETERMINE APPROPRIATE REQUIREMENTS AND FEES.\*\*\***

To view this notice and other documents for this application on-line, go to <http://tdr.uspto.gov/search.action?sn=77452991>. NOTE: This notice will only be available on-line the next business day after receipt of this e-mail.

|   |   |  |   |   |              |  |         |
|---|---|--|---|---|--------------|--|---------|
| <b>AWARD/CONTRACT</b>   |   | 1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) <span style="float: right;">▶</span> | RATING  | PAGE OF PAGES<br>1   65   |              |  |         |
| 2. CONTRACT (Proc. Inst. Ident.) NO.<br>SA1301-12-CN-0035   |   | 3. EFFECTIVE DATE<br>10/01/2012  | 4. REQUISITION/PURCHASE REQUEST/PROJECT NO.<br>AA-OAM-??-7-12-00934   |   |              |  |         |
| 5. ISSUED BY<br><br>U.S. DEPARTMENT OF COMMERCE<br>14TH & CONSTITUTION AVE. NW<br>ACQUISITION SERVICES- ROOM 6520<br>WASHINGTON DC 20230  |   | CODE 000SA   | 6. ADMINISTERED BY (if other than Item 5)   |   | CODE 000SA   |  |         |
| 7. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and Zip Code)<br>INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS<br>4676 ADMIRALTY WAY, SUITE #330<br>MARINA DEL REY CA 902926648<br>Vendor ID: 00000428<br>DUNS: 045511487<br>Cage Code: 4A4S9<br>CEC:  |   | 8. DELIVERY<br><input type="checkbox"/> FOB ORIGIN <input type="checkbox"/> OTHER (See below)  |   | 9. DISCOUNT FOR PROMPT PAYMENT<br><br>NET 30  |              |  |         |
| 11. SHIP TO/MARK FOR<br>NATIONAL TEL. AND INFO. ADMIN<br>1401 CONSTITUTION AVE. NW<br>ROOM 4888, HCHB   |   | CODE NTIA-HCH  | 12. PAYMENT WILL BE MADE BY<br>NIST ACCOUNTS PAYABLE OFFICE<br>BLDG 101, ROOM A-836 MS 1621<br>100 BUREAU DRIVE |   | CODE NISTFSG |  |         |
| 13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION.<br><input type="checkbox"/> 10 U.S.C. 2304(c)() <input type="checkbox"/> 41 U.S.C. 253(c)()   |   | 14. ACCOUNTING AND APPROPRIATION DATA  |   |   |              |  |         |
| 15A. ITEM NO.   | 15B. SUPPLIES/SERVICES                      | 15C. QUANTITY  | 15D. UNIT   | 15E. UNIT PRICE   | 15F. AMOUNT  |  |         |
|   | Please See Continuation Page for Line Items |  |   |   |              |  |         |
| 15G. TOTAL AMOUNT OF CONTRACT ▶   |   |  |   |   | \$ 0.00      |  |         |
| 16. TABLE OF CONTENTS   |   |  |   |   |              |  |         |
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| CONTRACTING OFFICER WILL COMPLETE ITEM 17 (SEALED-BID OR NEGOTIATED PROCUREMENT) OR 18 (SEALED-BID PROCUREMENT) AS APPLICABLE   |   |  |   |   |              |  |         |
| 17. <input checked="" type="checkbox"/> CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 1 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.) |   |  |   | 18. <input type="checkbox"/> SEALED-BID AWARD (Contractor is not required to sign this document.)<br>Your bid on Solicitation Number _____ including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the terms listed above and on any continuation sheets. This award consummates the contract which consists of the following documents (a) the Government's solicitation and your bid, and (b) this award/contract. No further contractual document is necessary. (Block 18 should be checked only when awarding a sealed-bid contract.) |              |  |         |
| 15A. NAME AND TITLE OF SIGNER (Type or Print)<br>ROD A. BECKSTROM<br>PRESIDENT & CEO, ICAANN  |   |  |   | 20A. NAME OF CONTRACTING OFFICER<br>KATHLEEN M. MCGRATH   |              |  |         |
| 19B. NAME OF CONTRACTOR<br>BY    |   | 19C. DATE SIGNED<br>JUL 29, 2012   |   | 20B. UNITED STATES OF AMERICA<br>BY   |              | 20C. DATE SIGNED<br>JUL 02, 2012                                 |         |
| (Signature of person authorized to sign)  |   |  |   | (Signature of Contracting Officer)  |              |  |         |

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**SCHEDULE Continued**

| ITEM NO. | SUPPLIES/SERVICES   | QUANTITY | UNIT | UNIT PRICE \$ | AMOUNT \$   |
|----------|---|----------|------|---------------|-------------|
|          | <p>Contracting Officer: Mona-Lisa Dunn, 202-482-1470</p> <p>Primary Contracting Officer Representative: Vernita D. Harris, 202-482-4686, vharris@NTIA.doc.gov</p> <p>Alternate Contracting Officer Representative(s):</p> <p>Technical Point of Contact: Vernita D. Harris, 202-482-4686, vharris@NTIA.doc.gov</p> <p>The Contractor shall provide the services in accordance with the terms, conditions, and prices described herein.</p> <p>The Contractor's proposal dated May 31, 2012 and as amended through agreed terms and conditions dated June 23, 2012 and June 26, 2012 are hereby incorporated by reference.</p> |          |      |               |             |
| 0001     | <p>BASE YEAR - October 1, 2012 - September 30, 2015. The Contractor shall provide the services necessary for the operation of the Internet Assigned Numbers Authority (IANA) in accordance with the attached Statement of Work. The Contractor may not charge the United States Government for performance of the requirements of this contract.</p> <p>Period of Performance: 10/01/2012 to 09/30/2015</p>   | 0.00     | EA   | 0.00          | 0.00        |
| 0002     | <p>OPTION YEAR 1 - October 1, 2015 - September 30, 2017. The Contractor shall provide the services necessary for the operation of the Internet Assigned Numbers Authority (IANA) in accordance with the attached Statement of Work. The Contractor may not charge the United States Government for performance of the requirements of this contract.</p> <p>Accounting and Appropriation Data:<br/>61.12.1200012.100.0012.010102000.<br/>0400000000000000.25970000.000000<br/>\$0.00</p> <p>Period of Performance: 10/01/2015 to 09/30/2017<br/>Pricing Option: Time and Material</p>   | 1.00     | JB   | 0.00          | OPT<br>0.00 |
| 0003     | <p>OPTION YEAR 2 - October 1, 2017 - September 30, 2019. The Contractor shall provide the services necessary for the operation of the Internet Assigned Numbers Authority (IANA) in accordance with the attached Statement of Work. The Contractor may not charge the United States Government for performance of the requirements of this contract.</p> <p>Accounting and Appropriation Data:<br/>61.12.1200012.100.0012.010102000.<br/>0400000000000000.25970000.000000<br/>\$0.00</p> <p>Period of Performance: 10/01/2017 to 09/30/2019<br/>Pricing Option: Time and Material</p>   | 1.00     | JB   | 0.00          | OPT<br>0.00 |

### **SECTION B SUPPLIES OR SERVICES AND PRICES/COSTS**

This is a no cost, \$0.00 time and material contract.

#### **B.2 COST/PRICE**

The Contractor may not charge the United States Government to perform the requirements of this Contract. The Contractor may establish and collect fees from third parties provided the fee levels are approved by the Contracting Officer and are fair and reasonable. If fees are charged, the Contractor shall base any proposed fee structure on the cost of providing the specific service for which the fee is charged and the resources necessary to monitor the fee driven requirements. The Contractor may propose an interim fee for the first year of the contract, which will expire one year after the contract award. If the Contractor intends to establish and collect fees from third parties beyond the first year of the Contract, the Contractor must collaborate with the interested and affected parties as enumerated in Section C.1.3 to develop a proposed fee structure based on a methodology that tracks the actual costs incurred for each discrete IANA function. The Contractor must submit a copy of proposed fee structure, tracking methodology and description of the collaboration efforts and process to the Contracting Officer.

#### **B.3 PRE-AWARD SURVEY – FAR 9.106 and 9.106-4(a)**

At the discretion of the Contracting Officer, a site visit to the Offeror's facility (ies) may also be requested and conducted by the Department of Commerce (Commerce) or its designee. The purpose of this visit will be to gather information relevant to the Offeror's responsibility and prospective capability to perform the requirements under any contract that may be awarded. The Contracting Officer will arrange such a visit at least seven (7) days in advance with the Offeror.

## **SECTION C – DESCRIPTION / SPECS / WORK STATEMENT**

### **STATEMENT OF WORK/SPECIFICATIONS**

The Contractor shall furnish the necessary personnel, materials, equipment, services and Facilities (except as otherwise specified) to perform the following Statement Work/Specifications.

#### **C.1 BACKGROUND**

**C.1.1** The U.S. Department of Commerce (DoC), National Telecommunications and Information Administration (NTIA) has initiated this contract to maintain the continuity and stability of services related to certain interdependent Internet technical management functions, known collectively as the Internet Assigned Numbers Authority (IANA).

**C.1.2** Initially, these interdependent technical functions were performed on behalf of the Government under a contract between the Defense Advanced Research Projects Agency (DARPA) and the University of Southern California (USC), as part of a research project known as the Tera-node Network Technology (TNT). As the TNT project neared completion and the DARPA/USC contract neared expiration in 1999, the Government recognized the need for the continued performance of the IANA functions as vital to the stability and correct functioning of the Internet.

**C.1.3** The Contractor, in the performance of its duties, must have or develop a close constructive working relationship with all interested and affected parties to ensure quality and satisfactory performance of the IANA functions. The interested and affected parties include, but are not limited to, the multi-stakeholder, private sector led, bottom-up policy development model for the domain name system (DNS) that the Internet Corporation for Assigned Names and Numbers (ICANN) represents; the Internet Engineering Task Force (IETF) and the Internet Architecture Board (IAB); Regional Internet Registries (RIRs); top-level domain (TLD) operators/managers (e.g., country codes and generic); governments; and the Internet user community.

**C.1.4** The Government acknowledges that data submitted by applicants in connection with the IANA functions may be confidential information. To the extent required by law, the Government shall accord any confidential data submitted by applicants in connection with the IANA functions with the same degree of care as it uses to protect its own confidential information, but not less than reasonable care, to prevent the unauthorized use, disclosure, or publication of confidential information. In providing data that is subject to such a confidentiality obligation to the Government, the Contractor shall advise the Government of that obligation.

## **C.2 CONTRACTOR REQUIREMENTS**

**C.2.1** The Contractor must perform the required services for this contract as a prime Contractor, not as an agent or subcontractor. The Contractor shall not enter into any subcontracts for the performance of the services, or assign or transfer any of its rights or obligations under this Contract, without the Government's prior written consent and any attempt to do so shall be void and without further effect. The Contractor shall be a) a wholly U.S. owned and operated firm or fully accredited United States University or College operating in one of the 50 states of the United States or District of Columbia; b) incorporated within one of the fifty (50) states of the United States or District of Columbia; and c) organized under the laws of a state of the United States or District of Columbia. The Contractor shall perform the primary IANA functions of the Contract in the United States and possess and maintain, throughout the performance of this Contract, a physical address within the United States. The Contractor must be able to demonstrate that all primary operations and systems will remain within the United States (including the District of Columbia). The Government reserves the right to inspect the premises, systems, and processes of all security and operational components used for the performance of all Contract requirements and obligations.

**C.2.2** The Contractor shall furnish the necessary personnel, material, equipment, services, and facilities, to perform the following requirements without any cost to the Government. The Contractor shall conduct due diligence in hiring, including full background checks.

**C.2.3** The Contractor may not charge the United States Government for performance of the requirements of this contract. The Contractor may establish and collect fees from third parties provided the fee levels are approved by the Contracting Officer (CO) and are fair and reasonable. If fees are charged, the Contractor shall base any proposed fee structure on the cost of providing the specific service for which the fee is charged. The Contractor may propose an interim fee for the first year of the contract, which will expire one year after the contract award. The documentation must be based upon the anticipated cost for providing the specific service for which the fee is charged, including start up costs, if any, equipment, personnel, software, etc. If the Contractor intends to establish and collect fees from third parties beyond the first year of the contract, the Contractor must collaborate with the interested and affected parties as enumerated in Section C.1.3 to develop a proposed fee structure based on a methodology that tracks the actual costs incurred for each discrete IANA function enumerated and described in C.2.9. The Contractor must submit a copy of any proposed fee structure including tracking methodology and description of the collaboration and process efforts for fees being proposed after the first year contract award to the Contracting Officer. The performance exclusion C.8.3 shall apply to any fee proposed.

**C.2.4** The Contractor is required to perform the IANA functions, which are critical for the operation of the Internet's core infrastructure, in a stable and secure manner. The IANA functions are administrative and technical in nature based on established policies developed by

interested and affected parties, as enumerated in Section C.1.3. The Contractor shall treat each of the IANA functions with equal priority and process all requests promptly and efficiently.

**C.2.5 Separation of Policy Development and Operational Roles** -- The Contractor shall ensure that designated IANA functions staff members will not initiate, advance, or advocate any policy development related to the IANA functions. The Contractor's staff may respond to requests for information requested by interested and affected parties as enumerated in Section C.1.3 to inform ongoing policy discussions and may request guidance or clarification as necessary for the performance of the IANA functions.

**C.2.6 Transparency and Accountability** -- Within six (6) months of award, the Contractor shall, in collaboration with all interested and affected parties as enumerated in Section C.1.3, develop user instructions including technical requirements for each corresponding IANA function and post via a website.

**C.2.7 Responsibility and Respect for Stakeholders** -- Within six (6) months of award, the Contractor shall, in collaboration with all interested and affected parties as enumerated in Section C.1.3, develop for each of the IANA functions a process for documenting the source of the policies and procedures and how it will apply the relevant policies and procedures for the corresponding IANA function and post via a website.

**C.2.8 Performance Standards** -- Within six (6) months of award, the Contractor shall develop performance standards, in collaboration with all interested and affected parties as enumerated in Section C.1.3, for each of the IANA functions as set forth at C.2.9 to C.2.9.4 and post via a website.

**C.2.9 Internet Assigned Numbers Authority (IANA) Functions** -- include (1) the coordination of the assignment of technical Internet protocol parameters; (2) the administration of certain responsibilities associated with the Internet DNS root zone management; (3) the allocation of Internet numbering resources; and (4) other services related to the management of the ARPA and INT top-level domains (TLDs).

**C.2.9.1 Coordinate The Assignment Of Technical Protocol Parameters including the management of the Address and Routing Parameter Area (ARPA) TLD** -- The Contractor shall review and assign unique values to various parameters (*e.g.*, operation codes, port numbers, object identifiers, protocol numbers) used in various Internet protocols based on established guidelines and policies as developed by interested and affected parties as enumerated in Section C.1.3. The Contractor shall disseminate the listings of assigned parameters through various means (including on-line publication via a website) and shall review technical documents for consistency with assigned values. The Contractor shall operate the ARPA TLD within the current registration policies for this TLD, as documented in RFC 3172-Management Guidelines & Operational Requirements for the Address and Routing Parameter Area Domain,

and any further clarification of this RFC. The Contractor shall also implement DNSSEC in the ARPA TLD.

**C.2.9.2 Perform Administrative Functions Associated With Root Zone Management** -- The Contractor shall facilitate and coordinate the root zone of the domain name system, and maintain 24 hour-a-day/7 days-a-week operational coverage. The process flow for root zone management involves three roles that are performed by three different entities through two separate legal agreements: the Contractor as the IANA Functions Operator, NTIA as the Administrator, and VeriSign (or any successor entity as designated by the U.S. Department of Commerce) as articulated in Cooperative Agreement Amendment 11, as the Root Zone Maintainer. The Requirements are detailed at Appendix 1 entitled Authoritative Root Zone Management Process that is incorporated by reference herein as if fully set forth. The Contractor shall work collaboratively with NTIA and the Root Zone Maintainer, in the performance of this function.

**C.2.9.2.a Root Zone File Change Request Management** -- The Contractor shall receive and process root zone file change requests for TLDs. These change requests include addition of new or updates to existing TLD name servers (NS) and delegation signer (DS) resource record (RR) information along with associated 'glue' (A and AAAA RRs). A change request may also include new TLD entries to the root zone file. The Contractor shall process root zone file changes as expeditiously as possible.

**C.2.9.2.b Root Zone "WHOIS" Change Request and Database Management** -- The Contractor shall maintain, update, and make publicly accessible a Root Zone "WHOIS" database with current and verified contact information for all TLD registry operators. The Root Zone "WHOIS" database, at a minimum, shall consist of the TLD name; the IP address of the primary nameserver and secondary nameserver for the TLD; the corresponding names of such nameservers; the creation date of the TLD; the name, postal address, email address, and telephone and fax numbers of the TLD registry operator; the name, postal address, email address, and telephone and fax numbers of the technical contact for the TLD registry operator; and the name, postal address, email address, and telephone and fax numbers of the administrative contact for the TLD registry operator; reports; and date record last updated; and any other information relevant to the TLD requested by the TLD registry operator. The Contractor shall receive and process root zone "WHOIS" change requests for TLDs.

**C.2.9.2.c Delegation and Redelegation of a Country Code Top Level-Domain (ccTLD)** --The Contractor shall apply existing policy frameworks in processing requests related to the delegation and redelegation of a ccTLD, such as RFC 1591 Domain Name System Structure and Delegation, the Governmental Advisory Committee (GAC) Principles And Guidelines For The Delegation And Administration Of Country Code Top Level Domains, and any further clarification of these policies by interested and affected parties as enumerated in Section C.1.3. If a policy framework does not exist to cover a specific instance, the Contractor will consult with the interested and affected parties, as enumerated in Section C.1.3; relevant public authorities;

and governments on any recommendation that is not within or consistent with an existing policy framework. In making its recommendations, the Contractor shall also take into account the relevant national frameworks and applicable laws of the jurisdiction that the TLD registry serves. The Contractor shall submit its recommendations to the COR via a Delegation and Redelegation Report.

**C.2.9.2d Delegation and Redelegation of a Generic Top Level Domain (gTLD)** -- The Contractor shall verify that all requests related to the delegation and redelegation of gTLDs are consistent with the procedures developed by ICANN. In making a delegation or redelegation recommendation, the Contractor must provide documentation verifying that ICANN followed its own policy framework including specific documentation demonstrating how the process provided the opportunity for input from relevant stakeholders and was supportive of the global public interest. The Contractor shall submit its recommendations to the COR via a Delegation and Redelegation Report.

**C.2.9.2.e Root Zone Automation** -- The Contractor shall work with NTIA and the Root Zone Maintainer, and collaborate with all interested and affected parties as enumerated in Section C.1.3, to deploy a fully automated root zone management system within nine (9) months after date of contract award. The fully automated system must, at a minimum, include a secure (encrypted) system for customer communications; an automated provisioning protocol allowing customers to manage their interactions with the root zone management system; an online database of change requests and subsequent actions whereby each customer can see a record of their historic requests and maintain visibility into the progress of their current requests; and a test system, which customers can use to meet the technical requirements for a change request ; an internal interface for secure communications between the IANA Functions Operator; the Administrator, and the Root Zone Maintainer.

**C.2.9.2.f Root Domain Name System Security Extensions (DNSSEC) Key Management** --The Contractor shall be responsible for the management of the root zone Key Signing Key (KSK), including generation, publication, and use for signing the Root Keyset. As delineated in the Requirements at Appendix 2 entitled Baseline Requirements for DNSSEC in the Authoritative Root Zone that is incorporated by reference herein as if fully set forth. The Contractor shall work collaboratively with NTIA and the Root Zone Maintainer, in the performance of this function.

**C.2.9.2.g Customer Service Complaint Resolution Process (CSCR)** --The Contractor shall work with NTIA and collaborate with all interested and affected parties as enumerated in Section C.1.3 to establish and implement within six (6) months after date of contract award a process for IANA function customers to submit complaints for timely resolution that follows industry best practice and includes a reasonable timeframe for resolution.

**C.2.9.3 Allocate Internet Numbering Resources** --The Contractor shall have responsibility for allocated and unallocated IPv4 and IPv6 address space and Autonomous System Number (ASN)

space based on established guidelines and policies as developed by interested and affected parties as enumerated in Section C.1.3. The Contractor shall delegate IP address blocks to Regional Internet Registries for routine allocation typically through downstream providers to Internet end-users within the regions served by those registries. The Contractor shall also reserve and direct allocation of space for special purposes, such as multicast addressing, addresses for private networks as described in RFC 1918-Address Allocation for Private Internets, and globally specified applications.

**C.2.9.4 Other services** -- The Contractor shall operate the INT TLD within the current registration policies for the TLD. Upon designation of a successor registry by the Government, if any, the Contractor shall cooperate with NTIA to facilitate the smooth transition of operation of the INT TLD. Such cooperation shall, at a minimum, include timely transfer to the successor registry of the then-current top-level domain registration data. The Contractor shall also implement modifications in performance of the IANA functions as needed upon mutual agreement of the parties.

**C.2.10** The performance of the IANA functions as articulated in Section C.2 Contractor Requirements shall be in compliance with the performance exclusions enumerated in Section C. 8.

**C.2.11** The Contracting Officer's Representative(COR) will perform final inspection and acceptance of all deliverables and reports articulated in Section C.2 Contractor Requirements. *Prior to publication/posting of reports the Contractor shall obtain approval from the COR.* The COR shall not unreasonably withhold approval.

**C.2.12.a Program Manager.** The contractor shall provide trained, knowledgeable technical personnel according to the requirements of this contract. All contractor personnel who interface with the CO and COR must have excellent oral and written communication skills. "Excellent oral and written communication skills" is defined as the capability to converse fluently, communicate effectively, and write intelligibly in the English language. The IANA Functions Program Manager organizes, plans, directs, staffs, and coordinates the overall program effort; manages contract and subcontract activities as the authorized interface with the CO and COR and ensures compliance with Federal rules and regulations and responsible for the following:

- Shall be responsible for the overall contract performance and shall not serve in any other capacity under this contract.
- Shall have demonstrated communications skills with all levels of management.
- Shall meet and confer with COR and CO regarding the status of specific contractor activities and problems, issues, or conflicts requiring resolution.
- Shall be capable of negotiating and making binding decisions for the company.
- Shall have extensive experience and proven expertise in managing similar multi-task contracts of this type and complexity.

- Shall have extensive experience supervising personnel.
- Shall have a thorough understanding and knowledge of the principles and methodologies associated with program management and contract management.

**C.2.12.b** The Contractor shall assign to this contract the following key personnel: IANA Functions Program Manager (C.2.9); IANA Function Liaison for Technical Protocol Parameters Assignment (C.2.9.1); IANA Function Liaison for Root Zone Management (C.2.9.2); IANA Function Liaison for Internet Number Resource Allocation (C.2.9.3).

### **C.3 SECURITY REQUIREMENTS**

**C.3.1 Secure Systems** -- The Contractor shall install and operate all computing and communications systems in accordance with best business and security practices. The Contractor shall implement a secure system for authenticated communications between it and its customers when carrying out all IANA function requirements. The Contractor shall document practices and configuration of all systems.

**C.3.2 Secure Systems Notification** -- The Contractor shall implement and thereafter operate and maintain a secure notification system at a minimum, capable of notifying all relevant stakeholders of the discrete IANA functions, of such events as outages, planned maintenance, and new developments. In all cases, the Contractor shall notify the COR of any outages.

**C.3.3 Secure Data** -- The Contractor shall ensure the authentication, integrity, and reliability of the data in performing each of the IANA functions.

**C.3.4 Security Plan** --The Contractor shall develop and execute a Security Plan that meets the requirements of this contract and Section C.3. The Contractor shall document in the security plan the process used to ensure information systems including hardware, software, applications, and general support systems have effective security safeguards, which have been implemented, planned for, and documented. The Contractor shall deliver the plan to the COR after each annual update.

**C.3.5 Director of Security** -- The Contractor shall designate a Director of Security who shall be responsible for ensuring technical and physical security measures, such as personnel access controls. The Contractor shall notify and consult in advance the COR when there are personnel changes in this position. The Director of Security shall be one of the key personnel assigned to this contract.

### **C.4 PERFORMANCE METRIC REQUIREMENTS**

**C.4.1 Meetings** -- Program reviews and site visits shall occur annually.

**C.4.2 Monthly Performance Progress Report** -- The Contractor shall prepare and submit to the COR a performance progress report every month (no later than 15 calendar days following the end of each month) that contains statistical and narrative information on the performance of the IANA functions (*i.e.*, assignment of technical protocol parameters; administrative functions associated with root zone management; and allocation of Internet numbering resources) during the previous calendar month. The report shall include a narrative summary of the work performed for each of the functions with appropriate details and particularity. The report shall also describe major events, problems encountered, and any projected significant changes, if any, related to the performance of requirements set forth in C.2.9 to C.2.9.4.

**C.4.3 Root Zone Management Dashboard** -- The Contractor shall work collaboratively with NTIA and the Root Zone Maintainer, and all interested and affected parties as enumerated in Section C.1.3, to develop and make publicly available via a website, a dashboard to track the process flow for root zone management within nine (9) months after date of contract award.

**C.4.4 Performance Standards Reports** -- The Contractor shall develop and publish reports for each discrete IANA function consistent with Section C.2.8. The Performance Standards Metric Reports will be published via a website every month (no later than 15 calendar days following the end of each month) starting no later than six (6) months after date of contract award.

**C.4.5 Customer Service Survey (CSS)** --The Contractor shall collaborate with NTIA to develop and conduct an annual customer service survey consistent with the performance standards for each of the discrete IANA functions. The survey shall include a feedback section for each discrete IANA function. No later than 30 days after conducting the survey, the Contractor shall submit the CSS Report to the COR.

**C.4.6 Final Report** -- The Contractor shall prepare and submit a final report on the performance of the IANA functions that documents standard operating procedures, including a description of the techniques, methods, software, and tools employed in the performance of the IANA functions. The Contractor shall submit the report to the CO and the COR no later than 30 days after expiration of the contract.

**C.4.7 Inspection and Acceptance** -- The COR will perform final inspection and acceptance of all deliverables and reports articulated in Section C.4. *Prior to publication/posting of reports, the Contractor shall obtain approval from the COR.* The COR shall not unreasonably withhold approval.

## **C.5 AUDIT REQUIREMENTS**

**C.5.1 Audit Data** -- The Contractor shall generate and retain security process audit record data for one year and provide an annual audit report to the CO and the COR. All root zone management operations shall be included in the audit, and records on change requests to the root zone file. The Contractor shall retain these records in accordance with the clause at

52.215-2. The Contractor shall provide specific audit record data to the CO and COR upon request.

**C.5.2 Root Zone Management Audit Data** -- The Contractor shall generate and publish via a website a monthly audit report based on information in the performance of *Provision C.9.2(a-g) Perform Administrative Functions Associated With Root Zone Management*. The audit report shall identify each root zone file and root zone "WHOIS" database change request and the relevant policy under which the change was made as well as identify change rejections and the relevant policy under which the change request was rejected. The Report shall start no later than nine (9) months after date of contract award and thereafter is due to the COR no later than 15 calendar days following the end of each month.

**C.5.3 External Auditor** - - The Contractor shall have an external, independent, specialized compliance audit which shall be conducted annually and it shall be an audit of all the IANA functions security provisions against existing best practices and Section C.3 of this contract.

**C.5.4 Inspection and Acceptance** -- The COR will perform final inspection and acceptance of all deliverables and reports articulated in Section C.5. *Prior to publication/posting of reports, the Contractor shall obtain approval from the COR.* The COR shall not unreasonably withhold approval.

## **C. 6 CONFLICT OF INTEREST REQUIREMENTS**

**C.6.1** The Contractor shall take measures to avoid any activity or situation that could compromise, or give the appearance of compromising, the impartial and objective performance of the contract (e.g., a person has a conflict of interest if the person directly or indirectly appears to benefit from the performance of the contract). The Contractor shall maintain a written, enforced conflict of interest policy that defines what constitutes a potential or actual conflict of interest for the Contractor. At a minimum, this policy must address conflicts based on personal relationships or bias, financial conflicts of interest, possible direct or indirect financial gain from Contractor's policy decisions and employment and post-employment activities. The conflict of interest policy must include appropriate sanctions in case of non-compliance, including suspension, dismissal and other penalties.

**C.6.2** The Contractor shall designate a senior staff member to serve as a Conflict of Interest Officer who shall be responsible for ensuring the Contractor is in compliance with the Contractor's internal and external conflict of interest rules and procedures. The Conflict of Interest Officer shall be one of the key personnel assigned to this contract.

**C.6.2.1** The Conflict of Interest Officer shall be responsible for distributing the Contractor's conflict of interest policy to all employees, directors, and subcontractors upon their election, re-election or appointment and annually thereafter.

**C.6.2.2** The Conflict of Interest Officer shall be responsible for requiring that each of the Contractor's employees, directors and subcontractors complete a certification with disclosures of any known conflicts of interest upon their election, re-election or appointment, and annually thereafter.

**C.6.2.3** The Conflict of Interest Officer shall require that each of the Contractor's employees, directors, and subcontractors promptly update the certification to disclose any interest, transaction, or opportunity covered by the conflict of interest policy that arises during the annual reporting period.

**C.6.2.4** The Conflict of Interest Officer shall develop and publish subject to applicable laws and regulations, a Conflict Of Interest Enforcement and Compliance Report. The report shall describe major events, problems encountered, and any changes, if any, related to Section C.6.

**C.6.2.5** See also the clause at H.5. Organizational Conflict of Interest

## **C. 7 CONTINUITY OF OPERATIONS**

**C.7.1 Continuity of Operations (COP)** – The Contractor shall, at a minimum, maintain multiple redundant sites in at least 2, ideally 3 sites, geographically dispersed within the United States as well as multiple resilient communication paths between interested and affected parties as enumerated in Section C.1.3 to ensure continuation of the IANA functions in the event of cyber or physical attacks, emergencies, or natural disasters.

**C.7.2 Contingency and Continuity of Operations Plan (The CCOP)** – The Contractor shall collaborate with NTIA and the Root Zone Maintainer, and all interested and affected parties as enumerated in Section C.1.3, to develop and implement a CCOP for the IANA functions within nine (9) months after date of contract award. The Contractor in collaboration with NTIA and the Root Zone Maintainer shall update and test the plan annually. The CCOP shall include details on plans for continuation of each of the IANA functions in the event of cyber or physical attacks, emergencies, or natural disasters. The Contractor shall submit the CCOP to the COR after each annual update.

**C.7.3 Transition to Successor Contractor** – In the event the Government selects a successor contractor, the Contractor shall have a plan in place for transitioning each of the IANA functions to ensure an orderly transition while maintaining continuity and security of operations. The plan shall be submitted to the COR eighteen (18) months after date of contract award, reviewed annually, and updated as appropriate.

## **C.8 PERFORMANCE EXCLUSIONS**

**C.8.1** This contract does not authorize the Contractor to make modifications, additions, or deletions to the root zone file or associated information. (This contract does not alter the root

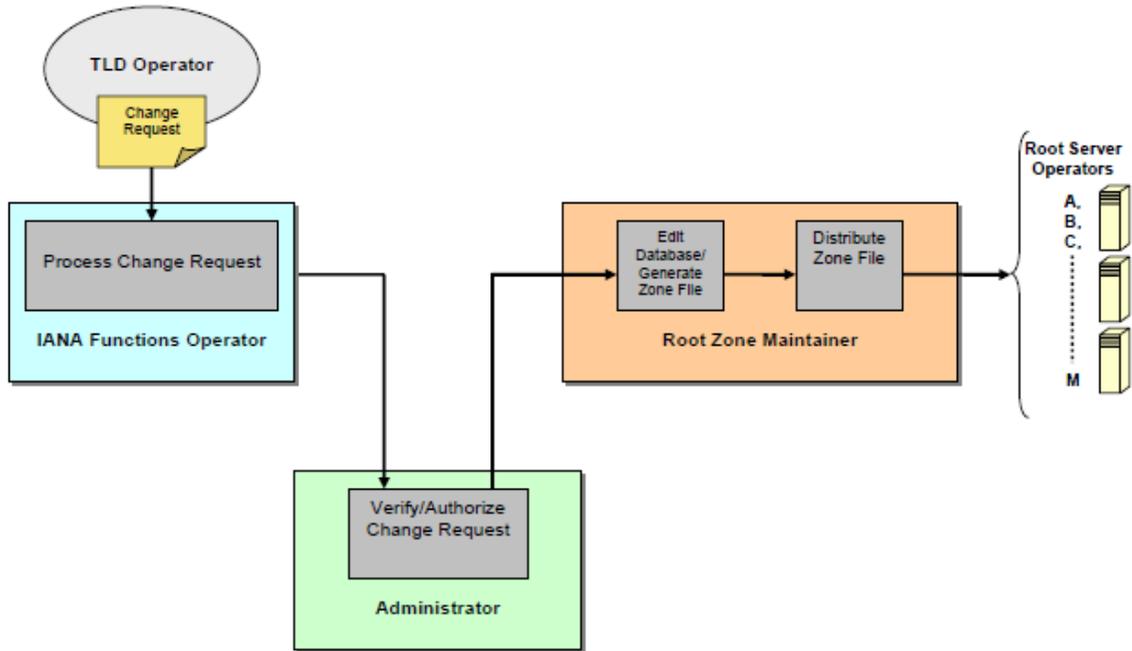
zone file responsibilities as set forth in Amendment 11 of the Cooperative Agreement NCR-9218742 between the U.S. Department of Commerce and VeriSign, Inc. or any successor entity as designated by the U.S. Department of Commerce). See Amendment 11 at [http://ntia.doc.gov/files/ntia/publications/amend11\\_052206.pdf](http://ntia.doc.gov/files/ntia/publications/amend11_052206.pdf).

**C.8.2** This contract does not authorize the Contractor to make material changes in the policies and procedures developed by the relevant entities associated with the performance of the IANA functions. The Contractor shall not change or implement the established methods associated with the performance of the IANA functions without prior approval of the CO.

**C.8.3** The performance of the functions under this contract, including the development of recommendations in connection with Section C.2.9.2, shall not be, in any manner, predicated or conditioned on the existence or entry into any contract, agreement or negotiation between the Contractor and any party requesting such changes or any other third-party. Compliance with this Section must be consistent with C.2.9.2d.

Appendix 1: Authoritative Root Zone Management Process <sup>1</sup>

**Authoritative Root Zone Management Process  
(Present)**



<sup>1</sup> The Root Zone management partners consist of the IANA Functions Operator (per the IANA functions contract), NTIA/Department of Commerce, and the Root Zone Maintainer (per the Cooperative Agreement with VeriSign (or any successor entity as designated by the U.S. Department of Commerce)).

## Appendix 2: Baseline Requirements for DNSSEC in the Authoritative Root Zone

DNSSEC at the authoritative Root Zone requires cooperation and collaboration between the root zone management partners and the Department.<sup>2</sup> The baseline requirements encompass the responsibilities and requirements for both the IANA Functions Operator and the Root Zone Maintainer as described and delineated below.

### General Requirements

The Root Zone system needs an overall security lifecycle, such as that described in ISO 27001, and any security policy for DNSSEC implementation must be validated against existing standards for security controls.

The remainder of this section highlights security requirements that must be considered in developing any solution. ISO 27002:2005 (formerly ISO 17799:2005) and NIST SP 800-53 are recognized sources for specific controls. Note that reference to SP 800-53 is used as a convenient means of specifying a set of technical security requirements.<sup>3</sup> It is expected that the systems referenced in this document will meet all the SP 800-53 technical security controls required by a HIGH IMPACT system.<sup>4</sup>

Whenever possible, references to NIST publications are given as a source for further information. These Special Publications (SP) and FIPS documents are not intended as a future auditing checklist, but as non-binding guidelines and recommendations to establish a viable IT security policy. Comparable security standards can be substituted where available and appropriate. All of the NIST document references can be found on the NIST Computer Security Research Center webpage (<http://www.csrc.nist.gov/>).

### 1) Security Authorization and Management Policy

- a) Each partner<sup>5</sup> in the Root Zone Signing process shall have a security policy in place; this security policy must be periodically reviewed and updated, as appropriate.

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<sup>2</sup> The Root Zone management partners consist of the IANA Functions Operator (per the IANA functions contract), NTIA/Department of Commerce, and Root Zone Maintainer (per the Cooperative Agreement with VeriSign). This document outlines requirements for both the IANA Functions Operator and Root Zone Maintainer in the operation and maintenance of DNSSEC at the authoritative root zone.

<sup>3</sup> Note in particular that the use of the requirements in SP 800-53 does not imply that these systems are subject to other Federal Information Security Management Act (FISMA) processes.

<sup>4</sup> For the purpose of identifying SP 800-53 security requirements, the Root Zone system can be considered a HIGH IMPACT system with regards to integrity and availability as defined in FIPS 199.

<sup>5</sup> For this document, the roles in the Root Zone Signing process are those associated with the Key Signing Key holder, the Zone Signing Key holder, Public Key Distributor, and others to be conducted by the IANA Functions Operator and the Root Zone Maintainer.

- i) Supplemental guidance on generating a Security Authorization Policy may be found in NIST SP 800-37.
- b) These policies shall have a contingency plan component to account for disaster recovery (both man-made and natural disasters).<sup>6</sup>
  - i) Supplemental guidance on contingency planning may be found in SP 800-34.
- c) These policies shall address Incident Response detection, handling and reporting (see 4 below).
  - i) Supplemental guidance on incident response handling may be found in NIST SP 800-61.

## **2) IT Access Control**

- a) There shall be an IT access control policy in place for each of the key management functions and it shall be enforced.
  - i) This includes both access to hardware/software components and storage media as well as ability to perform process operations.
  - ii) Supplemental guidance on access control policies may be found in NIST SP 800-12.
- b) Users without authentication shall not perform any action in key management.
- c) In the absence of a compelling operational requirement, remote access to any cryptographic component in the system (e.g. HSM) is not permitted.<sup>7</sup>

## **3) Security Training**

- a) All personnel participating in the Root Zone Signing process shall have adequate IT security training.
  - i) Supplemental guidance on establishing a security awareness training program may be found in NIST SP 800-50.

## **4) Audit and Accountability Procedures**

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<sup>6</sup> For the IANA Functions Operator, the contingency plan must be consistent with and/or included in the "Contingency and Continuity of Operations Plan" as articulated in Section C.7 of the IANA functions contract.

<sup>7</sup> Remote access is any access where a user or information system communicates through a non-organization controlled network (e.g., the Internet).

- a) The organization associated with each role shall develop, disseminate, and periodically review/update: (1) a formal, documented, audit and accountability policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance; and (2) formal, documented procedures to facilitate the implementation of the audit and accountability policy and associated audit and accountability controls.
  - i) Supplemental guidance on auditing and accountability policies may be found in NIST SP 800-12.
  - ii) Specific auditing events include the following:
    - o Generation of keys
    - o Generation of signatures
    - o Exporting of public key material
    - o Receipt and validation of public key material (i.e., from the ZSK holder or from TLDs)
    - o System configuration changes
    - o Maintenance and/or system updates
    - o Incident response handling
    - o Other events as appropriate
- b) Incident handling for physical and exceptional cyber attacks<sup>8</sup> shall include reporting to the Department's National Telecommunications and Information Administration (NTIA) in a timeframe and format as mutually agreed by the Department, IANA Functions Operator, and Root Zone Maintainer.
- c) The auditing procedures shall include monthly reporting to NTIA.<sup>9</sup>
- d) The auditing system shall be capable of producing reports on an ad-hoc basis.
- e) A version of these reports must be made publically available.

## 5) Physical Protection Requirements

- a) There shall be physical access controls in place to only allow access to hardware components and media to authorized personnel.
  - i) Supplemental guidance on token based access may be found in NIST SP 800-73 and FIPS 201.
  - ii) Supplemental guidance on token based access biometric controls may be found in

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<sup>8</sup> Non-exceptional events are to be included in monthly reporting as required in 4 c.

<sup>9</sup> For the IANA Functions Operator, audit reporting shall be incorporated into the audit report as articulated in C.5.2 of the IANA functions contract.

NIST SP 800-76.

- b) Physical access shall be monitored, logged, and registered for all users and visitors.
- c) All hardware components used to store keying material or generate signatures shall have short-term backup emergency power connections in case of site power outage. (See, SP 800-53r3)
- d) All organizations shall have appropriate protection measures in place to prevent physical damage to facilities as appropriate.

## 6) All Components

- a) All commercial off the shelf hardware and software components must have an established maintenance and update procedure in place.
  - i) Supplemental guidance on establishing an upgrading policy for an organization may be found in NIST SP 800-40.
- b) All hardware and software components provide a means to detect and protect against unauthorized modifications/updates/patching.

## Role Specific Requirements

### 7) Root Zone Key Signing Key (KSK) Holder<sup>10</sup>

The Root Zone KSK Holder (RZ KSK) is responsible for: (1) generating and protecting the private component of the RZ KSK(s); (2) securely exporting or importing any public key components, should this be required (3) authenticating and validating the public portion of the RZ Zone Signing Key (RZ ZSK); and (4) signing the Root Zone's DNSKEY record (ZSK/KSK).

#### a) Cryptographic Requirements

- i) The RZ KSK key pair shall be an RSA key pair, with a modulus of at least 2048 bits.
- ii) RSA key generation shall meet the requirements specified in FIPS 186-3.<sup>11</sup> In particular, key pair generation shall meet the FIPS 186-3 requirements for exponent size and primality testing.
- iii) The RZ KSK private key(s) shall be generated and stored on a FIPS 140-2 validated

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<sup>10</sup> The Root Zone KSK Holder is a responsibility performed by the IANA Functions Operator.

<sup>11</sup> Note that FIPS 186-3 and FIPS 140-2 are referenced as requirements in sections a and b, rather than supplemental guidance.

hardware cryptographic module (HSM)<sup>12</sup>, validated at Level 4 overall.<sup>13</sup>

- iv) RZ KSK Digital Signatures shall be generated using SHA-256.
- v) All cryptographic functions involving the private component of the KSK shall be performed within the HSM; that is, the private component shall only be exported from the HSM with the appropriate controls (FIPS 140-2) for purposes of key backup.

#### **b) Multi-Party Control**

At least two persons shall be required to activate or access any cryptographic module that contains the complete RZ KSK private signing key.

- i) The RZ KSK private key(s) shall be backed up and stored under at least two-person control. Backup copies shall be stored on FIPS 140-2 compliant HSM, validated at Level 4 overall, or shall be generated using m of n threshold scheme and distributed to organizationally separate parties.
- ii) Backup copies stored on HSMs shall be maintained in different physical locations<sup>14</sup>, with physical and procedural controls commensurate to that of the operational system.
- iii) In the case of threshold secret sharing, key shares shall be physically secured by each of the parties.
- iv) In all cases, the names of the parties participating in multi-person control shall be maintained on a list that shall be made available for inspection during compliance audits.

#### **c) Root Zone KSK Rollover**

- i) Scheduled rollover of the RZ KSK shall be performed.<sup>15</sup> (See Contingency planning for unscheduled rollover.)
- ii) RZ KSK rollover procedures shall take into consideration the potential future need for algorithm rollover.
- iii) DNSSEC users shall be able to authenticate the source and integrity of the new RZ KSK using the previously trusted RZ KSK's public key.

#### **d) Contingency Planning**

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<sup>12</sup> FIPS 140 defines hardware cryptographic modules, but this specification will use the more common HSM (for hardware security module) as the abbreviation.

<sup>13</sup> Note that FIPS 186-3 and FIPS 140-2 are referenced as requirements in sections a and b, rather than supplemental guidance.

<sup>14</sup> Backup locations are to be within the United States.

<sup>15</sup> The Department envisions the timeline for scheduled rollover of the RZ KSK to be jointly developed and proposed by the IANA Functions Operator and Root Zone Maintainer, based on consultation and input from the affected parties (e.g. root server operators, large-scale resolver operators, etc). Note that subsequent test plans may specify more or less frequent RZ KSK rollover to ensure adequate testing.

- i) Procedures for recovering from primary physical facility failures (e.g., fire or flood that renders the primary site inoperable) shall be designed to reconstitute capabilities within 48 hours.
- ii) Procedures for emergency rollover of the RZ KSK shall be designed to achieve key rollover and publication within 48 hours. These procedures, which are understood to address DNSSEC key provision only, should accommodate the following scenarios:
  - (1) The current RZ KSK has been compromised; and
  - (2) The current RZ KSK is unavailable, but is not believed to be compromised.

**e) DNS Record Generation/Supporting RZ ZSK rollover**

- i) The RZ KSK Holder shall authenticate the source and integrity of RZ ZSK public key material
  - (1) Mechanisms must support proof of possession and verify the parameters (i.e., the RSA exponent)
- ii) The signature on the root zone's DNSKEY record shall be generated using SHA-256.

**f) Audit Generation and Review Procedures**

- i) Designated Audit personnel may not participate in the multi-person control for the RZ ZSK or RZ KSK.
- ii) Audit logs shall be backed up offsite at least monthly.
- iii) Audit logs (whether onsite or offsite) shall be protected from modification or deletion.
- iv) Audit logs shall be made available upon request for Department review.

**8) RZ KSK Public Key Distribution**

- a) The RZ KSK public key(s) shall be distributed in a secure fashion to preclude substitution attacks.
- b) Each mechanism used to distribute the RZ KSK public key(s) shall either
  - i) Establish proof of possession of the RZ KSK private key (for public key distribution); or
  - ii) Establish proof of possession of the previous RZ KSK private key (for Root zone key rollover).

**9) RZ Zone Signing Key (RZ ZSK) Holder<sup>16</sup>**

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<sup>16</sup> The RZ ZSK holder is a function performed by the Root Zone Maintainer, NOT the IANA Functions Operator.

The Root Zone ZSK Holder (RZ ZSK) is responsible for (1) generating and protecting the private component of the RZ ZSK(s); (2) securely exporting or importing any public key components, should this be required and (3) generating and signing Zone File Data in accordance to the DNSSEC specifications.

**a) Cryptographic Requirements**

- i) The RZ ZSK key pair shall be an RSA key pair, with a modulus of at least 1024 bits.<sup>17</sup>
- ii) RSA key generation shall meet the requirements specified in FIPS 186-3.<sup>18</sup> In particular, key pair generation shall meet the FIPS 186-3 requirements for exponent size and primality testing.
- iii) RZ ZSK Digital Signatures shall be generated using SHA-256.
- iv) The RZ ZSK private key(s) shall be generated and stored on a FIPS 140-2 compliant HSM. At a minimum, the HSM shall be validated at Level 4 overall.
- v) All cryptographic functions involving the private component of the RZ ZSK shall be performed within the HSM; that is, the private component shall not be exported from the HSM except for purposes of key backup.

**b) Multi-Party Control**

- i) Activation of the RZ ZSK shall require at least two-person control. This requirement may be satisfied through a combination of physical and technical controls.
- ii) If the RZ ZSK private key(s) are backed up, they shall be backed up and stored under at least two-person control. Backup copies shall be stored on FIPS 140-2 validated HSM, validated at Level 4 overall.<sup>19</sup>
  - (1) Backup copies shall be maintained both onsite and offsite<sup>20</sup>, with physical and procedural controls commensurate to that of the operational system.
  - (2) The names of the parties participating in multi-person control shall be maintained on a list and made available for inspection during compliance audits.

**c) Contingency Planning**

- i) Procedures for recovery from failure of the operational HSM containing the RZ ZSK shall be designed to re-establish the capability to sign the zone within 2 hours.
- ii) Procedures for emergency rollover of the RZ ZSK shall be designed to achieve key

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<sup>17</sup> Note that these requirements correspond to those articulated in NIST SP 800-78 for authentication keys. Since there is no forward security requirement for the DNSSEC signed data, the more stringent requirements imposed on long term digital signatures do not apply.

<sup>18</sup> Note that FIPS 186-3 and FIPS 140-2 are referenced as requirements in sections 8a and 8 b, rather than as supplemental guidance.

<sup>19</sup> Note that FIPS 186-3 and FIPS 140-2 are referenced as requirements in sections 8a and 8 b, rather than as supplemental guidance.

<sup>20</sup> The Department expects backup locations to be within the United States.

rollover within a technically feasible timeframe as mutually agreed among the Department, Root Zone Maintainer, and the IANA functions operator. These procedures must accommodate the following scenarios:

- (1) The current RZ ZSK has been compromised; and
- (2) The current RZ ZSK is unavailable (e.g. destroyed), but is not believed to be compromised.

**d) Root Zone ZSK Rollover**

- i) The RZ ZSK shall be rolled over every six months at a minimum.<sup>21</sup>
- ii) DNSSEC users shall be able to authenticate the source and integrity of the new RZ ZSK using the previously trusted RZ ZSK's public key.
- iii) RZ ZSK holder shall be able to authenticate the source and integrity of the new RZ ZSK.

**e) Audit Generation and Review Procedures**

- i) Designated Audit personnel may not participate in the control for the RZ ZSK or RZ ZSK.
- ii) Audit logs shall be backed up offsite at least monthly.
- iii) Audit logs (whether onsite or offsite) shall be protected from unauthorized access, modification, or deletion.
- iv) Audit logs shall be made available upon request for NTIA review.

**Other Requirements**

**10) Transition Planning**

- a) The IANA Functions Operator and Root Zone Maintainer shall have plans in place for transitioning the responsibilities for each role while maintaining continuity and security of operations. In the event the IANA Functions Operator or Root Zone Maintainer are no longer capable of fulfilling their DNSSEC related roles and responsibilities (due to bankruptcy, permanent loss of facilities, etc.) or in the event the Department selects a successor, that party shall ensure an orderly transition of their DNSSEC roles and responsibilities in cooperation with the Department.<sup>22</sup>

**11) Personnel Security Requirements**

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<sup>21</sup> The timelines specified in this document apply to the operational system. Subsequent test plans may specify more or less frequent RZ ZSK rollover to ensure adequate testing.

<sup>22</sup> For the IANA Functions Operator, the transition plan shall be incorporated into that which is called for in section C.7.3 of the IANA functions contract.

**a) Separation of Duties**

- i) Personnel holding a role in the multi-party access to the RZ KSK may not hold a role in the multi-party access to the RZ ZSK, or vice versa.
- ii) Designated Audit personnel may not participate in the multi-person control for the RZ ZSK or KSK.
- iii) Audit Personnel shall be assigned to audit the RZ KSK Holder or the RZ ZSK Holder, but not both.

**b) Security Training**

- i) All personnel with access to any cryptographic component used with the Root Zone Signing process shall have adequate training for all expected duties.

**12) Root Zone Maintainer Basic Requirements**

- a) Ability to receive NTIA authorized TLD Resource Record Set (RRset) updates from NTIA and IANA Functions Operator
- b) Ability to integrate TLD RRset updates into the final zone file
- c) Ability to accept NTIA authorized signed RZ keyset(s) and integrate those RRsets into the final zone file

**13) IANA Functions Operator Interface Basic Functionality**

- a) Ability to accept and process TLD DS records. New functionality includes:
  - i) Accept TLD DS RRs
    - (1) Retrieve TLD DNSKEY record from the TLD, and perform parameter checking for the TLD keys, including verify that the DS RR has been correctly generated using the specified hash algorithm.
  - ii) Develop with, and communicate to, TLD operators procedures for:
    - (1) Scheduled roll over for TLD key material
    - (2) Supporting emergency key roll over for TLD key material.
    - (3) Moving TLD from signed to unsigned in the root zone.
- b) Ability to submit TLD DS record updates to NTIA for authorization and inclusion into the root zone by the Root Zone Maintainer.
- c) Ability to submit RZ keyset to NTIA for authorization and subsequent inclusion into the root zone by the Root Zone Maintainer.

**14) Root Zone Management Requirements<sup>23</sup>**

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<sup>23</sup> The Department envisions the IANA Functions Operator and Root Zone Maintainer jointly agree to utilizing pre-existing processes and/or deciding and proposing new methods by which each of these requirements are designed and implemented, subject to Department approval.

- a) Ability and process to store TLD delegations and DS RRs
- b) Ability and process to store multiple keys for a delegation with possibly different algorithms
- c) Ability and process to maintain a history of DS records used by each delegation
- d) Procedures for managing scheduled roll over for TLD key material
- e) Procedures for managing emergency key roll over for TLD key material.<sup>24</sup>
- f) Procedures for managing the movement of TLD from signed to unsigned.<sup>25</sup>
- g) Procedures for DNSSEC revocation at the root zone and returning the root zone to its pre-signed state.

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<sup>24</sup> To the extent possible, on 24 hour notice under the existing manual system and on 12 hours notice once the automated system is utilized.

<sup>25</sup> To the extent possible, this must be within 48 hours.

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**SECTION D - PACKAGING AND MARKING**

**RESERVED**

## **SECTION E - INSPECTION AND ACCEPTANCE**

### **E.1 INSPECTION AND ACCEPTANCE**

The Contracting Officer's Representative (COR) will perform final inspection and acceptance of all work performed, written communications regardless of form, reports, and other services and deliverables related to Section C prior to any publication/posting called for by this Contract. The CO reserves the right to designate other Government agents as authorized representatives upon unilateral written notice to the Contractor, which may be accomplished in the form of a transmittal of a copy of the authorization. The Government reserves the right to inspect the premises, systems, and processes of all security and operational components used for the performance of all Contract requirements and obligations.

### **E.2 INSPECTION -- TIME-AND-MATERIAL AND LABOR-HOUR (FAR 52.246-6) (MAY 2001)**

(a) *Definitions.* As used in this clause--

“Contractor’s managerial personnel” means any of the Contractor’s directors, officers, managers, superintendents, or equivalent representatives who have supervision or direction of --

- (1) All or substantially all of the Contractor’s business;
- (2) All or substantially all of the Contractor’s operation at any one plant or separate location where the contract is being performed; or
- (3) A separate and complete major industrial operation connected with the performance of this contract.

“Materials” includes data when the contract does not include the Warranty of Data clause.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the material, fabricating methods, work, and services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all materials furnished and services performed under this contract, to the extent practicable at all places and times, including the period of performance, and in any event before acceptance. The Government may also inspect the plant or plants of the Contractor or any subcontractor engaged in contract performance.

The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If the Government performs inspection or test on the premises of the Contractor or a subcontractor, the Contractor shall furnish and shall require subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

(e) Unless otherwise specified in the contract, the Government shall accept or reject services and materials at the place of delivery as promptly as practicable after delivery, and they shall be presumed accepted 60 days after the date of delivery, unless accepted earlier.

(f) At any time during contract performance, but not later than 6 months (or such other time as may be specified in the contract) after acceptance of the services or materials last delivered under this contract, the Government may require the Contractor to replace or correct services or materials that at time of delivery failed to meet contract requirements. Except as otherwise specified in paragraph (h) of this clause, the cost of replacement or correction shall be determined under the Payments Under Time-and-Materials and Labor-Hour Contracts clause, but the "hourly rate" for labor hours incurred in the replacement or correction shall be reduced to exclude that portion of the rate attributable to profit. The Contractor shall not tender for acceptance materials and services required to be replaced or corrected without disclosing the former requirement for replacement or correction, and, when required, shall disclose the corrective action taken.

(g)

(1) If the Contractor fails to proceed with reasonable promptness to perform required replacement or correction, and if the replacement or correction can be performed within the ceiling price (or the ceiling price as increased by the Government), the Government may --

(i) By contract or otherwise, perform the replacement or correction, charge to the Contractor any increased cost, or deduct such increased cost from any amounts paid or due under this contract; or

(ii) Terminate this contract for default.

(2) Failure to agree to the amount of increased cost to be charged to the Contractor shall be a dispute.

(h) Notwithstanding paragraphs (f) and (g) above, the Government may at any time require the Contractor to remedy by correction or replacement, without cost to the Government, any failure by the Contractor to comply with the requirements of this contract, if the failure is due to --

(1) Fraud, lack of good faith, or willful misconduct on the part of the Contractor's managerial personnel; or

(2) The conduct of one or more of the Contractor's employees selected or retained by the Contractor after any of the Contractor's managerial personnel has reasonable grounds to believe that the employee is habitually careless or unqualified.

(i) This clause applies in the same manner and to the same extent to corrected or replacement materials or services as to materials and services originally delivered under this contract.

(j) The Contractor has no obligation or liability under this contract to correct or replace materials and services that at time of delivery do not meet contract requirements, except as provided in this clause or as may be otherwise specified in the contract.

(k) Unless otherwise specified in the contract, the Contractor's obligation to correct or replace Government-furnished property shall be governed by the clause pertaining to Government property.

## SECTION F - DELIVERIES AND PERFORMANCE

### F.1 PERIOD OF PERFORMANCE

The period of performance of this contract is: October 1, 2012 – September 30, 2015.

### F.2 PLACE OF PERFORMANCE

The Contractor shall perform all work at the Contractor's facilities.

### F.3 DISTRIBUTION OF DELIVERABLES

The Contractor shall submit **one (1) copy** to the COR.

### F.4 DELIVERABLES

The listed below are the deliverables required by this contract. Section C of this contract contains information about the deliverables.

| Clause No. | Clause   | Deliverable   | Due Date                |
|------------|--|---|-------------------------|
| C.2.6      | Transparency and Accountability                        | User instructional documentation including technical requirements | Six months after award  |
| C.2.7      | Responsibility and Respect for Stakeholders            | Documenting the source of the policies and procedures.            | Six months after award  |
| C.2.8      | Performance Standards                                  | Performance Standards   | Six months after award  |
| C.2.9.2e   | Root Zone Automation                                   | Automated Root Zone   | Nine months after award |
| C.2.9.2g   | Customer Service Complaint Resolution Process (CSCRCP) | Customer Compliant Process  | Six months after award  |
| C.3.4      | Security Plan  | Documenting Practices and configuration of all systems            | Annually                |
| C.4.1      | Monthly Performance Progress Report includes DNSSEC    | Report based on C.2   | Monthly                 |
| C.4.2      | Root Zone Management                                   | Root Zone Management  | Nine months             |

| Clause No. | Clause   | Deliverable  | Due Date  |
|------------|--|--|---|
|            | Dashboard  | Dashboard  | after award   |
| C.4.3      | Performance Standards Reports                            | Performance Standards Report   | Six months after award and monthly thereafter         |
| C.4.4      | Customer Service Survey                                  | Customer Service Survey  | Annual Report of Customer Survey                      |
| C.4.5      | Final Report   | Final Report   | Expiration of Contract                                |
| C.5.1      | Audit Data   | Audit Report   | Annually  |
| C.5.2      | Root Zone Management Audit Data                          | Root Zone Management Audit Report  | Nine Months after award and Monthly Report thereafter |
| C.5.3      | External Auditor   | External Audit Report  | Annually  |
| C.6.2.4    | Conflict of Interest Enforcement and Compliance Report   | Enforcement and Compliance Report  | Annually  |
| C.7.2      | Contingency and Continuity of Operations Plan (The CCOP) | Contingency and Continuity of Operations for the continuation of the IANA Functions in case of an emergency. | Annually  |
| C.7.3      | Transition to Successor                                  | Transition plan in case of successor contractor.   | Eighteen (18) months after date of contract award     |

## **F.5 GOVERNMENT RIGHTS TO DELIVERABLES**

All deliverables provided under this contract become the property of the U.S. Government.

## **F.6 GOVERNMENT REVIEW OF DELIVERABLES**

The Government shall review all deliverables and determine acceptability. Any deficiencies shall be corrected by the Contractor and resubmitted to the Government within ten (10) workdays after notification.

## **F.7 REQUIRED DELIVERABLES**

The Contractor shall transmit all deliverables so the deliverables are received by the parties listed above on or before the indicated due dates.

**F.8 MEETINGS**

Program reviews will be scheduled monthly and site visits will occur annually.

## **SECTION G - CONTRACT ADMINISTRATION DATA**

Notwithstanding the Contractor's responsibility for total management during the performance of the contract, the administration of the contract will require maximum coordination between the Department of Commerce and the Contractor. The following individuals will be the Department of Commerce points of contact during the performance of the contract.

### **G.1 CONTRACTING OFFICER'S AUTHORITY**

#### **CONTRACTING OFFICER'S AUTHORITY (CAR 1352.201-70) (APR 2010)**

The Contracting Officer is the only person authorized to make or approve any changes in any of the requirements of this contract, and, notwithstanding any provisions contained elsewhere in this contract, the said authority remains solely in the Contracting Officer. In the event the contractor makes any changes at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract terms and conditions, including price.

#### **CONTRACTING OFFICER'S REPRESENTATIVE (COR) (CAR 1352.201-72) (APR 2010)**

(a) **Vernita D. Harris, Deputy Associate Administrator** is hereby designated as the Contracting Officer's Representative (COR). The COR may be changed at any time by the Government without prior notice to the contractor by a unilateral modification to the contract.

The COR is located at:

1401 Constitution Avenue, N.W., Room 4701, Washington, DC 20230

PHONE NO: 202.482.4686

Email: [vharris@ntia.doc.gov](mailto:vharris@ntia.doc.gov)

(b) The responsibilities and limitations of the COR are as follows:

(1) The COR is responsible for the technical aspects of the contract and serves as technical liaison with the contractor. The COR is also responsible for the final inspection and acceptance of all deliverables and such other responsibilities as may be specified in the contract.

(2) The COR is not authorized to make any commitments or otherwise obligate the Government or authorize any changes which affect the contract price, terms or conditions. Any contractor request for changes shall be referred to the Contracting Officer directly or through the COR. No such changes shall be made without the express written prior authorization of the Contracting Officer. The Contracting Officer may designate assistant or alternate COR(s) to act for the COR by naming such

assistant/alternate(s) in writing and transmitting a copy of such designation to the contractor.

## SECTION H - SPECIAL CONTRACT REQUIREMENTS

### H.1 AUDIT AND RECORDS – NEGOTIATION (FAR 52.215-2) (OCT 2010)

(a) As used in this clause, “records” includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) *Examination of costs.* If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor’s plants, or parts of them, engaged in performing the contract.

(c) *Certified cost or pricing data.* If the Contractor has been required to submit certified cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor’s records, including computations and projections, related to --

- (1) The proposal for the contract, subcontract, or modification;
- (2) The discussions conducted on the proposal(s), including those related to negotiating;
- (3) Pricing of the contract, subcontract, or modification; or
- (4) Performance of the contract, subcontract or modification.

(d) *Comptroller General—*

(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor’s directly pertinent records involving transactions related to this contract or a subcontract hereunder and to interview any current employee regarding such transactions.

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) *Reports.* If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the

right to examine and audit the supporting records and materials, for the purpose of evaluating -

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(1) The effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports; and

(2) The data reported.

(f) *Availability*. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition --

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, and --

(1) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these;

(2) For which certified cost or pricing data are required; or

(3) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause.

The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

*Alternate I (Mar 2009)*. As prescribed in [15.209](#) (b)(2), substitute the following paragraphs (d)(1) and (g) for paragraphs (d)(1) and (g) of the basic clause:

(d) *Comptroller General or Inspector General*.

(1) The Comptroller General of the United States, an appropriate Inspector General appointed under section 3 or 8G of the Inspector General Act of 1978 (5 U.S.C. App.), or an authorized representative of either of the foregoing officials, shall have access to and the right to—

- (i) Examine any of the Contractor's or any subcontractor's records that pertain to and involve transactions relating to this contract or a subcontract hereunder; and
- (ii) Interview any officer or employee regarding such transactions.

(g)(1) Except as provided in paragraph (g)(2) of this clause, the Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract. The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

(2) The authority of the Inspector General under paragraph (d)(1)(ii) of this clause does not flow down to subcontracts.

*Alternate II (Apr 1998).* As prescribed in 15.209(b)(3), add the following paragraph (h) to the basic clause:

(h) The provisions of OMB Circular No.A-133, "Audits of States, Local Governments, and Nonprofit Organizations," apply to this contract.

*Alternate III (Jun 1999).* As prescribed in 15.209(b)(4), delete paragraph (d) of the basic clause and redesignate the remaining paragraphs accordingly, and substitute the following paragraph (e) for the redesignated paragraph (e) of the basic clause:

(e) Availability. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), and (d) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition—

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

## **H.2 PATENT RIGHTS -- OWNERSHIP BY THE CONTRACTOR (FAR 52.227-11) (DEC 2007)**

(a) As used in this clause—

“Invention” means any invention or discovery that is or may be patentable or otherwise protectable under title 35 of the U.S. Code, or any variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, *et seq.*)

“Made” means—

(1) When used in relation to any invention other than a plant variety, the conception or first actual reduction to practice of the invention; or

(2) When used in relation to a plant variety, that the Contractor has at least tentatively determined that the variety has been reproduced with recognized characteristics.

“Nonprofit organization” means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

“Practical application” means to manufacture, in the case of a composition of product; to practice, in the case of a process or method, or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

“Subject invention” means any invention of the Contractor made in the performance of work under this contract.

(b) *Contractor’s rights.*

(1) *Ownership.* The Contractor may retain ownership of each subject invention throughout the world in accordance with the provisions of this clause.

(2) *License.*

(i) The Contractor shall retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, unless the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. The Contractor’s license extends to any domestic subsidiaries and affiliates within the corporate structure of which the Contractor

is a part, and includes the right to grant sublicenses to the extent the Contractor was legally obligated to do so at contract award. The license is transferable only with the written approval of the agency, except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(ii) The Contractor's license may be revoked or modified by the agency to the extent necessary to achieve expeditious practical application of the subject invention in a particular country in accordance with the procedures in FAR 27.302(i)2() and 27.(304(f).

*(c) Contractor's obligations.*

(1) The Contractor shall disclose in writing each subject invention to the Contracting Officer within 2 months after the inventor discloses it in writing to Contractor personnel responsible for patent matters. The disclosure shall identify the inventor(s) and this contract under which the subject invention was made. It shall be sufficiently complete in technical detail to convey a clear understanding of the subject invention. The disclosure shall also identify any publication, on sale (*i.e.*, sale or offer for sale), or public use of the subject invention, or whether a manuscript describing the subject invention has been submitted for publication and, if so, whether it has been accepted for publication. In addition, after disclosure to the agency, the Contractor shall promptly notify the Contracting Officer of the acceptance of any manuscript describing the subject invention for publication and any on sale or public use.

(2) The Contractor shall elect in writing whether or not to retain ownership of any subject invention by notifying the Contracting Officer within 2 years of disclosure to the agency. However, in any case where publication, on sale, or public use has initiated the 1-year statutory period during which valid patent protection can be obtained in the United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.

(3) The Contractor shall file either a provisional or a nonprovisional patent application or a Plant Variety Protection Application on an elected subject invention within 1 year after election. However, in any case where a publication, on sale, or public use has initiated the 1-year statutory period during which valid patent protection can be obtained in the United States, the Contractor shall file the application prior to the end of that statutory period. If the Contractor files a provisional application, it shall file a nonprovisional application within 10 months of the filing of the provisional application. The Contractor shall file patent applications in additional countries or international patent offices within either 10 months of the first filed patent application (whether provisional or nonprovisional) or 6 months from the date permission is granted by the Commissioner

of Patents to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

(4) The Contractor may request extensions of time for disclosure, election, or filing under paragraphs (c)(1), (c)(2), and (c)(3) of this clause.

(d) *Government's rights—*

(1) *Ownership.* The Contractor shall assign to the agency, on written request, title to any subject invention—

(i) If the Contractor fails to disclose or elect ownership to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain ownership; provided, that the agency may request title only within 60 days after learning of the Contractor's failure to disclose or elect within the specified times.

(ii) In those countries in which the Contractor fails to file patent applications within the times specified in paragraph (c) of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in paragraph (c) of this clause, but prior to its receipt of the written request of the agency, the Contractor shall continue to retain ownership in that country.

(iii) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

(2) *License.* If the Contractor retains ownership of any subject invention, the Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice, or have practiced for or on its behalf, the subject invention throughout the world.

(e) *Contractor action to protect the Government's interest.*

(1) The Contractor shall execute or have executed and promptly deliver to the agency all instruments necessary to—

(i) Establish or confirm the rights the Government has throughout the world in those subject inventions in which the Contractor elects to retain ownership; and

(ii) Assign title to the agency when requested under paragraph (d) of this clause and to enable the Government to obtain patent protection and plant variety protection for that subject invention in any country.

(2) The Contractor shall require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in the Contractor's format, each subject invention in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. The disclosure format should require, as a minimum, the information required by paragraph (c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, as to the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) The Contractor shall notify the Contracting Officer of any decisions not to file a nonprovisional patent application, continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response or filing period required by the relevant patent office.

(4) The Contractor shall include, within the specification of any United States nonprovisional patent or plant variety protection application and any patent or plant variety protection certificate issuing thereon covering a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by (identify the agency). The Government has certain rights in the invention."

(f) *Reporting on utilization of subject inventions.* The Contractor shall submit, on request, periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining utilization of the subject invention that are being made by the Contractor or its licensees or assignees. The reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and other data and information as the agency may reasonably specify. The Contractor also shall provide additional reports as may be requested by the agency in connection with any march-in proceeding undertaken by the agency in accordance with paragraph (h) of this clause. The Contractor also shall mark any utilization report as confidential/proprietary to help prevent inadvertent release outside the Government. As required by 35 U.S.C. 202(c)(5), the agency will not disclose that information to persons outside the Government without the Contractor's permission.

(g) *Preference for United States industry.* Notwithstanding any other provision of this clause, neither the Contractor nor any assignee shall grant to any person the exclusive right to use or sell any subject invention in the United States unless the person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement

for an agreement may be waived by the agency upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States, or that under the circumstances domestic manufacture is not commercially feasible.

(h) *March-in rights.* The Contractor acknowledges that, with respect to any subject invention in which it has retained ownership, the agency has the right to require licensing pursuant to 35 U.S.C. 203 and 210(c), and in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency in effect on the date of contract award.

(i) Special provisions for contracts with nonprofit organizations. If the Contractor is a nonprofit organization, it shall—

(1) Not assign rights to a subject invention in the United States without the written approval of the agency, except where an assignment is made to an organization that has as one of its primary functions the management of inventions, provided, that the assignee shall be subject to the same provisions as the Contractor;

(2) Share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (but through their agency if the agency deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;

(3) Use the balance of any royalties or income earned by the Contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions for the support of scientific research or education; and

(4) Make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business concerns, and give a preference to a small business concern when licensing a subject invention if the Contractor determines that the small business concern has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business concerns; provided, that the Contractor is also satisfied that the small business concern has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor.

(5) Allow the Secretary of Commerce to review the Contractor's licensing program and decisions regarding small business applicants, and negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when the Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of paragraph (i)(4) of this clause.

(j) *Communications.* [Complete according to agency instructions.]

(k) *Subcontracts.*

(1) The Contractor shall include the substance of this clause, including this paragraph (k), in all subcontracts for experimental, developmental, or research work to be performed by a small business concern or nonprofit organization.

(2) The Contractor shall include in all other subcontracts for experimental, developmental, or research work the substance of the patent rights clause required by FAR Subpart 27.3.

(3) At all tiers, the patent rights clause must be modified to identify the parties as follows: references to the Government are not changed, and the subcontractor has all rights and obligations of the Contractor in the clause. The Contractor shall not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(4) In subcontracts, at any tier, the agency, the subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and the agency with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (h) of this clause.

### **H.3 RESERVED**

### **H.4 RIGHTS IN DATA – SPECIAL WORKS (FAR 52.227-17) (DEC 2007)**

(a) *Definitions.* As used in this clause--

“Data” means recorded information, regardless of form or the medium on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

“Unlimited rights” means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) *Allocation of Rights.*

(1) The Government shall have—

(i) Unlimited rights in all data delivered under this contract, and in all data first produced in the performance of this contract, except as provided in paragraph (c) of this clause for copyright.

(ii) The right to limit assertion of copyright in data first produced in the performance of this contract, and to obtain assignment of copyright in that data, in accordance with paragraph (c)(1) of this clause.

(iii) The right to limit the release and use of certain data in accordance with paragraph (d) of this clause.

(2) The Contractor shall have, to the extent permission is granted in accordance with paragraph (c)(1) of this clause, the right to assert claim to copyright subsisting in data first produced in the performance of this contract.

(c) *Copyright—*

(1) *Data first produced in the performance of this contract.*

(i) The Contractor shall not assert or authorize others to assert any claim to copyright subsisting in any data first produced in the performance of this contract without prior written permission of the Contracting Officer. When copyright is asserted, the Contractor shall affix the appropriate copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. The Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license for all delivered data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.

(ii) If the Government desires to obtain copyright in data first produced in the performance of this contract and permission has not been granted as set forth in paragraph (c)(1)(i) of this clause, the Contracting Officer shall direct the Contractor to assign (with or without registration), or obtain the assignment of, the copyright to the Government or its designated assignee.

(2) *Data not first produced in the performance of this contract.* The Contractor shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract and which contain the copyright notice of 17 U.S.C. 401 or 402, unless the

Contractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause.

(d) *Release and use restrictions.* Except as otherwise specifically provided for in this contract, the Contractor shall not use, release, reproduce, distribute, or publish any data first produced in the performance of this contract, nor authorize others to do so, without written permission of the Contracting Officer.

(e) *Indemnity.* The Contractor shall indemnify the Government and its officers, agents, and employees acting for the Government against any liability, including costs and expenses, incurred as the result of the violation of trade secrets, copyrights, or right of privacy or publicity, arising out of the creation, delivery, publication, or use of any data furnished under this contract; or any libelous or other unlawful matter contained in such data. The provisions of this paragraph do not apply unless the Government provides notice to the Contractor as soon as practicable of any claim or suit, affords the Contractor an opportunity under applicable laws, rules, or regulations to participate in the defense of the claim or suit, and obtains the Contractor's consent to the settlement of any claim or suit other than as required by final decree of a court of competent jurisdiction; and these provisions do not apply to material furnished to the Contractor by the Government and incorporated in data to which this clause applies.

#### **H.5 RIGHTS IN DATA -- EXISTING WORKS (FAR 52.227-18) (DEC 2007)**

(a) Except as otherwise provided in this contract, the Contractor grants to the Government, and others acting on its behalf, a paid-up nonexclusive, irrevocable, worldwide license to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government, for all the material or subject matter called for under this contract, or for which this clause is specifically made applicable.

(b) The Contractor shall indemnify the Government and its officers, agents, and employees acting for the Government against any liability, including costs and expenses, incurred as the result of (1) the violation of trade secrets, copyrights, or right of privacy or publicity, arising out of the creation, delivery, publication or use of any data furnished under this contract; or (2) any libelous or other unlawful matter contained in such data. The provisions of this paragraph do not apply unless the Government provides notice to the Contractor as soon as practicable of any claim or suit, affords the Contractor an opportunity under applicable laws, rules, or regulations to participate in the defense of the claim or suit, and obtains the Contractor's consent to the settlement of any claim or suit other than as required by final decree of a court of competent jurisdiction; and do not apply to material furnished to the Contractor by the Government and incorporated in data to which this clause applies.

#### **H.6 BANKRUPTCY (FAR 52.242-13) (JUL 1995)**

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

**H.7 PRINTING (CAR 1352.208-70) (APR 2010)**

(a) The contractor is authorized to duplicate or copy production units provided the requirement does not exceed 5,000 production units of any one page or 25,000 production units in the aggregate of multiple pages. Such pages may not exceed a maximum image size of 103/4by 141/4inches. A "production unit" is one sheet, size 81/2x 11 inches (215 x 280 mm), one side only, and one color ink. Production unit requirements are outlined in the Government Printing and Binding Regulations.

(b) This clause does not preclude writing, editing, preparation of manuscript copy, or preparation of related illustrative material as a part of this contract, or administrative duplicating/copying (for example, necessary forms and instructional materials used by the contractor to respond to the terms of the contract).

(c) Costs associated with printing, duplicating, or copying in excess of the limits in paragraph (a) of this clause are unallowable without prior written approval of the Contracting Officer. If the contractor has reason to believe that any activity required in fulfillment of the contract will necessitate any printing or substantial duplicating or copying, it shall immediately provide written notice to the Contracting Officer and request approval prior to proceeding with the activity. Requests will be processed by the Contracting Officer in accordance with FAR 8.802.

(d) The contractor shall include in each subcontract which may involve a requirement for any printing, duplicating, and copying in excess of the limits specified in paragraph (a) of this clause, a provision substantially the same as this clause, including this paragraph (d).

**H.8 KEY PERSONNEL (CAR 1352.237-75) (APR 2010)**

(a) The contractor shall assign to this contract the following key personnel:

| NAME                | POSITION                       |
|---------------------|--------------------------------|
| <b>Elise Gerich</b> | IANA Functions Program Manager |

|                        |  |
|------------------------|--|
| <b>Michelle Cotton</b> | IANA Function Liaison for Technical Protocol Parameters Assignment |
| <b>Kim Davies</b>      | IANA Function Liaison for Root Zone Management                     |
| <b>Leo Vegoda</b>      | IANA Function Liaison for Internet Number Resource Allocation      |
| <b>Tomofumi Okubo</b>  | Security Director  |
| <b>Steve Antonoff</b>  | Conflict of Interest Officer                                       |

(b) The contractor shall obtain the consent of the Contracting Officer prior to making key personnel substitutions. Replacements for key personnel must possess qualifications equal to or exceeding the qualifications of the personnel being replaced, unless an exception is approved by the Contracting Officer.

(c) Requests for changes in key personnel shall be submitted to the Contracting Officer at least 15 working days prior to making any permanent substitutions. The request should contain a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any additional information requested by the Contracting Officer. The Contracting Officer will notify the contractor within 10 working days after receipt of all required information of the decision on substitutions. The contract will be modified to reflect any approved changes.

#### **H.9 ORGANIZATIONAL CONFLICT OF INTEREST (CAR 1352.209-74) (APR 2010)**

(a) Purpose. The purpose of this clause is to ensure that the contractor and its subcontractors:

(1) Are not biased because of their financial, contractual, organizational, or other interests which relate to the work under this contract, and

(2) Do not obtain any unfair competitive advantage over other parties by virtue of their performance of this contract.

(b) Scope. The restrictions described herein shall apply to performance or participation by the contractor, its parents, affiliates, divisions and subsidiaries, and successors in interest (hereinafter collectively referred to as "contractor") in the activities covered by this clause as a prime contractor, subcontractor, co-sponsor, joint venturer, consultant, or in any similar capacity. For the purpose of this clause, affiliation occurs when a business concern is controlled by or has the power to control another or when a third party has the power to control both.

(c) Warrant and Disclosure. The warrant and disclosure requirements of this paragraph apply with full force to both the contractor and all subcontractors. The contractor warrants that, to the best of the contractor's knowledge and belief, there are no relevant facts or circumstances which would give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, and that the contractor has disclosed all relevant information regarding any actual or potential conflict. The contractor agrees it shall make an immediate and full disclosure, in writing, to the

Contracting Officer of any potential or actual organizational conflict of interest or the existence of any facts that may cause a reasonably prudent person to question the contractor's impartiality because of the appearance or existence of bias or an unfair competitive advantage. Such disclosure shall include a description of the actions the contractor has taken or proposes to take in order to avoid, neutralize, or mitigate any resulting conflict of interest.

(d) Remedies. The Contracting Officer may terminate this contract for convenience, in whole or in part, if the Contracting Officer deems such termination necessary to avoid, neutralize or mitigate an actual or apparent organizational conflict of interest. If the contractor fails to disclose facts pertaining to the existence of a potential or actual organizational conflict of interest or misrepresents relevant information to the Contracting Officer, the Government may terminate the contract for default, suspend or debar the contractor from Government contracting, or pursue such other remedies as may be permitted by law or this contract.

(e) Subcontracts. The contractor shall include a clause substantially similar to this clause, including paragraphs (f) and (g), in any subcontract or consultant agreement at any tier expected to exceed the simplified acquisition threshold. The terms "contract," "contractor," and "Contracting Officer" shall be appropriately modified to preserve the Government's rights.

(f) Prime Contractor Responsibilities. The contractor shall obtain from its subcontractors or consultants the disclosure required in FAR Part 9.507-1, and shall determine in writing whether the interests disclosed present an actual, or significant potential for, an organizational conflict of interest. The contractor shall identify and avoid, neutralize, or mitigate any subcontractor organizational conflict prior to award of the contract to the satisfaction of the Contracting Officer. If the subcontractor's organizational conflict cannot be avoided, neutralized, or mitigated, the contractor must obtain the written approval of the Contracting Officer prior to entering into the subcontract. If the contractor becomes aware of a subcontractor's potential or actual organizational conflict of interest after contract award, the contractor agrees that the Contractor may be required to eliminate the subcontractor from its team, at the contractor's own risk.

(g) Waiver. The parties recognize that this clause has potential effects which will survive the performance of this contract and that it is impossible to foresee each circumstance to which it might be applied in the future. Accordingly, the contractor may at any time seek a waiver from the Head of the Contracting Activity by submitting such waiver request to the Contracting Officer, including a full written description of the requested waiver and the reasons in support thereof.

#### **H.10 RESTRICTIONS AGAINST DISCLOSURE (CAR 1352.209-72) (APR 2010)**

(a) The contractor agrees, in the performance of this contract, to keep the information furnished by the Government or acquired/developed by the contractor in performance of the contract and designated by the Contracting Officer or Contracting Officer's Representative, in

the strictest confidence. The contractor also agrees not to publish or otherwise divulge such information, in whole or in part, in any manner or form, nor to authorize or permit others to do so, taking such reasonable measures as are necessary to restrict access to such information while in the contractor's possession, to those employees needing such information to perform the work described herein, *i.e.*, on a "need to know" basis. The contractor agrees to immediately notify the Contracting Officer in writing in the event that the contractor determines or has reason to suspect a breach of this requirement has occurred.

(b) The contractor agrees that it will not disclose any information described in subsection (a) to any person unless prior written approval is obtained from the Contracting Officer. The contractor agrees to insert the substance of this clause in any consultant agreement or subcontract hereunder.

#### **H.11 COMPLIANCE WITH LAWS (CAR 1352.209-73) (APR 2010)**

The contractor shall comply with all applicable laws, rules and regulations which deal with or relate to performance in accord with the terms of the contract.

#### **H.12 DUPLICATION OF EFFORT (CAR 1352.231-71) (APR 2010)**

The contractor hereby certifies that costs for work to be performed under this contract and any subcontracts hereunder are not duplicative of any costs charged against any other Government contract, subcontract, or other Government source. The contractor agrees to advise the Contracting Officer, in writing, of any other Government contract or subcontract it has performed or is performing which involves work directly related to the purpose of this contract. The contractor also certifies and agrees that any and all work performed under this contract shall be directly and exclusively for the use and benefit of the Government, and not incidental to any other work, pursuit, research, or purpose of the contractor, whose responsibility it will be to account for it accordingly.

#### **H.13 HARMLESS FROM LIABILITY**

The Contractor shall hold and save the Government, its officers, agents, and employees harmless from liability of any nature or kind, including costs and expenses to which they may be subject, for or on account of any or all suits or damages of any character whatsoever resulting from injuries or damages sustained by any person or persons or property by virtue of performance of this contract, arising or resulting in whole or in part from the fault, negligence, wrongful act or wrongful omission of the Contractor, or any subcontractor, their employees, and agents.

#### **H.14 CONTRACTOR IDENTIFICATION RESPONSIBILITIES**

(a) All Contractor personnel attending meetings, answering Government telephones, and working in other situations where their Contractor status is not obvious to third parties, are required to identify themselves as such to avoid creating an impression in the minds of the public that they are Government officials.

(b) All documents or reports produced by the Contractor shall be suitably marked as Contractor products or that Contractor participation is appropriately identified.

#### **H.15 NOTICE REQUIREMENT**

The Contractor agrees that it will immediately inform the Contracting Officer and the Contracting Officer's Representative in the event that the Contractor's Chairman of the Board of Directors initiates any investigation by an independent auditor of potential corporate insolvency.

#### **H.16 CERTIFICATION REGARDING TERRORIST FINANCING IMPLEMENTING EXECUTIVE ORDER 13224**

(a) By signing and submitting this application, the prospective Contractor provides the certification set out below:

(1) The Contractor, to the best of its current knowledge, did not provide, within the previous ten years, and will take all reasonable steps to ensure that it does not and will not knowingly provide, material support or resources to any individual or entity that commits, attempts to commit, advocates, facilitates or participates in terrorist acts, or has committed, attempted to commit, facilitated or participated in terrorist acts, as that term is defined in Executive Order 13224.

(2) Before providing any material support or resources to an individual or entity, the Contractor will consider all information about that individual or entity of which it is aware and all public information that is reasonably available to it or of which it must be aware.

(3) The Contractor also will implement reasonable monitoring and oversight procedures to safeguard against assistance being diverted to support terrorist activity.

(b) For the purposes of this certification, the Contractor's obligations under paragraph "a" are not applicable to the procurement of goods and/or services by the Contractor that are acquired in the ordinary course of business through contract or purchase, e.g., utilities, rents, office supplies, gasoline, unless the Contractor has reason to believe that a vendor or supplier of such goods and services commits, attempts to commit, advocates, facilitates or participates in terrorist acts, or has committed, attempted to commit, facilitated or participated in terrorist acts.

(c) This certification is an express term and condition of any agreement issued as a result of this application, and any violation of it shall be grounds for unilateral termination of the agreement by DoC prior to the end of its term.

## SECTION I - CONTRACT CLAUSES

### FEDERAL ACQUISITION REGULATION (FAR)

#### I.1 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address:

<https://www.acquisition.gov/far/>

#### I.2 52.202-1 DEFINITIONS (JUL 2004)

#### I.3 52.203-3 GRATUITIES (APR 1984)

#### I.4 52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

#### I.5 52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995)

#### I.6 52.203-7 ANTI-KICKBACK PROCEDURES (JUL 1995)

#### I.7 52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

#### I.8 52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (SEPT 2007)

#### I.9 52.203-13 CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT (APR 2010)

#### I.10 52.204-2 SECURITY REQUIREMENTS (AUG 2000)

#### I.11 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

#### I.12 52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)

#### I.13 52.215-8 ORDER OF PRECEDENCE—UNIFORM CONTRACT FORMAT (OCT 1997)

#### I.14 52.216-7 ALLOWABLE COST AND PAYMENT (JUN 2011)

#### I.15 RESERVED

#### I.16 52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

#### I.17 52.222-26 EQUAL OPPORTUNITY (MAR 2007)

- I.18 52.222.35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEP 2006)**
- I.19 52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)**
- I.20 52.222-37 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEP 2006)**
- I.21 52.222-50 COMBATting TRAFFICKING IN PERSONS (FEB 2009)**
- I.22 52.222.54 EMPLOYMENT ELIGIBILITY VERIFICATION (JAN 2009)**
- I.23 52.223-6 DRUG-FREE WORKPLACE (MAY 2001)**
- I.24 52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (AUG 2011)**
- I.25 52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUN 2008)**
- I.26 52.227-1 AUTHORIZATION AND CONSENT (DEC 2007)**
- I.27 52.227-2 NOTICE OF ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (DEC 2007)**
- I.28 52.227-3 PATENT INDEMNITY (APR 1984)**
- I.29 52.227-14 RIGHTS IN DATA—GENERAL, ALTERNATES I, II, III, IV (DEC 2007)**
- I.30 52.229-3 FEDERAL, STATE AND LOCAL TAXES (APR 2003)**
- I.31 52.232-20 LIMITATION OF COST (APR 1984)**
- I.32 52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)**
- I.33 52.232-25 PROMPT PAYMENT (OCT 2008)**
- I.34 52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (OCT 2003)**
- I.35 52.233-1 DISPUTES (JUL 2002), ALTERNATE I (DEC 1991)**
- I.36 52.233-3 PROTEST AFTER AWARD (AUG 1996)**

- I.37 52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004)**
- I.38 52.239-1 PRIVACY OR SECURITY SAFEGUARDS (AUG 1996)**
- I.39 52.242-1 NOTICE OF INTENT TO DISALLOW COSTS (APR 1984)**
- I.40 52.242-4 CERTIFICATION OF FINAL INDIRECT COSTS (JAN 1997)**
- I.41 52.242-13 BANKRUPTCY (JUL 1995)**
- I.42 52.242-14 SUSPENSION OF WORK (APR 1984)**
- I.43 52.242-15 STOP-WORK ORDER (AUG 1989)**
- I.44 52.243-1 CHANGES-FIXED PRICE (AUG 1987) Alternate I (APR 1984)**
- I.45 52.243-2 CHANGES--COST-REIMBURSEMENT (AUG 1987), ALTERNATE I (APR 1984)**
- I.46 52.244-2 SUBCONTRACTS (OCT 2010)**
- I.47 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (DEC 2010)**
- I.48 52.245-1 GOVERNMENT PROPERTY (APR 2012)**
- I.49 52.246-20 WARRANTY OF SERVICES (MAY 2001)**  
[The Contracting Officer shall give written notice of any defect or nonconformance to the Contractor within 120 days from the date of acceptance by the Government.]
- I.50 52.246-25 LIMITATION OF LIABILITY—SERVICES (FEB 1997)**
- I.51 52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (MAY 2004) ALT II (SEP 1996)**
- I.52 52.249-5 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (EDUCATIONAL AND OTHER NONPROFIT INSTITUTIONS) (SEP 1996)**
- I.53 52.249-6 TERMINATION (COST REIMBURSEMENT) (MAY 2004) (ALT V) (SEP 1996)**
- I.54 52.249-14 EXCUSABLE DELAYS (APR 1984)**
- I.55 52.253-1 COMPUTER GENERATED FORMS (JAN 1991)**

**CLAUSES INCORPORATED IN FULL TEXT**

**I.56 52.204-7 CENTRAL CONTRACTOR REGISTRATION (FEB 2012)**

(a) Definitions. As used in this clause—

*“Central Contractor Registration (CCR) database”* means the primary Government repository for Contractor information required for the conduct of business with the Government.

*“Data Universal Numbering System (DUNS) number”* means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

*“Data Universal Numbering System+4 (DUNS+4) number”* means the DUNS number means the number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see the FAR at Subpart 32.11) for the same concern.

*“Registered in the CCR database”* means that—

(1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database; and

(2) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS), and has marked the record “Active”. The Contractor will be required to provide consent for TIN validation to the Government as a part of the CCR registration process.

(b)

(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.

(2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation “DUNS” or “DUNS+4” followed by the DUNS or DUNS+4 number that identifies the offeror’s name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number—

(i) Via the internet at <http://fedgov.dnb.com/webform> or if the offeror does not have internet access, it may call Dun and Bradstreet at 1-866-705-5711 if located within the United States; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office. The offeror should indicate that it is an offeror for a U.S. Government contract when contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and Zip Code.

(iv) Company mailing address, city, state and Zip Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(g)

(1)

(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to:

(A) Change the name in the CCR database;

(B) Comply with the requirements of Subpart 42.12 of the FAR;

(C) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of

assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(h) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the CCR accessed through <https://www.acquisition.gov> or by calling 1-888-227-2423, or 269-961-5757.

**I.57 52.216-11 COST CONTRACT – NO FEE (APR 1984)**

(a) The Government shall not pay the Contractor a fee for performing this contract.

**I.58 52.217-8 OPTION TO EXTEND SERVICES (NOV 1999)**

The Government may require continued performance of any services within the limits and at the rates specified in the contract. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 15 calendar days of expiration of the contract.

**I.59 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)**

(a) The Government may extend the term of this contract by written notice to the Contractor **within 15 calendar days before the expiration of the contract**; provided that the Government gives the Contractor a preliminary written notice of its intent to extend **at least 30 calendar days before the contract expires**. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed seven years.

**I.60 52.233-2 SERVICE OF PROTEST (SEP 2006)**

(a) Protests, as defined in section 31.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer addressed as follows: Mona-Lisa Dunn, Contracting Officer, 1401 Constitution Avenue, NW, Room 6521, Washington, DC 20230 by obtaining written and dated acknowledgment of receipt from Mona-Lisa Dunn.

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

**I.61 52.237-3 CONTINUITY OF SERVICES (JAN 1991)**

(a) The Contractor recognizes that the services under this contract are vital to the Government and must be continued without interruption and that, upon contract expiration, a successor, either the Government or another contractor, may continue them. The Contractor agrees to --

(1) Furnish phase-in training; and

(2) Exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.

(b) The Contractor shall, upon the Contracting Officer's written notice,

(1) furnish phase-in, phase-out services for up to 90 days after this contract expires and

(2) negotiate in good faith a plan with a successor to determine the nature and extent of phase-in, phase-out services required.

The plan shall specify a training program and a date for transferring responsibilities for each division of work described in the plan, and shall be subject to the Contracting Officer's approval. The Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the services called for by this contract are maintained at the required level of proficiency.

(c) The Contractor shall allow as many personnel as practicable to remain on the job to help the successor maintain the continuity and consistency of the services required by this contract. The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.

(d) The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs (i.e., costs incurred within the agreed period after contract expiration that result from phase-in, phase-out operations) and a fee (profit) not to exceed a pro rata portion of the fee (profit) under this contract.

**COMMERCE ACQUISITION REGULATION (CAR) CLAUSES INCORPORATED IN FULL TEXT**

**I.62 1352.208-70 RESTRICTIONS ON PRINTING AND DUPLICATING (APR 2010)**

(a) The contractor is authorized to duplicate or copy production units provided the requirement does not exceed 5,000 production units of any one page or 25,000 production units in the aggregate of multiple pages. Such pages may not exceed a maximum image size of 10-3/4 by 14-1/4 inches. A "production unit" is one sheet, size 8-1/2 x 11 inches (215 x 280 mm), one side only, and one color ink. Production unit requirements are outlined in the Government Printing and Binding Regulations.

(b) This clause does not preclude writing, editing, preparation of manuscript copy, or preparation of related illustrative material as a part of this contract, or administrative duplicating/copying (for example, necessary forms and instructional materials used by the contractor to respond to the terms of the contract).

(c) Costs associated with printing, duplicating, or copying in excess of the limits in paragraph (a) of this clause are unallowable without prior written approval of the Contracting Officer. If the contractor has reason to believe that any activity required in fulfillment of the contract will necessitate any printing or substantial duplicating or copying, it shall immediately provide written notice to the Contracting Officer and request approval prior to proceeding with the activity. Requests will be processed by the Contracting Officer in accordance with FAR 8.802.

(d) The contractor shall include in each subcontract which may involve a requirement for any printing, duplicating, and copying in excess of the limits specified in paragraph (a) of this clause, a provision substantially the same as this clause, including this paragraph (d).

**I.63 1352.209-72 RESTRICTIONS AGAINST DISCLOSURE (APR 2010)**

(a) The contractor agrees, in the performance of this contract, to keep the information furnished by the Government or acquired/developed by the contractor in performance of the contract and designated by the Contracting Officer or Contracting Officer's Representative, in the strictest confidence. The contractor also agrees not to publish or otherwise divulge such information, in whole or in part, in any manner or form, nor to authorize or permit others to do so, taking such reasonable measures as are necessary to restrict access to such information while in the contractor's possession, to those employees needing such information to perform the work described herein, *i.e.*, on a "need to know" basis. The contractor agrees to immediately notify the Contracting Officer in writing in the event that the contractor determines or has reason to suspect a breach of this requirement has occurred.

(b) The contractor agrees that it will not disclose any information described in subsection (a) to any person unless prior written approval is obtained from the Contracting Officer. The contractor agrees to insert the substance of this clause in any consultant agreement or subcontract hereunder.

**I.64 1352.209-73 COMPLIANCE WITH THE LAWS (APR 2010)**

The contractor shall comply with all applicable laws, rules and regulations which deal with or relate to performance in accord with the terms of the contract.

**I.65 1352.233-70 AGENCY PROTESTS (APR 2010)**

(a) An agency protest may be filed with either: (1) The Contracting Officer, or (2) at a level above the Contracting Officer, with the appropriate agency Protest Decision Authority. See 64 FR 16,651 (April 6, 1999).

(b) Agency protests filed with the Contracting Officer shall be sent to the following address:

**Ms. Mona-Lisa Dunn, Contracting Officer**  
U.S. Department of Commerce  
Office of Acquisition Management  
Commerce Acquisition Solutions, Room 6521  
14th and Constitution Avenue, NW  
Washington, D.C. 20230  
Fax: 202-482-1470  
Email: mdunn@doc.gov

(c) Agency protests filed with the agency Protest Decision Authority shall be sent to the following address:

**Mr. Mark Langstein, Esquire**  
U.S. Department of Commerce  
Office of the General Counsel  
Contract Law Division--Room 5893  
Herbert C. Hoover Building  
14th Street and Constitution Avenue, NW  
Washington, D.C. 20230.  
FAX: (202) 482-5858

(d) A complete copy of all agency protests, including all attachments, shall be served upon the Contract Law Division of the Office of the General Counsel within one day of filing a protest with either the Contracting Officer or the Protest Decision Authority.

(e) Service upon the Contract Law Division shall be made as follows: U.S. Department of Commerce, Office of the General Counsel, Chief, Contract Law Division, Room 5893, Herbert C. Hoover Building, 14th Street and Constitution Avenue, NW., Washington, DC 20230. FAX: (202) 482-5858.

**I.66 1352.233-71 GAO AND COURT OF FEDERAL CLAIMS PROTESTS (APR 2010)**

(a) A protest may be filed with either the Government Accountability Office (GAO) or the Court of Federal Claims unless an agency protest has been filed.

(b) A complete copy of all GAO or Court of Federal Claims protests, including all attachments, shall be served upon (i) the Contracting Officer, and (ii) the Contract Law Division of the Office of the General Counsel, within one day of filing a protest with either GAO or the Court of Federal Claims.

(c) Service upon the Contract Law Division shall be made as follows: U.S. Department of Commerce, Office of the General Counsel, Chief, Contract Law Division, Room 5893, Herbert C. Hoover Building, 14th Street and Constitution Avenue, NW., Washington, DC 20230. FAX: (202) 482-5858.

**I.67 1352.237-71 SECURITY PROCESSING REQUIREMENTS - LOW RISK CONTRACTS (APR 2010)**

(a) Investigative Requirements for Low Risk Contracts. All contractor (and subcontractor) personnel proposed to be employed under a Low Risk contract shall undergo security processing by the Department's Office of Security before being eligible to work on the premises of any Department of Commerce owned, leased, or controlled facility in the United States or overseas, or to obtain access to a Department of Commerce IT system. All Department of Commerce security processing pertinent to this contract will be conducted at no cost to the contractor.

(b) Investigative requirements for Non-IT Service Contracts are:

- (1) Contracts more than 180 days – National Agency Check and Inquiries (NACI)
- (2) Contracts less than 180 days – Special Agency Check (SAC)

(c) Investigative requirements for IT Service Contracts are:

- (1) Contracts more than 180 days – National Agency Check and Inquiries (NACI)
- (2) Contracts less than 180 days – National Agency Check and Inquiries (NACI)

(d) In addition to the investigations noted above, non-U.S. citizens must have a background check that includes an Immigration and Customs Enforcement agency check.

(e) Additional Requirements for Foreign Nationals (Non-U.S. Citizens). Non-U.S. citizens (lawful permanent residents) to be employed under this contract within the United States must have:

- (1) Official legal status in the United States;
- (2) Continuously resided in the United States for the last two years; and
- (3) Obtained advance approval from the servicing Security Officer in consultation with the Office of Security headquarters.

(f) DoC Security Processing Requirements for Low Risk Non-IT Service Contracts. Processing requirements for Low Risk non-IT Service Contracts are as follows:

- (1) Processing of a NACI is required for all contract employees employed in Low Risk non-IT service contracts for more than 180 days. The Contracting Officer's Representative (COR) will invite the prospective contractor into e-QIP to complete the SF-85. The contract employee must also complete fingerprinting.
- (2) Contract employees employed in Low Risk non-IT service contracts for less than 180 days require processing of Form OFI-86C Special Agreement Check (SAC), to be processed. The Sponsor will forward a completed Form OFI-86C, FD-258, Fingerprint Chart, and Credit Release Authorization to the servicing Security Officer, who will send the investigative packet to the Office of Personnel Management for processing.
- (3) Any contract employee with a favorable SAC who remains on the contract over 180 days will be required to have a NACI conducted to continue working on the job site.
- (4) For Low Risk non-IT service contracts, the scope of the SAC will include checks of the Security/Suitability Investigations Index (SII), other agency files (INVA), Defense Clearance Investigations Index (DCII), FBI Fingerprint (FBIF), and the FBI Information Management Division (FBIN).
- (5) In addition, for those individuals who are not U.S. citizens (lawful permanent residents), the Sponsor may request a Customs Enforcement SAC on Form OFI-86C, by checking Block #7, Item I. In Block 13, the Sponsor should enter the employee's Alien Registration Receipt Card number to aid in verification.
- (6) Copies of the appropriate forms can be obtained from the Sponsor or the Office of Security. Upon receipt of the required forms, the Sponsor will forward the forms to the servicing Security Officer. The Security Officer will process the forms and advise the Sponsor and the Contracting Officer whether the contract employee can commence work prior to completion of the suitability determination based on the type of work and risk to the facility (i.e., adequate controls and restrictions are in place). The Sponsor will notify the contractor of favorable or unfavorable findings of

the suitability determinations. The Contracting Officer will notify the contractor of an approved contract start date.

(g) Security Processing Requirements for Low Risk IT Service Contracts. Processing of a NACI is required for all contract employees employed under Low Risk IT service contracts.

- (1) Contract employees employed in all Low Risk IT service contracts will require a National Agency Check and Inquiries (NACI) to be processed. The Contracting Officer's Representative (COR) will invite the prospective contractor into e-QIP to complete the SF-85. Fingerprints and a Credit Release Authorization must be completed within three working days from start of work, and provided to the Servicing Security Officer, who will forward the investigative package to OPM.
- (2) For Low Risk IT service contracts, individuals who are not U.S. citizens (lawful permanent residents) must undergo a NACI that includes an agency check conducted by the Immigration and Customs Enforcement Service. The Sponsor must request the ICE check as a part of the NAC.

(h) Notification of Disqualifying Information. If the Office of Security receives disqualifying information on a contract employee, the Sponsor and Contracting Officer will be notified. The Sponsor shall coordinate with the Contracting Officer for the immediate removal of the employee from duty requiring access to Departmental facilities or IT systems. Contract employees may be barred from working on the premises of a facility for any of the following reasons:

- (1) Conviction of a felony crime of violence or of a misdemeanor involving moral turpitude.
- (2) Falsification of information entered on security screening forms or of other documents submitted to the Department.
- (3) Improper conduct once performing on the contract, including criminal, infamous, dishonest, immoral, or notoriously disgraceful conduct or other conduct prejudicial to the Government regardless of whether the conduct was directly related to the contract.
- (4) Any behavior judged to pose a potential threat to Departmental information systems, personnel, property, or other assets.

(i) Failure to comply with security processing requirements may result in termination of the contract or removal of contract employees from Department of Commerce facilities or denial of access to IT systems.

(j) Access to National Security Information. Compliance with these requirements shall not be construed as providing a contract employee clearance to have access to national security information.

(k) The contractor shall include the substance of this clause, including this paragraph, in all subcontracts.

**I.68 1352.242-70 POSTAWARD CONFERENCE (APR 2010)**

A post award conference with the successful Offeror may be required. If required, the Contracting Officer will contact the contractor within 10 days of contract award to arrange the conference.

**I.69 1352.246-70 PLACE OF ACCEPTANCE (APR 2010)**

(a) The Contracting Officer or the duly authorized representative will accept supplies and services to be provided under this contract.

(b) The place of acceptance will be:  
U.S Department of Commerce – NTIA  
Office of International Affairs  
1401 Constitution Avenue, NW,  
Room 4701  
Washington, DC 20230

**I.70 1352.270-70 PERIOD OF PERFORMANCE (APR 2010)**

(a) The base period of performance of this contract is from October 1, 2012 through September 30, 2015. If an option is exercised, the period of performance shall be extended through the end of that option period.

(b) The option periods that may be exercised are as follows:

| <b>Period</b> | <b>Start Date</b> | <b>End Date</b>    |
|---------------|-------------------|--------------------|
| Option I      | October 1, 2015   | September 30, 2017 |
| Option II     | October 1, 2017   | September 30, 2019 |

(c) The notice requirements for unilateral exercise of option periods are set out in FAR 52.217-9 (see Paragraph I.59 above).

- 1207.01(a)(v) - Expansion
  - 1207.01(a)(vi) - Evidence
  - 1207.01(b) - Similarity of the
  - 1207.01(c) - Design Marks
  - 1207.01(d) - Miscellaneous C
- 1207.02 - Marks That Are Likely
- 1207.03 - Marks Previously Use
- 1207.04 - Concurrent Use Regis
- 1208 - Conflicting Marks in Pendin
- 1209 - Refusal on Basis of Descrip
- 1210 - Refusal on Basis of Geogra
- 1211 - Refusal on Basis of Summar
- 1212 - Acquired Distinctiveness or
- 1213 - Disclaimer of Elements in M
- 1214 - "Phantom" Elements in Mar
- 1215 - Marks Composed, in Whole
- 1216 - Effect of Applicant's Prior R
- 1217 - Res Judicata, Collateral Est
- 1300 - Service Marks, Collectiv
- 1400 - Classification and Identifi
- 1500 - Post-Examination Proce
- 1600 - Registration and Post Re
- 1700 - Petitions, Requests for R
- 1800 - Public Inquiries About A
- 1900 - Madrid Protocol
- Appendix A - Examining Attorn
- Appendix B - Members of Intern
- Appendix C - Notes of Other St
- Appendix D - Foreign Entity Ap
- Appendix E - Countries That Ha

<< 1207.01(a)(iv) 1200> 1207> 1207.01> 1207.01(a)> 1207.01(a)(v) Oct2017 (Current) 1207.01(a)(vi) >>

### 1207.01(a)(v) Expansion-of-Trade Doctrine

The expansion-of-trade doctrine has limited application in ex parte proceedings, and the Trademark Trial and Appeal Board has indicated that "[i]t is not necessary, . . . in the context of an ex parte proceeding, for the Office to show that the owner of the particular registration that has been cited against the application has expanded or will expand its goods or services." *In re 1st USA Realty Profils, Inc.*, 84 USPQ2d 1581, 1584 & n.4 (TTAB 2007) ; see also *In re Kysela Pere et Fils, Ltd.*, 98 USPQ2d 1261, 1266 (TTAB 2011)

The doctrine is typically applied in inter partes proceedings where an opposer claims that its priority of use of a mark with respect to its goods/services should be extended to include applicant's goods/services because they are in the natural scope of expansion of opposer's goods/services. See *Orange Bang, Inc. v. Olé Mexican Foods, Inc.*, 116 USPQ2d 1102, 1119 (TTAB 2015) (noting that the "natural zone of expansion" doctrine normally applies in inter partes cases in the context of the parties' dueling claims of priority); *1st USA Realty Profils*, 84 USPQ2d at 1584. However, in the ex parte context, the normal relatedness analysis is applied.

[W]e look at the question of the relatedness of the services identified in applicant's application and those in the cited registration based on whether consumers are likely to believe that the services emanate from a single source, rather than whether the Examining Attorney has shown that the registrant . . . has or is likely to expand its particular business to include the services of applicant.

*Id.*

To the extent the expansion-of-trade doctrine does apply in ex parte cases, it "is considered through a traditional relatedness of goods and services approach." *Id.* at 1584 n.4.

<< 1207.01(a)(iv) 1207.01(a)(v)-Top 1207.01(a)(vi) >>

|                       |   |        |               |
|-----------------------|---|--------|---------------|
| <b>AWARD/CONTRACT</b> | 1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) | RATING | PAGE OF PAGES |
|                       |   |        | 1   65        |

|   |                                 |   |
|---|---------------------------------|---|
| 2. CONTRACT (Proc. Inst. Ident.) NO.<br>SA1301-12-CN-0035 | 3. EFFECTIVE DATE<br>10/01/2012 | 4. REQUISITION/PURCHASE REQUEST/PROJECT NO.<br>AA-OAM-??-7-12-00934 |
|---|---------------------------------|---|

|  |            |   |            |
|--|------------|---|------------|
| 5. ISSUED BY<br>U.S. DEPARTMENT OF COMMERCE<br>14TH & CONSTITUTION AVE. NW<br>ACQUISITION SERVICES- ROOM 6520<br>WASHINGTON DC 20230 | CODE 000SA | 6. ADMINISTERED BY (if other than Item 5)<br>U.S. DEPARTMENT OF COMMERCE<br>14TH & CONSTITUTION AVE. NW<br>ACQUISITION SERVICES- ROOM 6520<br>WASHINGTON DC 20230 | CODE 000SA |
|--|------------|---|------------|

|   |  |
|---|--|
| 7. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and Zip Code)<br>INTERNET CORPORATION FOR ASSIGNED NAMES<br>AND NUMBERS<br>4676 ADMIRALTY WAY, SUITE #330<br>MARINA DEL REY CA 902926648<br>Vendor ID: 00000428<br>DUNS: 045511487<br>Cage Code: 4A4S9<br>CEC: | 8. DELIVERY<br><input type="checkbox"/> FOB ORIGIN <input type="checkbox"/> OTHER (See below)        |
| 9. DISCOUNT FOR PROMPT PAYMENT<br><br>NET 30  | 10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN<br>ITEM<br>NISTFSG |
| CODE  | FACILITY CODE  |

|   |               |   |              |
|---|---------------|---|--------------|
| 11. SHIP TO/MARK FOR<br>NATIONAL TEL. AND INFO. ADMIN<br>1401 CONSTITUTION AVE. NW<br>ROOM 4888, HCHB | CODE NTIA-HCH | 12. PAYMENT WILL BE MADE BY<br>NIST ACCOUNTS PAYABLE OFFICE<br>BLDG 101, ROOM A-836 MS 1621<br>100 BUREAU DRIVE | CODE NISTFSG |
|---|---------------|---|--------------|

|   |                                       |
|---|---------------------------------------|
| 13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION.<br><input type="checkbox"/> 10 U.S.C. 2304(c) <input type="checkbox"/> 41 U.S.C. 253(c) | 14. ACCOUNTING AND APPROPRIATION DATA |
|---|---------------------------------------|

| 15A. ITEM NO.                        | 15B. SUPPLIES/SERVICES                      | 15C. QUANTITY | 15D. UNIT | 15E. UNIT PRICE | 15F. AMOUNT    |
|--------------------------------------|---|---------------|-----------|-----------------|----------------|
|                                      | Please See Continuation Page for Line Items |               |           |                 |                |
| <b>15G. TOTAL AMOUNT OF CONTRACT</b> |   |               |           |                 | <b>\$ 0.00</b> |

| (X)                   | SEC. | DESCRIPTION                           | PAGE(S) | (X)  | SEC. | DESCRIPTION  | PAGE(S) |
|-----------------------|------|---------------------------------------|---------|--|------|--|---------|
| PART I - THE SCHEDULE |      |                                       |         | PART II - CONTRACT CLAUSES                               |      |  |         |
| X                     | A    | SOLICITATION/CONTRACT FORM            | 1       | X  | I    | CONTRACT CLAUSES   | 52-65   |
| X                     | B    | SUPPLIES OR SERVICES AND PRICES/COSTS | 2-3     | PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH. |      |  |         |
| X                     | C    | DESCRIPTION/SPECS./WORK STATEMENT     | 4-25    | J  |      | LIST OF ATTACHMENTS  |         |
| X                     | D    | PACKAGING AND MARKING                 | 26      | PART IV - REPRESENTATIONS AND INSTRUCTIONS               |      |  |         |
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CONTRACTING OFFICER WILL COMPLETE ITEM 17 (SEALED-BID OR NEGOTIATED PROCUREMENT) OR 18 (SEALED-BID PROCUREMENT) AS APPLICABLE

|   |  |
|---|--|
| 17. <input checked="" type="checkbox"/> CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 1 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)<br>15A. NAME AND TITLE OF SIGNER (Type or Print)<br>ROD A. BECKSTROM<br>PRESIDENT & CEO, ICAANN | 18. <input type="checkbox"/> SEALED-BID AWARD (Contractor is not required to sign this document.)<br>Your bid on Solicitation Number _____ including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the terms listed above and on any continuation sheets. This award consummates the contract which consists of the following documents (a) the Government's solicitation and your bid, and (b) this award/contract. No further contractual document is necessary. (Block 18 should be checked only when awarding a sealed-bid contract.)<br>20A. NAME OF CONTRACTING OFFICER<br>KATHLEEN M. MCGRATH |
| 19B. NAME OF CONTRACTOR<br>BY: <i>[Signature]</i><br>(Signature of person authorized to sign)   | 19C. DATE SIGNED<br>JUL 29, 2012   |
| 20B. UNITED STATES OF AMERICA<br>BY: <i>[Signature]</i><br>(Signature of Contracting Officer)   | 20C. DATE SIGNED<br>JUL 02, 2012   |

**SCHEDULE Continued**

| ITEM NO. | SUPPLIES/SERVICES   | QUANTITY | UNIT | UNIT PRICE \$ | AMOUNT \$   |
|----------|---|----------|------|---------------|-------------|
|          | <p>Contracting Officer: Mona-Lisa Dunn, 202-482-1470</p> <p>Primary Contracting Officer Representative: Vernita D. Harris, 202-482-4686, vharris@NTIA.doc.gov</p> <p>Alternate Contracting Officer Representative(s):</p> <p>Technical Point of Contact: Vernita D. Harris, 202-482-4686, vharris@NTIA.doc.gov</p> <p>The Contractor shall provide the services in accordance with the terms, conditions, and prices described herein.</p> <p>The Contractor's proposal dated May 31, 2012 and as amended through agreed terms and conditions dated June 23, 2012 and June 26, 2012 are hereby incorporated by reference.</p> |          |      |               |             |
| 0001     | <p>BASE YEAR - October 1, 2012 - September 30, 2015. The Contractor shall provide the services necessary for the operation of the Internet Assigned Numbers Authority (IANA) in accordance with the attached Statement of Work. The Contractor may not charge the United States Government for performance of the requirements of this contract.</p> <p>Period of Performance: 10/01/2012 to 09/30/2015</p>   | 0.00     | EA   | 0.00          | 0.00        |
| 0002     | <p>OPTION YEAR 1 - October 1, 2015 - September 30, 2017. The Contractor shall provide the services necessary for the operation of the Internet Assigned Numbers Authority (IANA) in accordance with the attached Statement of Work. The Contractor may not charge the United States Government for performance of the requirements of this contract.</p> <p>Accounting and Appropriation Data:<br/>61.12.1200012.100.0012.010102000.<br/>0400000000000000.25970000.000000<br/>\$0.00</p> <p>Period of Performance: 10/01/2015 to 09/30/2017<br/>Pricing Option: Time and Material</p>   | 1.00     | JB   | 0.00          | OPT<br>0.00 |
| 0003     | <p>OPTION YEAR 2 - October 1, 2017 - September 30, 2019. The Contractor shall provide the services necessary for the operation of the Internet Assigned Numbers Authority (IANA) in accordance with the attached Statement of Work. The Contractor may not charge the United States Government for performance of the requirements of this contract.</p> <p>Accounting and Appropriation Data:<br/>61.12.1200012.100.0012.010102000.<br/>0400000000000000.25970000.000000<br/>\$0.00</p> <p>Period of Performance: 10/01/2017 to 09/30/2019<br/>Pricing Option: Time and Material</p>   | 1.00     | JB   | 0.00          | OPT<br>0.00 |

### **SECTION B SUPPLIES OR SERVICES AND PRICES/COSTS**

This is a no cost, \$0.00 time and material contract.

#### **B.2 COST/PRICE**

The Contractor may not charge the United States Government to perform the requirements of this Contract. The Contractor may establish and collect fees from third parties provided the fee levels are approved by the Contracting Officer and are fair and reasonable. If fees are charged, the Contractor shall base any proposed fee structure on the cost of providing the specific service for which the fee is charged and the resources necessary to monitor the fee driven requirements. The Contractor may propose an interim fee for the first year of the contract, which will expire one year after the contract award. If the Contractor intends to establish and collect fees from third parties beyond the first year of the Contract, the Contractor must collaborate with the interested and affected parties as enumerated in Section C.1.3 to develop a proposed fee structure based on a methodology that tracks the actual costs incurred for each discrete IANA function. The Contractor must submit a copy of proposed fee structure, tracking methodology and description of the collaboration efforts and process to the Contracting Officer.

#### **B.3 PRE-AWARD SURVEY – FAR 9.106 and 9.106-4(a)**

At the discretion of the Contracting Officer, a site visit to the Offeror's facility (ies) may also be requested and conducted by the Department of Commerce (Commerce) or its designee. The purpose of this visit will be to gather information relevant to the Offeror's responsibility and prospective capability to perform the requirements under any contract that may be awarded. The Contracting Officer will arrange such a visit at least seven (7) days in advance with the Offeror.

## **SECTION C – DESCRIPTION / SPECS / WORK STATEMENT**

### **STATEMENT OF WORK/SPECIFICATIONS**

The Contractor shall furnish the necessary personnel, materials, equipment, services and Facilities (except as otherwise specified) to perform the following Statement Work/Specifications.

#### **C.1 BACKGROUND**

**C.1.1** The U.S. Department of Commerce (DoC), National Telecommunications and Information Administration (NTIA) has initiated this contract to maintain the continuity and stability of services related to certain interdependent Internet technical management functions, known collectively as the Internet Assigned Numbers Authority (IANA).

**C.1.2** Initially, these interdependent technical functions were performed on behalf of the Government under a contract between the Defense Advanced Research Projects Agency (DARPA) and the University of Southern California (USC), as part of a research project known as the Tera-node Network Technology (TNT). As the TNT project neared completion and the DARPA/USC contract neared expiration in 1999, the Government recognized the need for the continued performance of the IANA functions as vital to the stability and correct functioning of the Internet.

**C.1.3** The Contractor, in the performance of its duties, must have or develop a close constructive working relationship with all interested and affected parties to ensure quality and satisfactory performance of the IANA functions. The interested and affected parties include, but are not limited to, the multi-stakeholder, private sector led, bottom-up policy development model for the domain name system (DNS) that the Internet Corporation for Assigned Names and Numbers (ICANN) represents; the Internet Engineering Task Force (IETF) and the Internet Architecture Board (IAB); Regional Internet Registries (RIRs); top-level domain (TLD) operators/managers (e.g., country codes and generic); governments; and the Internet user community.

**C.1.4** The Government acknowledges that data submitted by applicants in connection with the IANA functions may be confidential information. To the extent required by law, the Government shall accord any confidential data submitted by applicants in connection with the IANA functions with the same degree of care as it uses to protect its own confidential information, but not less than reasonable care, to prevent the unauthorized use, disclosure, or publication of confidential information. In providing data that is subject to such a confidentiality obligation to the Government, the Contractor shall advise the Government of that obligation.

## **C.2 CONTRACTOR REQUIREMENTS**

**C.2.1** The Contractor must perform the required services for this contract as a prime Contractor, not as an agent or subcontractor. The Contractor shall not enter into any subcontracts for the performance of the services, or assign or transfer any of its rights or obligations under this Contract, without the Government's prior written consent and any attempt to do so shall be void and without further effect. The Contractor shall be a) a wholly U.S. owned and operated firm or fully accredited United States University or College operating in one of the 50 states of the United States or District of Columbia; b) incorporated within one of the fifty (50) states of the United States or District of Columbia; and c) organized under the laws of a state of the United States or District of Columbia. The Contractor shall perform the primary IANA functions of the Contract in the United States and possess and maintain, throughout the performance of this Contract, a physical address within the United States. The Contractor must be able to demonstrate that all primary operations and systems will remain within the United States (including the District of Columbia). The Government reserves the right to inspect the premises, systems, and processes of all security and operational components used for the performance of all Contract requirements and obligations.

**C.2.2** The Contractor shall furnish the necessary personnel, material, equipment, services, and facilities, to perform the following requirements without any cost to the Government. The Contractor shall conduct due diligence in hiring, including full background checks.

**C.2.3** The Contractor may not charge the United States Government for performance of the requirements of this contract. The Contractor may establish and collect fees from third parties provided the fee levels are approved by the Contracting Officer (CO) and are fair and reasonable. If fees are charged, the Contractor shall base any proposed fee structure on the cost of providing the specific service for which the fee is charged. The Contractor may propose an interim fee for the first year of the contract, which will expire one year after the contract award. The documentation must be based upon the anticipated cost for providing the specific service for which the fee is charged, including start up costs, if any, equipment, personnel, software, etc. If the Contractor intends to establish and collect fees from third parties beyond the first year of the contract, the Contractor must collaborate with the interested and affected parties as enumerated in Section C.1.3 to develop a proposed fee structure based on a methodology that tracks the actual costs incurred for each discrete IANA function enumerated and described in C.2.9. The Contractor must submit a copy of any proposed fee structure including tracking methodology and description of the collaboration and process efforts for fees being proposed after the first year contract award to the Contracting Officer. The performance exclusion C.8.3 shall apply to any fee proposed.

**C.2.4** The Contractor is required to perform the IANA functions, which are critical for the operation of the Internet's core infrastructure, in a stable and secure manner. The IANA functions are administrative and technical in nature based on established policies developed by

interested and affected parties, as enumerated in Section C.1.3. The Contractor shall treat each of the IANA functions with equal priority and process all requests promptly and efficiently.

**C.2.5 Separation of Policy Development and Operational Roles** -- The Contractor shall ensure that designated IANA functions staff members will not initiate, advance, or advocate any policy development related to the IANA functions. The Contractor's staff may respond to requests for information requested by interested and affected parties as enumerated in Section C.1.3 to inform ongoing policy discussions and may request guidance or clarification as necessary for the performance of the IANA functions.

**C.2.6 Transparency and Accountability** -- Within six (6) months of award, the Contractor shall, in collaboration with all interested and affected parties as enumerated in Section C.1.3, develop user instructions including technical requirements for each corresponding IANA function and post via a website.

**C.2.7 Responsibility and Respect for Stakeholders** -- Within six (6) months of award, the Contractor shall, in collaboration with all interested and affected parties as enumerated in Section C.1.3, develop for each of the IANA functions a process for documenting the source of the policies and procedures and how it will apply the relevant policies and procedures for the corresponding IANA function and post via a website.

**C.2.8 Performance Standards** -- Within six (6) months of award, the Contractor shall develop performance standards, in collaboration with all interested and affected parties as enumerated in Section C.1.3, for each of the IANA functions as set forth at C.2.9 to C.2.9.4 and post via a website.

**C.2.9 Internet Assigned Numbers Authority (IANA) Functions** -- include (1) the coordination of the assignment of technical Internet protocol parameters; (2) the administration of certain responsibilities associated with the Internet DNS root zone management; (3) the allocation of Internet numbering resources; and (4) other services related to the management of the ARPA and INT top-level domains (TLDs).

**C.2.9.1 Coordinate The Assignment Of Technical Protocol Parameters including the management of the Address and Routing Parameter Area (ARPA) TLD** -- The Contractor shall review and assign unique values to various parameters (*e.g.*, operation codes, port numbers, object identifiers, protocol numbers) used in various Internet protocols based on established guidelines and policies as developed by interested and affected parties as enumerated in Section C.1.3. The Contractor shall disseminate the listings of assigned parameters through various means (including on-line publication via a website) and shall review technical documents for consistency with assigned values. The Contractor shall operate the ARPA TLD within the current registration policies for this TLD, as documented in RFC 3172-Management Guidelines & Operational Requirements for the Address and Routing Parameter Area Domain,

and any further clarification of this RFC. The Contractor shall also implement DNSSEC in the ARPA TLD.

**C.2.9.2 Perform Administrative Functions Associated With Root Zone Management** -- The Contractor shall facilitate and coordinate the root zone of the domain name system, and maintain 24 hour-a-day/7 days-a-week operational coverage. The process flow for root zone management involves three roles that are performed by three different entities through two separate legal agreements: the Contractor as the IANA Functions Operator, NTIA as the Administrator, and VeriSign (or any successor entity as designated by the U.S. Department of Commerce) as articulated in Cooperative Agreement Amendment 11, as the Root Zone Maintainer. The Requirements are detailed at Appendix 1 entitled Authoritative Root Zone Management Process that is incorporated by reference herein as if fully set forth. The Contractor shall work collaboratively with NTIA and the Root Zone Maintainer, in the performance of this function.

**C.2.9.2.a Root Zone File Change Request Management** -- The Contractor shall receive and process root zone file change requests for TLDs. These change requests include addition of new or updates to existing TLD name servers (NS) and delegation signer (DS) resource record (RR) information along with associated 'glue' (A and AAAA RRs). A change request may also include new TLD entries to the root zone file. The Contractor shall process root zone file changes as expeditiously as possible.

**C.2.9.2.b Root Zone "WHOIS" Change Request and Database Management** -- The Contractor shall maintain, update, and make publicly accessible a Root Zone "WHOIS" database with current and verified contact information for all TLD registry operators. The Root Zone "WHOIS" database, at a minimum, shall consist of the TLD name; the IP address of the primary nameserver and secondary nameserver for the TLD; the corresponding names of such nameservers; the creation date of the TLD; the name, postal address, email address, and telephone and fax numbers of the TLD registry operator; the name, postal address, email address, and telephone and fax numbers of the technical contact for the TLD registry operator; and the name, postal address, email address, and telephone and fax numbers of the administrative contact for the TLD registry operator; reports; and date record last updated; and any other information relevant to the TLD requested by the TLD registry operator. The Contractor shall receive and process root zone "WHOIS" change requests for TLDs.

**C.2.9.2.c Delegation and Redefinition of a Country Code Top Level-Domain (ccTLD)** --The Contractor shall apply existing policy frameworks in processing requests related to the delegation and redelegation of a ccTLD, such as RFC 1591 Domain Name System Structure and Delegation, the Governmental Advisory Committee (GAC) Principles And Guidelines For The Delegation And Administration Of Country Code Top Level Domains, and any further clarification of these policies by interested and affected parties as enumerated in Section C.1.3. If a policy framework does not exist to cover a specific instance, the Contractor will consult with the interested and affected parties, as enumerated in Section C.1.3; relevant public authorities;

and governments on any recommendation that is not within or consistent with an existing policy framework. In making its recommendations, the Contractor shall also take into account the relevant national frameworks and applicable laws of the jurisdiction that the TLD registry serves. The Contractor shall submit its recommendations to the COR via a Delegation and Redelegation Report.

**C.2.9.2d Delegation and Redelegation of a Generic Top Level Domain (gTLD)** -- The Contractor shall verify that all requests related to the delegation and redelegation of gTLDs are consistent with the procedures developed by ICANN. In making a delegation or redelegation recommendation, the Contractor must provide documentation verifying that ICANN followed its own policy framework including specific documentation demonstrating how the process provided the opportunity for input from relevant stakeholders and was supportive of the global public interest. The Contractor shall submit its recommendations to the COR via a Delegation and Redelegation Report.

**C.2.9.2.e Root Zone Automation** -- The Contractor shall work with NTIA and the Root Zone Maintainer, and collaborate with all interested and affected parties as enumerated in Section C.1.3, to deploy a fully automated root zone management system within nine (9) months after date of contract award. The fully automated system must, at a minimum, include a secure (encrypted) system for customer communications; an automated provisioning protocol allowing customers to manage their interactions with the root zone management system; an online database of change requests and subsequent actions whereby each customer can see a record of their historic requests and maintain visibility into the progress of their current requests; and a test system, which customers can use to meet the technical requirements for a change request ; an internal interface for secure communications between the IANA Functions Operator; the Administrator, and the Root Zone Maintainer.

**C.2.9.2.f Root Domain Name System Security Extensions (DNSSEC) Key Management** --The Contractor shall be responsible for the management of the root zone Key Signing Key (KSK), including generation, publication, and use for signing the Root Keyset. As delineated in the Requirements at Appendix 2 entitled Baseline Requirements for DNSSEC in the Authoritative Root Zone that is incorporated by reference herein as if fully set forth. The Contractor shall work collaboratively with NTIA and the Root Zone Maintainer, in the performance of this function.

**C.2.9.2.g Customer Service Complaint Resolution Process (CSCR)** --The Contractor shall work with NTIA and collaborate with all interested and affected parties as enumerated in Section C.1.3 to establish and implement within six (6) months after date of contract award a process for IANA function customers to submit complaints for timely resolution that follows industry best practice and includes a reasonable timeframe for resolution.

**C.2.9.3 Allocate Internet Numbering Resources** --The Contractor shall have responsibility for allocated and unallocated IPv4 and IPv6 address space and Autonomous System Number (ASN)

space based on established guidelines and policies as developed by interested and affected parties as enumerated in Section C.1.3. The Contractor shall delegate IP address blocks to Regional Internet Registries for routine allocation typically through downstream providers to Internet end-users within the regions served by those registries. The Contractor shall also reserve and direct allocation of space for special purposes, such as multicast addressing, addresses for private networks as described in RFC 1918-Address Allocation for Private Internets, and globally specified applications.

**C.2.9.4 Other services** -- The Contractor shall operate the INT TLD within the current registration policies for the TLD. Upon designation of a successor registry by the Government, if any, the Contractor shall cooperate with NTIA to facilitate the smooth transition of operation of the INT TLD. Such cooperation shall, at a minimum, include timely transfer to the successor registry of the then-current top-level domain registration data. The Contractor shall also implement modifications in performance of the IANA functions as needed upon mutual agreement of the parties.

**C.2.10** The performance of the IANA functions as articulated in Section C.2 Contractor Requirements shall be in compliance with the performance exclusions enumerated in Section C. 8.

**C.2.11** The Contracting Officer's Representative(COR) will perform final inspection and acceptance of all deliverables and reports articulated in Section C.2 Contractor Requirements. *Prior to publication/posting of reports the Contractor shall obtain approval from the COR.* The COR shall not unreasonably withhold approval.

**C.2.12.a Program Manager.** The contractor shall provide trained, knowledgeable technical personnel according to the requirements of this contract. All contractor personnel who interface with the CO and COR must have excellent oral and written communication skills. "Excellent oral and written communication skills" is defined as the capability to converse fluently, communicate effectively, and write intelligibly in the English language. The IANA Functions Program Manager organizes, plans, directs, staffs, and coordinates the overall program effort; manages contract and subcontract activities as the authorized interface with the CO and COR and ensures compliance with Federal rules and regulations and responsible for the following:

- Shall be responsible for the overall contract performance and shall not serve in any other capacity under this contract.
- Shall have demonstrated communications skills with all levels of management.
- Shall meet and confer with COR and CO regarding the status of specific contractor activities and problems, issues, or conflicts requiring resolution.
- Shall be capable of negotiating and making binding decisions for the company.
- Shall have extensive experience and proven expertise in managing similar multi-task contracts of this type and complexity.

- Shall have extensive experience supervising personnel.
- Shall have a thorough understanding and knowledge of the principles and methodologies associated with program management and contract management.

**C.2.12.b** The Contractor shall assign to this contract the following key personnel: IANA Functions Program Manager (C.2.9); IANA Function Liaison for Technical Protocol Parameters Assignment (C.2.9.1); IANA Function Liaison for Root Zone Management (C.2.9.2); IANA Function Liaison for Internet Number Resource Allocation (C.2.9.3).

### **C.3 SECURITY REQUIREMENTS**

**C.3.1 Secure Systems** -- The Contractor shall install and operate all computing and communications systems in accordance with best business and security practices. The Contractor shall implement a secure system for authenticated communications between it and its customers when carrying out all IANA function requirements. The Contractor shall document practices and configuration of all systems.

**C.3.2 Secure Systems Notification** -- The Contractor shall implement and thereafter operate and maintain a secure notification system at a minimum, capable of notifying all relevant stakeholders of the discrete IANA functions, of such events as outages, planned maintenance, and new developments. In all cases, the Contractor shall notify the COR of any outages.

**C.3.3 Secure Data** -- The Contractor shall ensure the authentication, integrity, and reliability of the data in performing each of the IANA functions.

**C.3.4 Security Plan** --The Contractor shall develop and execute a Security Plan that meets the requirements of this contract and Section C.3. The Contractor shall document in the security plan the process used to ensure information systems including hardware, software, applications, and general support systems have effective security safeguards, which have been implemented, planned for, and documented. The Contractor shall deliver the plan to the COR after each annual update.

**C.3.5 Director of Security** -- The Contractor shall designate a Director of Security who shall be responsible for ensuring technical and physical security measures, such as personnel access controls. The Contractor shall notify and consult in advance the COR when there are personnel changes in this position. The Director of Security shall be one of the key personnel assigned to this contract.

### **C.4 PERFORMANCE METRIC REQUIREMENTS**

**C.4.1 Meetings** -- Program reviews and site visits shall occur annually.

**C.4.2 Monthly Performance Progress Report** -- The Contractor shall prepare and submit to the COR a performance progress report every month (no later than 15 calendar days following the end of each month) that contains statistical and narrative information on the performance of the IANA functions (*i.e.*, assignment of technical protocol parameters; administrative functions associated with root zone management; and allocation of Internet numbering resources) during the previous calendar month. The report shall include a narrative summary of the work performed for each of the functions with appropriate details and particularity. The report shall also describe major events, problems encountered, and any projected significant changes, if any, related to the performance of requirements set forth in C.2.9 to C.2.9.4.

**C.4.3 Root Zone Management Dashboard** -- The Contractor shall work collaboratively with NTIA and the Root Zone Maintainer, and all interested and affected parties as enumerated in Section C.1.3, to develop and make publicly available via a website, a dashboard to track the process flow for root zone management within nine (9) months after date of contract award.

**C.4.4 Performance Standards Reports** -- The Contractor shall develop and publish reports for each discrete IANA function consistent with Section C.2.8. The Performance Standards Metric Reports will be published via a website every month (no later than 15 calendar days following the end of each month) starting no later than six (6) months after date of contract award.

**C.4.5 Customer Service Survey (CSS)** --The Contractor shall collaborate with NTIA to develop and conduct an annual customer service survey consistent with the performance standards for each of the discrete IANA functions. The survey shall include a feedback section for each discrete IANA function. No later than 30 days after conducting the survey, the Contractor shall submit the CSS Report to the COR.

**C.4.6 Final Report** -- The Contractor shall prepare and submit a final report on the performance of the IANA functions that documents standard operating procedures, including a description of the techniques, methods, software, and tools employed in the performance of the IANA functions. The Contractor shall submit the report to the CO and the COR no later than 30 days after expiration of the contract.

**C.4.7 Inspection and Acceptance** -- The COR will perform final inspection and acceptance of all deliverables and reports articulated in Section C.4. *Prior to publication/posting of reports, the Contractor shall obtain approval from the COR.* The COR shall not unreasonably withhold approval.

## **C.5 AUDIT REQUIREMENTS**

**C.5.1 Audit Data** -- The Contractor shall generate and retain security process audit record data for one year and provide an annual audit report to the CO and the COR. All root zone management operations shall be included in the audit, and records on change requests to the root zone file. The Contractor shall retain these records in accordance with the clause at

52.215-2. The Contractor shall provide specific audit record data to the CO and COR upon request.

**C.5.2 Root Zone Management Audit Data** -- The Contractor shall generate and publish via a website a monthly audit report based on information in the performance of *Provision C.9.2(a-g) Perform Administrative Functions Associated With Root Zone Management*. The audit report shall identify each root zone file and root zone "WHOIS" database change request and the relevant policy under which the change was made as well as identify change rejections and the relevant policy under which the change request was rejected. The Report shall start no later than nine (9) months after date of contract award and thereafter is due to the COR no later than 15 calendar days following the end of each month.

**C.5.3 External Auditor** - - The Contractor shall have an external, independent, specialized compliance audit which shall be conducted annually and it shall be an audit of all the IANA functions security provisions against existing best practices and Section C.3 of this contract.

**C.5.4 Inspection and Acceptance** -- The COR will perform final inspection and acceptance of all deliverables and reports articulated in Section C.5. *Prior to publication/posting of reports, the Contractor shall obtain approval from the COR.* The COR shall not unreasonably withhold approval.

## **C. 6 CONFLICT OF INTEREST REQUIREMENTS**

**C.6.1** The Contractor shall take measures to avoid any activity or situation that could compromise, or give the appearance of compromising, the impartial and objective performance of the contract (e.g., a person has a conflict of interest if the person directly or indirectly appears to benefit from the performance of the contract). The Contractor shall maintain a written, enforced conflict of interest policy that defines what constitutes a potential or actual conflict of interest for the Contractor. At a minimum, this policy must address conflicts based on personal relationships or bias, financial conflicts of interest, possible direct or indirect financial gain from Contractor's policy decisions and employment and post-employment activities. The conflict of interest policy must include appropriate sanctions in case of non-compliance, including suspension, dismissal and other penalties.

**C.6.2** The Contractor shall designate a senior staff member to serve as a Conflict of Interest Officer who shall be responsible for ensuring the Contractor is in compliance with the Contractor's internal and external conflict of interest rules and procedures. The Conflict of Interest Officer shall be one of the key personnel assigned to this contract.

**C.6.2.1** The Conflict of Interest Officer shall be responsible for distributing the Contractor's conflict of interest policy to all employees, directors, and subcontractors upon their election, re-election or appointment and annually thereafter.

**C.6.2.2** The Conflict of Interest Officer shall be responsible for requiring that each of the Contractor's employees, directors and subcontractors complete a certification with disclosures of any known conflicts of interest upon their election, re-election or appointment, and annually thereafter.

**C.6.2.3** The Conflict of Interest Officer shall require that each of the Contractor's employees, directors, and subcontractors promptly update the certification to disclose any interest, transaction, or opportunity covered by the conflict of interest policy that arises during the annual reporting period.

**C.6.2.4** The Conflict of Interest Officer shall develop and publish subject to applicable laws and regulations, a Conflict Of Interest Enforcement and Compliance Report. The report shall describe major events, problems encountered, and any changes, if any, related to Section C.6.

**C.6.2.5** See also the clause at H.5. Organizational Conflict of Interest

## **C. 7 CONTINUITY OF OPERATIONS**

**C.7.1 Continuity of Operations (COP)** – The Contractor shall, at a minimum, maintain multiple redundant sites in at least 2, ideally 3 sites, geographically dispersed within the United States as well as multiple resilient communication paths between interested and affected parties as enumerated in Section C.1.3 to ensure continuation of the IANA functions in the event of cyber or physical attacks, emergencies, or natural disasters.

**C.7.2 Contingency and Continuity of Operations Plan (The CCOP)** – The Contractor shall collaborate with NTIA and the Root Zone Maintainer, and all interested and affected parties as enumerated in Section C.1.3, to develop and implement a CCOP for the IANA functions within nine (9) months after date of contract award. The Contractor in collaboration with NTIA and the Root Zone Maintainer shall update and test the plan annually. The CCOP shall include details on plans for continuation of each of the IANA functions in the event of cyber or physical attacks, emergencies, or natural disasters. The Contractor shall submit the CCOP to the COR after each annual update.

**C.7.3 Transition to Successor Contractor** – In the event the Government selects a successor contractor, the Contractor shall have a plan in place for transitioning each of the IANA functions to ensure an orderly transition while maintaining continuity and security of operations. The plan shall be submitted to the COR eighteen (18) months after date of contract award, reviewed annually, and updated as appropriate.

## **C.8 PERFORMANCE EXCLUSIONS**

**C.8.1** This contract does not authorize the Contractor to make modifications, additions, or deletions to the root zone file or associated information. (This contract does not alter the root

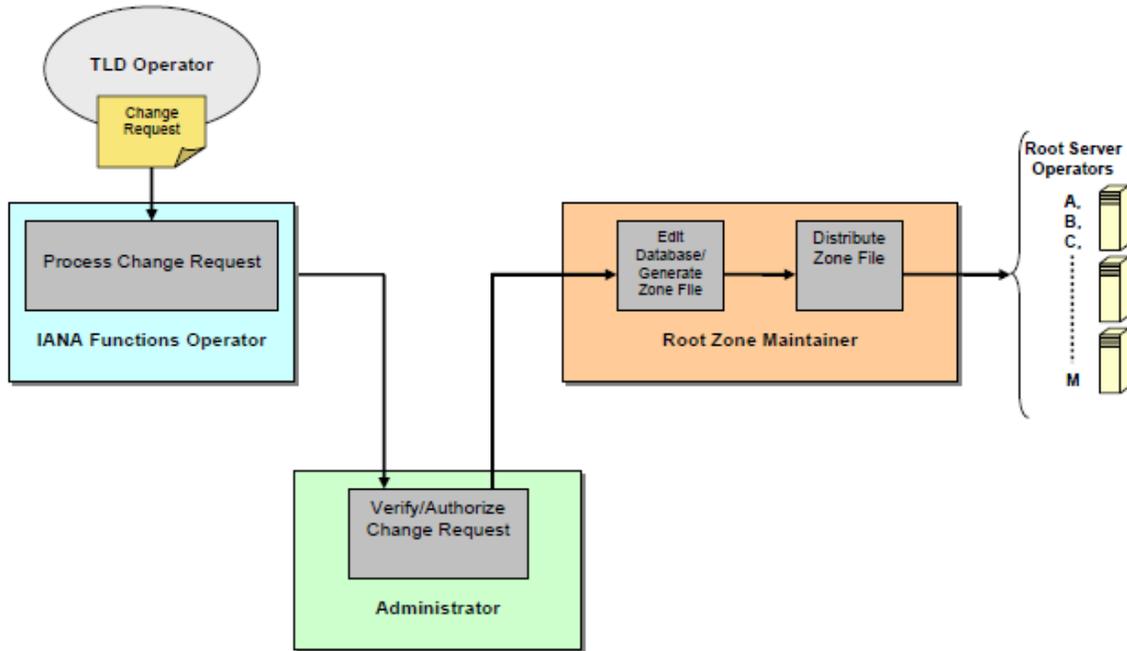
zone file responsibilities as set forth in Amendment 11 of the Cooperative Agreement NCR-9218742 between the U.S. Department of Commerce and VeriSign, Inc. or any successor entity as designated by the U.S. Department of Commerce). See Amendment 11 at [http://ntia.doc.gov/files/ntia/publications/amend11\\_052206.pdf](http://ntia.doc.gov/files/ntia/publications/amend11_052206.pdf).

**C.8.2** This contract does not authorize the Contractor to make material changes in the policies and procedures developed by the relevant entities associated with the performance of the IANA functions. The Contractor shall not change or implement the established methods associated with the performance of the IANA functions without prior approval of the CO.

**C.8.3** The performance of the functions under this contract, including the development of recommendations in connection with Section C.2.9.2, shall not be, in any manner, predicated or conditioned on the existence or entry into any contract, agreement or negotiation between the Contractor and any party requesting such changes or any other third-party. Compliance with this Section must be consistent with C.2.9.2d.

## Appendix 1: Authoritative Root Zone Management Process <sup>1</sup>

### Authoritative Root Zone Management Process (Present)



<sup>1</sup> The Root Zone management partners consist of the IANA Functions Operator (per the IANA functions contract), NTIA/Department of Commerce, and the Root Zone Maintainer (per the Cooperative Agreement with VeriSign (or any successor entity as designated by the U.S. Department of Commerce).

## Appendix 2: Baseline Requirements for DNSSEC in the Authoritative Root Zone

DNSSEC at the authoritative Root Zone requires cooperation and collaboration between the root zone management partners and the Department.<sup>2</sup> The baseline requirements encompass the responsibilities and requirements for both the IANA Functions Operator and the Root Zone Maintainer as described and delineated below.

### General Requirements

The Root Zone system needs an overall security lifecycle, such as that described in ISO 27001, and any security policy for DNSSEC implementation must be validated against existing standards for security controls.

The remainder of this section highlights security requirements that must be considered in developing any solution. ISO 27002:2005 (formerly ISO 17799:2005) and NIST SP 800-53 are recognized sources for specific controls. Note that reference to SP 800-53 is used as a convenient means of specifying a set of technical security requirements.<sup>3</sup> It is expected that the systems referenced in this document will meet all the SP 800-53 technical security controls required by a HIGH IMPACT system.<sup>4</sup>

Whenever possible, references to NIST publications are given as a source for further information. These Special Publications (SP) and FIPS documents are not intended as a future auditing checklist, but as non-binding guidelines and recommendations to establish a viable IT security policy. Comparable security standards can be substituted where available and appropriate. All of the NIST document references can be found on the NIST Computer Security Research Center webpage (<http://www.csrc.nist.gov/>).

### 1) Security Authorization and Management Policy

- a) Each partner<sup>5</sup> in the Root Zone Signing process shall have a security policy in place; this security policy must be periodically reviewed and updated, as appropriate.

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<sup>2</sup> The Root Zone management partners consist of the IANA Functions Operator (per the IANA functions contract), NTIA/Department of Commerce, and Root Zone Maintainer (per the Cooperative Agreement with VeriSign). This document outlines requirements for both the IANA Functions Operator and Root Zone Maintainer in the operation and maintenance of DNSSEC at the authoritative root zone.

<sup>3</sup> Note in particular that the use of the requirements in SP 800-53 does not imply that these systems are subject to other Federal Information Security Management Act (FISMA) processes.

<sup>4</sup> For the purpose of identifying SP 800-53 security requirements, the Root Zone system can be considered a HIGH IMPACT system with regards to integrity and availability as defined in FIPS 199.

<sup>5</sup> For this document, the roles in the Root Zone Signing process are those associated with the Key Signing Key holder, the Zone Signing Key holder, Public Key Distributor, and others to be conducted by the IANA Functions Operator and the Root Zone Maintainer.

- i) Supplemental guidance on generating a Security Authorization Policy may be found in NIST SP 800-37.
- b) These policies shall have a contingency plan component to account for disaster recovery (both man-made and natural disasters).<sup>6</sup>
  - i) Supplemental guidance on contingency planning may be found in SP 800-34.
- c) These policies shall address Incident Response detection, handling and reporting (see 4 below).
  - i) Supplemental guidance on incident response handling may be found in NIST SP 800-61.

## **2) IT Access Control**

- a) There shall be an IT access control policy in place for each of the key management functions and it shall be enforced.
  - i) This includes both access to hardware/software components and storage media as well as ability to perform process operations.
  - ii) Supplemental guidance on access control policies may be found in NIST SP 800-12.
- b) Users without authentication shall not perform any action in key management.
- c) In the absence of a compelling operational requirement, remote access to any cryptographic component in the system (e.g. HSM) is not permitted.<sup>7</sup>

## **3) Security Training**

- a) All personnel participating in the Root Zone Signing process shall have adequate IT security training.
  - i) Supplemental guidance on establishing a security awareness training program may be found in NIST SP 800-50.

## **4) Audit and Accountability Procedures**

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<sup>6</sup> For the IANA Functions Operator, the contingency plan must be consistent with and/or included in the "Contingency and Continuity of Operations Plan" as articulated in Section C.7 of the IANA functions contract.

<sup>7</sup> Remote access is any access where a user or information system communicates through a non-organization controlled network (e.g., the Internet).

- a) The organization associated with each role shall develop, disseminate, and periodically review/update: (1) a formal, documented, audit and accountability policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance; and (2) formal, documented procedures to facilitate the implementation of the audit and accountability policy and associated audit and accountability controls.
  - i) Supplemental guidance on auditing and accountability policies may be found in NIST SP 800-12.
  - ii) Specific auditing events include the following:
    - o Generation of keys
    - o Generation of signatures
    - o Exporting of public key material
    - o Receipt and validation of public key material (i.e., from the ZSK holder or from TLDs)
    - o System configuration changes
    - o Maintenance and/or system updates
    - o Incident response handling
    - o Other events as appropriate
- b) Incident handling for physical and exceptional cyber attacks<sup>8</sup> shall include reporting to the Department's National Telecommunications and Information Administration (NTIA) in a timeframe and format as mutually agreed by the Department, IANA Functions Operator, and Root Zone Maintainer.
- c) The auditing procedures shall include monthly reporting to NTIA.<sup>9</sup>
- d) The auditing system shall be capable of producing reports on an ad-hoc basis.
- e) A version of these reports must be made publically available.

## 5) Physical Protection Requirements

- a) There shall be physical access controls in place to only allow access to hardware components and media to authorized personnel.
  - i) Supplemental guidance on token based access may be found in NIST SP 800-73 and FIPS 201.
  - ii) Supplemental guidance on token based access biometric controls may be found in

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<sup>8</sup> Non-exceptional events are to be included in monthly reporting as required in 4 c.

<sup>9</sup> For the IANA Functions Operator, audit reporting shall be incorporated into the audit report as articulated in C.5.2 of the IANA functions contract.

NIST SP 800-76.

- b) Physical access shall be monitored, logged, and registered for all users and visitors.
- c) All hardware components used to store keying material or generate signatures shall have short-term backup emergency power connections in case of site power outage. (See, SP 800-53r3)
- d) All organizations shall have appropriate protection measures in place to prevent physical damage to facilities as appropriate.

## 6) All Components

- a) All commercial off the shelf hardware and software components must have an established maintenance and update procedure in place.
  - i) Supplemental guidance on establishing an upgrading policy for an organization may be found in NIST SP 800-40.
- b) All hardware and software components provide a means to detect and protect against unauthorized modifications/updates/patching.

## Role Specific Requirements

### 7) Root Zone Key Signing Key (KSK) Holder<sup>10</sup>

The Root Zone KSK Holder (RZ KSK) is responsible for: (1) generating and protecting the private component of the RZ KSK(s); (2) securely exporting or importing any public key components, should this be required (3) authenticating and validating the public portion of the RZ Zone Signing Key (RZ ZSK); and (4) signing the Root Zone's DNSKEY record (ZSK/KSK).

#### a) Cryptographic Requirements

- i) The RZ KSK key pair shall be an RSA key pair, with a modulus of at least 2048 bits.
- ii) RSA key generation shall meet the requirements specified in FIPS 186-3.<sup>11</sup> In particular, key pair generation shall meet the FIPS 186-3 requirements for exponent size and primality testing.
- iii) The RZ KSK private key(s) shall be generated and stored on a FIPS 140-2 validated

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<sup>10</sup> The Root Zone KSK Holder is a responsibility performed by the IANA Functions Operator.

<sup>11</sup> Note that FIPS 186-3 and FIPS 140-2 are referenced as requirements in sections a and b, rather than supplemental guidance.

hardware cryptographic module (HSM)<sup>12</sup>, validated at Level 4 overall.<sup>13</sup>

- iv) RZ KSK Digital Signatures shall be generated using SHA-256.
- v) All cryptographic functions involving the private component of the KSK shall be performed within the HSM; that is, the private component shall only be exported from the HSM with the appropriate controls (FIPS 140-2) for purposes of key backup.

**b) Multi-Party Control**

At least two persons shall be required to activate or access any cryptographic module that contains the complete RZ KSK private signing key.

- i) The RZ KSK private key(s) shall be backed up and stored under at least two-person control. Backup copies shall be stored on FIPS 140-2 compliant HSM, validated at Level 4 overall, or shall be generated using m of n threshold scheme and distributed to organizationally separate parties.
- ii) Backup copies stored on HSMs shall be maintained in different physical locations<sup>14</sup>, with physical and procedural controls commensurate to that of the operational system.
- iii) In the case of threshold secret sharing, key shares shall be physically secured by each of the parties.
- iv) In all cases, the names of the parties participating in multi-person control shall be maintained on a list that shall be made available for inspection during compliance audits.

**c) Root Zone KSK Rollover**

- i) Scheduled rollover of the RZ KSK shall be performed.<sup>15</sup> (See Contingency planning for unscheduled rollover.)
- ii) RZ KSK rollover procedures shall take into consideration the potential future need for algorithm rollover.
- iii) DNSSEC users shall be able to authenticate the source and integrity of the new RZ KSK using the previously trusted RZ KSK's public key.

**d) Contingency Planning**

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<sup>12</sup> FIPS 140 defines hardware cryptographic modules, but this specification will use the more common HSM (for hardware security module) as the abbreviation.

<sup>13</sup> Note that FIPS 186-3 and FIPS 140-2 are referenced as requirements in sections a and b, rather than supplemental guidance.

<sup>14</sup> Backup locations are to be within the United States.

<sup>15</sup> The Department envisions the timeline for scheduled rollover of the RZ KSK to be jointly developed and proposed by the IANA Functions Operator and Root Zone Maintainer, based on consultation and input from the affected parties (e.g. root server operators, large-scale resolver operators, etc). Note that subsequent test plans may specify more or less frequent RZ KSK rollover to ensure adequate testing.

- i) Procedures for recovering from primary physical facility failures (e.g., fire or flood that renders the primary site inoperable) shall be designed to reconstitute capabilities within 48 hours.
- ii) Procedures for emergency rollover of the RZ KSK shall be designed to achieve key rollover and publication within 48 hours. These procedures, which are understood to address DNSSEC key provision only, should accommodate the following scenarios:
  - (1) The current RZ KSK has been compromised; and
  - (2) The current RZ KSK is unavailable, but is not believed to be compromised.

**e) DNS Record Generation/Supporting RZ ZSK rollover**

- i) The RZ KSK Holder shall authenticate the source and integrity of RZ ZSK public key material
  - (1) Mechanisms must support proof of possession and verify the parameters (i.e., the RSA exponent)
- ii) The signature on the root zone's DNSKEY record shall be generated using SHA-256.

**f) Audit Generation and Review Procedures**

- i) Designated Audit personnel may not participate in the multi-person control for the RZ ZSK or RZ KSK.
- ii) Audit logs shall be backed up offsite at least monthly.
- iii) Audit logs (whether onsite or offsite) shall be protected from modification or deletion.
- iv) Audit logs shall be made available upon request for Department review.

**8) RZ KSK Public Key Distribution**

- a) The RZ KSK public key(s) shall be distributed in a secure fashion to preclude substitution attacks.
- b) Each mechanism used to distribute the RZ KSK public key(s) shall either
  - i) Establish proof of possession of the RZ KSK private key (for public key distribution); or
  - ii) Establish proof of possession of the previous RZ KSK private key (for Root zone key rollover).

**9) RZ Zone Signing Key (RZ ZSK) Holder<sup>16</sup>**

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<sup>16</sup> The RZ ZSK holder is a function performed by the Root Zone Maintainer, NOT the IANA Functions Operator.

The Root Zone ZSK Holder (RZ ZSK) is responsible for (1) generating and protecting the private component of the RZ ZSK(s); (2) securely exporting or importing any public key components, should this be required and (3) generating and signing Zone File Data in accordance to the DNSSEC specifications.

**a) Cryptographic Requirements**

- i) The RZ ZSK key pair shall be an RSA key pair, with a modulus of at least 1024 bits.<sup>17</sup>
- ii) RSA key generation shall meet the requirements specified in FIPS 186-3.<sup>18</sup> In particular, key pair generation shall meet the FIPS 186-3 requirements for exponent size and primality testing.
- iii) RZ ZSK Digital Signatures shall be generated using SHA-256.
- iv) The RZ ZSK private key(s) shall be generated and stored on a FIPS 140-2 compliant HSM. At a minimum, the HSM shall be validated at Level 4 overall.
- v) All cryptographic functions involving the private component of the RZ ZSK shall be performed within the HSM; that is, the private component shall not be exported from the HSM except for purposes of key backup.

**b) Multi-Party Control**

- i) Activation of the RZ ZSK shall require at least two-person control. This requirement may be satisfied through a combination of physical and technical controls.
- ii) If the RZ ZSK private key(s) are backed up, they shall be backed up and stored under at least two-person control. Backup copies shall be stored on FIPS 140-2 validated HSM, validated at Level 4 overall.<sup>19</sup>
  - (1) Backup copies shall be maintained both onsite and offsite<sup>20</sup>, with physical and procedural controls commensurate to that of the operational system.
  - (2) The names of the parties participating in multi-person control shall be maintained on a list and made available for inspection during compliance audits.

**c) Contingency Planning**

- i) Procedures for recovery from failure of the operational HSM containing the RZ ZSK shall be designed to re-establish the capability to sign the zone within 2 hours.
- ii) Procedures for emergency rollover of the RZ ZSK shall be designed to achieve key

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<sup>17</sup> Note that these requirements correspond to those articulated in NIST SP 800-78 for authentication keys. Since there is no forward security requirement for the DNSSEC signed data, the more stringent requirements imposed on long term digital signatures do not apply.

<sup>18</sup> Note that FIPS 186-3 and FIPS 140-2 are referenced as requirements in sections 8a and 8 b, rather than as supplemental guidance.

<sup>19</sup> Note that FIPS 186-3 and FIPS 140-2 are referenced as requirements in sections 8a and 8 b, rather than as supplemental guidance.

<sup>20</sup> The Department expects backup locations to be within the United States.

rollover within a technically feasible timeframe as mutually agreed among the Department, Root Zone Maintainer, and the IANA functions operator. These procedures must accommodate the following scenarios:

- (1) The current RZ ZSK has been compromised; and
- (2) The current RZ ZSK is unavailable (e.g. destroyed), but is not believed to be compromised.

**d) Root Zone ZSK Rollover**

- i) The RZ ZSK shall be rolled over every six months at a minimum.<sup>21</sup>
- ii) DNSSEC users shall be able to authenticate the source and integrity of the new RZ ZSK using the previously trusted RZ ZSK's public key.
- iii) RZ ZSK holder shall be able to authenticate the source and integrity of the new RZ ZSK.

**e) Audit Generation and Review Procedures**

- i) Designated Audit personnel may not participate in the control for the RZ ZSK or RZ ZSK.
- ii) Audit logs shall be backed up offsite at least monthly.
- iii) Audit logs (whether onsite or offsite) shall be protected from unauthorized access, modification, or deletion.
- iv) Audit logs shall be made available upon request for NTIA review.

**Other Requirements**

**10) Transition Planning**

- a) The IANA Functions Operator and Root Zone Maintainer shall have plans in place for transitioning the responsibilities for each role while maintaining continuity and security of operations. In the event the IANA Functions Operator or Root Zone Maintainer are no longer capable of fulfilling their DNSSEC related roles and responsibilities (due to bankruptcy, permanent loss of facilities, etc.) or in the event the Department selects a successor, that party shall ensure an orderly transition of their DNSSEC roles and responsibilities in cooperation with the Department.<sup>22</sup>

**11) Personnel Security Requirements**

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<sup>21</sup> The timelines specified in this document apply to the operational system. Subsequent test plans may specify more or less frequent RZ ZSK rollover to ensure adequate testing.

<sup>22</sup> For the IANA Functions Operator, the transition plan shall be incorporated into that which is called for in section C.7.3 of the IANA functions contract.

**a) Separation of Duties**

- i) Personnel holding a role in the multi-party access to the RZ KSK may not hold a role in the multi-party access to the RZ ZSK, or vice versa.
- ii) Designated Audit personnel may not participate in the multi-person control for the RZ ZSK or KSK.
- iii) Audit Personnel shall be assigned to audit the RZ KSK Holder or the RZ ZSK Holder, but not both.

**b) Security Training**

- i) All personnel with access to any cryptographic component used with the Root Zone Signing process shall have adequate training for all expected duties.

**12) Root Zone Maintainer Basic Requirements**

- a) Ability to receive NTIA authorized TLD Resource Record Set (RRset) updates from NTIA and IANA Functions Operator
- b) Ability to integrate TLD RRset updates into the final zone file
- c) Ability to accept NTIA authorized signed RZ keyset(s) and integrate those RRsets into the final zone file

**13) IANA Functions Operator Interface Basic Functionality**

- a) Ability to accept and process TLD DS records. New functionality includes:
  - i) Accept TLD DS RRs
    - (1) Retrieve TLD DNSKEY record from the TLD, and perform parameter checking for the TLD keys, including verify that the DS RR has been correctly generated using the specified hash algorithm.
  - ii) Develop with, and communicate to, TLD operators procedures for:
    - (1) Scheduled roll over for TLD key material
    - (2) Supporting emergency key roll over for TLD key material.
    - (3) Moving TLD from signed to unsigned in the root zone.
- b) Ability to submit TLD DS record updates to NTIA for authorization and inclusion into the root zone by the Root Zone Maintainer.
- c) Ability to submit RZ keyset to NTIA for authorization and subsequent inclusion into the root zone by the Root Zone Maintainer.

**14) Root Zone Management Requirements<sup>23</sup>**

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<sup>23</sup> The Department envisions the IANA Functions Operator and Root Zone Maintainer jointly agree to utilizing pre-existing processes and/or deciding and proposing new methods by which each of these requirements are designed and implemented, subject to Department approval.

- a) Ability and process to store TLD delegations and DS RRs
- b) Ability and process to store multiple keys for a delegation with possibly different algorithms
- c) Ability and process to maintain a history of DS records used by each delegation
- d) Procedures for managing scheduled roll over for TLD key material
- e) Procedures for managing emergency key roll over for TLD key material.<sup>24</sup>
- f) Procedures for managing the movement of TLD from signed to unsigned.<sup>25</sup>
- g) Procedures for DNSSEC revocation at the root zone and returning the root zone to its pre-signed state.

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<sup>24</sup> To the extent possible, on 24 hour notice under the existing manual system and on 12 hours notice once the automated system is utilized.

<sup>25</sup> To the extent possible, this must be within 48 hours.

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**SECTION D - PACKAGING AND MARKING**

**RESERVED**

## **SECTION E - INSPECTION AND ACCEPTANCE**

### **E.1 INSPECTION AND ACCEPTANCE**

The Contracting Officer's Representative (COR) will perform final inspection and acceptance of all work performed, written communications regardless of form, reports, and other services and deliverables related to Section C prior to any publication/posting called for by this Contract. The CO reserves the right to designate other Government agents as authorized representatives upon unilateral written notice to the Contractor, which may be accomplished in the form of a transmittal of a copy of the authorization. The Government reserves the right to inspect the premises, systems, and processes of all security and operational components used for the performance of all Contract requirements and obligations.

### **E.2 INSPECTION -- TIME-AND-MATERIAL AND LABOR-HOUR (FAR 52.246-6) (MAY 2001)**

(a) *Definitions.* As used in this clause--

“Contractor’s managerial personnel” means any of the Contractor’s directors, officers, managers, superintendents, or equivalent representatives who have supervision or direction of --

- (1) All or substantially all of the Contractor’s business;
- (2) All or substantially all of the Contractor’s operation at any one plant or separate location where the contract is being performed; or
- (3) A separate and complete major industrial operation connected with the performance of this contract.

“Materials” includes data when the contract does not include the Warranty of Data clause.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the material, fabricating methods, work, and services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all materials furnished and services performed under this contract, to the extent practicable at all places and times, including the period of performance, and in any event before acceptance. The Government may also inspect the plant or plants of the Contractor or any subcontractor engaged in contract performance.

The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If the Government performs inspection or test on the premises of the Contractor or a subcontractor, the Contractor shall furnish and shall require subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

(e) Unless otherwise specified in the contract, the Government shall accept or reject services and materials at the place of delivery as promptly as practicable after delivery, and they shall be presumed accepted 60 days after the date of delivery, unless accepted earlier.

(f) At any time during contract performance, but not later than 6 months (or such other time as may be specified in the contract) after acceptance of the services or materials last delivered under this contract, the Government may require the Contractor to replace or correct services or materials that at time of delivery failed to meet contract requirements. Except as otherwise specified in paragraph (h) of this clause, the cost of replacement or correction shall be determined under the Payments Under Time-and-Materials and Labor-Hour Contracts clause, but the "hourly rate" for labor hours incurred in the replacement or correction shall be reduced to exclude that portion of the rate attributable to profit. The Contractor shall not tender for acceptance materials and services required to be replaced or corrected without disclosing the former requirement for replacement or correction, and, when required, shall disclose the corrective action taken.

(g)

(1) If the Contractor fails to proceed with reasonable promptness to perform required replacement or correction, and if the replacement or correction can be performed within the ceiling price (or the ceiling price as increased by the Government), the Government may --

(i) By contract or otherwise, perform the replacement or correction, charge to the Contractor any increased cost, or deduct such increased cost from any amounts paid or due under this contract; or

(ii) Terminate this contract for default.

(2) Failure to agree to the amount of increased cost to be charged to the Contractor shall be a dispute.

(h) Notwithstanding paragraphs (f) and (g) above, the Government may at any time require the Contractor to remedy by correction or replacement, without cost to the Government, any failure by the Contractor to comply with the requirements of this contract, if the failure is due to --

(1) Fraud, lack of good faith, or willful misconduct on the part of the Contractor's managerial personnel; or

(2) The conduct of one or more of the Contractor's employees selected or retained by the Contractor after any of the Contractor's managerial personnel has reasonable grounds to believe that the employee is habitually careless or unqualified.

(i) This clause applies in the same manner and to the same extent to corrected or replacement materials or services as to materials and services originally delivered under this contract.

(j) The Contractor has no obligation or liability under this contract to correct or replace materials and services that at time of delivery do not meet contract requirements, except as provided in this clause or as may be otherwise specified in the contract.

(k) Unless otherwise specified in the contract, the Contractor's obligation to correct or replace Government-furnished property shall be governed by the clause pertaining to Government property.

## SECTION F - DELIVERIES AND PERFORMANCE

### F.1 PERIOD OF PERFORMANCE

The period of performance of this contract is: October 1, 2012 – September 30, 2015.

### F.2 PLACE OF PERFORMANCE

The Contractor shall perform all work at the Contractor's facilities.

### F.3 DISTRIBUTION OF DELIVERABLES

The Contractor shall submit **one (1) copy** to the COR.

### F.4 DELIVERABLES

The listed below are the deliverables required by this contract. Section C of this contract contains information about the deliverables.

| Clause No. | Clause   | Deliverable   | Due Date                |
|------------|--|---|-------------------------|
| C.2.6      | Transparency and Accountability                        | User instructional documentation including technical requirements | Six months after award  |
| C.2.7      | Responsibility and Respect for Stakeholders            | Documenting the source of the policies and procedures.            | Six months after award  |
| C.2.8      | Performance Standards                                  | Performance Standards   | Six months after award  |
| C.2.9.2e   | Root Zone Automation                                   | Automated Root Zone   | Nine months after award |
| C.2.9.2g   | Customer Service Complaint Resolution Process (CSCRCP) | Customer Compliant Process  | Six months after award  |
| C.3.4      | Security Plan  | Documenting Practices and configuration of all systems            | Annually                |
| C.4.1      | Monthly Performance Progress Report includes DNSSEC    | Report based on C.2   | Monthly                 |
| C.4.2      | Root Zone Management                                   | Root Zone Management  | Nine months             |

| Clause No. | Clause   | Deliverable  | Due Date  |
|------------|--|--|---|
|            | Dashboard  | Dashboard  | after award   |
| C.4.3      | Performance Standards Reports                            | Performance Standards Report   | Six months after award and monthly thereafter         |
| C.4.4      | Customer Service Survey                                  | Customer Service Survey  | Annual Report of Customer Survey                      |
| C.4.5      | Final Report   | Final Report   | Expiration of Contract                                |
| C.5.1      | Audit Data   | Audit Report   | Annually  |
| C.5.2      | Root Zone Management Audit Data                          | Root Zone Management Audit Report  | Nine Months after award and Monthly Report thereafter |
| C.5.3      | External Auditor   | External Audit Report  | Annually  |
| C.6.2.4    | Conflict of Interest Enforcement and Compliance Report   | Enforcement and Compliance Report  | Annually  |
| C.7.2      | Contingency and Continuity of Operations Plan (The CCOP) | Contingency and Continuity of Operations for the continuation of the IANA Functions in case of an emergency. | Annually  |
| C.7.3      | Transition to Successor                                  | Transition plan in case of successor contractor.   | Eighteen (18) months after date of contract award     |

## **F.5 GOVERNMENT RIGHTS TO DELIVERABLES**

All deliverables provided under this contract become the property of the U.S. Government.

## **F.6 GOVERNMENT REVIEW OF DELIVERABLES**

The Government shall review all deliverables and determine acceptability. Any deficiencies shall be corrected by the Contractor and resubmitted to the Government within ten (10) workdays after notification.

## **F.7 REQUIRED DELIVERABLES**

The Contractor shall transmit all deliverables so the deliverables are received by the parties listed above on or before the indicated due dates.

**F.8 MEETINGS**

Program reviews will be scheduled monthly and site visits will occur annually.

## **SECTION G - CONTRACT ADMINISTRATION DATA**

Notwithstanding the Contractor's responsibility for total management during the performance of the contract, the administration of the contract will require maximum coordination between the Department of Commerce and the Contractor. The following individuals will be the Department of Commerce points of contact during the performance of the contract.

### **G.1 CONTRACTING OFFICER'S AUTHORITY**

#### **CONTRACTING OFFICER'S AUTHORITY (CAR 1352.201-70) (APR 2010)**

The Contracting Officer is the only person authorized to make or approve any changes in any of the requirements of this contract, and, notwithstanding any provisions contained elsewhere in this contract, the said authority remains solely in the Contracting Officer. In the event the contractor makes any changes at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract terms and conditions, including price.

#### **CONTRACTING OFFICER'S REPRESENTATIVE (COR) (CAR 1352.201-72) (APR 2010)**

(a) **Vernita D. Harris, Deputy Associate Administrator** is hereby designated as the Contracting Officer's Representative (COR). The COR may be changed at any time by the Government without prior notice to the contractor by a unilateral modification to the contract.

The COR is located at:

1401 Constitution Avenue, N.W., Room 4701, Washington, DC 20230

PHONE NO: 202.482.4686

Email: [vharris@ntia.doc.gov](mailto:vharris@ntia.doc.gov)

(b) The responsibilities and limitations of the COR are as follows:

(1) The COR is responsible for the technical aspects of the contract and serves as technical liaison with the contractor. The COR is also responsible for the final inspection and acceptance of all deliverables and such other responsibilities as may be specified in the contract.

(2) The COR is not authorized to make any commitments or otherwise obligate the Government or authorize any changes which affect the contract price, terms or conditions. Any contractor request for changes shall be referred to the Contracting Officer directly or through the COR. No such changes shall be made without the express written prior authorization of the Contracting Officer. The Contracting Officer may designate assistant or alternate COR(s) to act for the COR by naming such

assistant/alternate(s) in writing and transmitting a copy of such designation to the contractor.

## SECTION H - SPECIAL CONTRACT REQUIREMENTS

### H.1 AUDIT AND RECORDS – NEGOTIATION (FAR 52.215-2) (OCT 2010)

(a) As used in this clause, “records” includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) *Examination of costs.* If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor’s plants, or parts of them, engaged in performing the contract.

(c) *Certified cost or pricing data.* If the Contractor has been required to submit certified cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor’s records, including computations and projections, related to --

- (1) The proposal for the contract, subcontract, or modification;
- (2) The discussions conducted on the proposal(s), including those related to negotiating;
- (3) Pricing of the contract, subcontract, or modification; or
- (4) Performance of the contract, subcontract or modification.

(d) *Comptroller General—*

(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor’s directly pertinent records involving transactions related to this contract or a subcontract hereunder and to interview any current employee regarding such transactions.

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) *Reports.* If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the

right to examine and audit the supporting records and materials, for the purpose of evaluating -

-

(1) The effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports; and

(2) The data reported.

(f) *Availability*. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition --

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, and --

(1) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these;

(2) For which certified cost or pricing data are required; or

(3) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause.

The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

*Alternate I (Mar 2009)*. As prescribed in [15.209](#) (b)(2), substitute the following paragraphs (d)(1) and (g) for paragraphs (d)(1) and (g) of the basic clause:

(d) *Comptroller General or Inspector General*.

(1) The Comptroller General of the United States, an appropriate Inspector General appointed under section 3 or 8G of the Inspector General Act of 1978 (5 U.S.C. App.), or an authorized representative of either of the foregoing officials, shall have access to and the right to—

- (i) Examine any of the Contractor's or any subcontractor's records that pertain to and involve transactions relating to this contract or a subcontract hereunder; and
- (ii) Interview any officer or employee regarding such transactions.

(g)(1) Except as provided in paragraph (g)(2) of this clause, the Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract. The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

(2) The authority of the Inspector General under paragraph (d)(1)(ii) of this clause does not flow down to subcontracts.

*Alternate II (Apr 1998).* As prescribed in 15.209(b)(3), add the following paragraph (h) to the basic clause:

(h) The provisions of OMB Circular No.A-133, "Audits of States, Local Governments, and Nonprofit Organizations," apply to this contract.

*Alternate III (Jun 1999).* As prescribed in 15.209(b)(4), delete paragraph (d) of the basic clause and redesignate the remaining paragraphs accordingly, and substitute the following paragraph (e) for the redesignated paragraph (e) of the basic clause:

(e) Availability. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), and (d) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition—

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

## **H.2 PATENT RIGHTS -- OWNERSHIP BY THE CONTRACTOR (FAR 52.227-11) (DEC 2007)**

(a) As used in this clause—

“Invention” means any invention or discovery that is or may be patentable or otherwise protectable under title 35 of the U.S. Code, or any variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, *et seq.*)

“Made” means—

(1) When used in relation to any invention other than a plant variety, the conception or first actual reduction to practice of the invention; or

(2) When used in relation to a plant variety, that the Contractor has at least tentatively determined that the variety has been reproduced with recognized characteristics.

“Nonprofit organization” means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

“Practical application” means to manufacture, in the case of a composition of product; to practice, in the case of a process or method, or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

“Subject invention” means any invention of the Contractor made in the performance of work under this contract.

(b) *Contractor’s rights.*

(1) *Ownership.* The Contractor may retain ownership of each subject invention throughout the world in accordance with the provisions of this clause.

(2) *License.*

(i) The Contractor shall retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, unless the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. The Contractor’s license extends to any domestic subsidiaries and affiliates within the corporate structure of which the Contractor

is a part, and includes the right to grant sublicenses to the extent the Contractor was legally obligated to do so at contract award. The license is transferable only with the written approval of the agency, except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(ii) The Contractor's license may be revoked or modified by the agency to the extent necessary to achieve expeditious practical application of the subject invention in a particular country in accordance with the procedures in FAR 27.302(i)2() and 27.(304(f).

*(c) Contractor's obligations.*

(1) The Contractor shall disclose in writing each subject invention to the Contracting Officer within 2 months after the inventor discloses it in writing to Contractor personnel responsible for patent matters. The disclosure shall identify the inventor(s) and this contract under which the subject invention was made. It shall be sufficiently complete in technical detail to convey a clear understanding of the subject invention. The disclosure shall also identify any publication, on sale (*i.e.*, sale or offer for sale), or public use of the subject invention, or whether a manuscript describing the subject invention has been submitted for publication and, if so, whether it has been accepted for publication. In addition, after disclosure to the agency, the Contractor shall promptly notify the Contracting Officer of the acceptance of any manuscript describing the subject invention for publication and any on sale or public use.

(2) The Contractor shall elect in writing whether or not to retain ownership of any subject invention by notifying the Contracting Officer within 2 years of disclosure to the agency. However, in any case where publication, on sale, or public use has initiated the 1-year statutory period during which valid patent protection can be obtained in the United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.

(3) The Contractor shall file either a provisional or a nonprovisional patent application or a Plant Variety Protection Application on an elected subject invention within 1 year after election. However, in any case where a publication, on sale, or public use has initiated the 1-year statutory period during which valid patent protection can be obtained in the United States, the Contractor shall file the application prior to the end of that statutory period. If the Contractor files a provisional application, it shall file a nonprovisional application within 10 months of the filing of the provisional application. The Contractor shall file patent applications in additional countries or international patent offices within either 10 months of the first filed patent application (whether provisional or nonprovisional) or 6 months from the date permission is granted by the Commissioner

of Patents to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

(4) The Contractor may request extensions of time for disclosure, election, or filing under paragraphs (c)(1), (c)(2), and (c)(3) of this clause.

(d) *Government's rights—*

(1) *Ownership.* The Contractor shall assign to the agency, on written request, title to any subject invention—

(i) If the Contractor fails to disclose or elect ownership to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain ownership; provided, that the agency may request title only within 60 days after learning of the Contractor's failure to disclose or elect within the specified times.

(ii) In those countries in which the Contractor fails to file patent applications within the times specified in paragraph (c) of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in paragraph (c) of this clause, but prior to its receipt of the written request of the agency, the Contractor shall continue to retain ownership in that country.

(iii) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

(2) *License.* If the Contractor retains ownership of any subject invention, the Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice, or have practiced for or on its behalf, the subject invention throughout the world.

(e) *Contractor action to protect the Government's interest.*

(1) The Contractor shall execute or have executed and promptly deliver to the agency all instruments necessary to—

(i) Establish or confirm the rights the Government has throughout the world in those subject inventions in which the Contractor elects to retain ownership; and

(ii) Assign title to the agency when requested under paragraph (d) of this clause and to enable the Government to obtain patent protection and plant variety protection for that subject invention in any country.

(2) The Contractor shall require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in the Contractor's format, each subject invention in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. The disclosure format should require, as a minimum, the information required by paragraph (c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, as to the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) The Contractor shall notify the Contracting Officer of any decisions not to file a nonprovisional patent application, continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response or filing period required by the relevant patent office.

(4) The Contractor shall include, within the specification of any United States nonprovisional patent or plant variety protection application and any patent or plant variety protection certificate issuing thereon covering a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by (identify the agency). The Government has certain rights in the invention."

(f) *Reporting on utilization of subject inventions.* The Contractor shall submit, on request, periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining utilization of the subject invention that are being made by the Contractor or its licensees or assignees. The reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and other data and information as the agency may reasonably specify. The Contractor also shall provide additional reports as may be requested by the agency in connection with any march-in proceeding undertaken by the agency in accordance with paragraph (h) of this clause. The Contractor also shall mark any utilization report as confidential/proprietary to help prevent inadvertent release outside the Government. As required by 35 U.S.C. 202(c)(5), the agency will not disclose that information to persons outside the Government without the Contractor's permission.

(g) *Preference for United States industry.* Notwithstanding any other provision of this clause, neither the Contractor nor any assignee shall grant to any person the exclusive right to use or sell any subject invention in the United States unless the person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement

for an agreement may be waived by the agency upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States, or that under the circumstances domestic manufacture is not commercially feasible.

(h) *March-in rights*. The Contractor acknowledges that, with respect to any subject invention in which it has retained ownership, the agency has the right to require licensing pursuant to 35 U.S.C. 203 and 210(c), and in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency in effect on the date of contract award.

(i) Special provisions for contracts with nonprofit organizations. If the Contractor is a nonprofit organization, it shall—

(1) Not assign rights to a subject invention in the United States without the written approval of the agency, except where an assignment is made to an organization that has as one of its primary functions the management of inventions, provided, that the assignee shall be subject to the same provisions as the Contractor;

(2) Share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (but through their agency if the agency deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;

(3) Use the balance of any royalties or income earned by the Contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions for the support of scientific research or education; and

(4) Make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business concerns, and give a preference to a small business concern when licensing a subject invention if the Contractor determines that the small business concern has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business concerns; provided, that the Contractor is also satisfied that the small business concern has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor.

(5) Allow the Secretary of Commerce to review the Contractor's licensing program and decisions regarding small business applicants, and negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when the Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of paragraph (i)(4) of this clause.

(j) *Communications.* [Complete according to agency instructions.]

(k) *Subcontracts.*

(1) The Contractor shall include the substance of this clause, including this paragraph (k), in all subcontracts for experimental, developmental, or research work to be performed by a small business concern or nonprofit organization.

(2) The Contractor shall include in all other subcontracts for experimental, developmental, or research work the substance of the patent rights clause required by FAR Subpart 27.3.

(3) At all tiers, the patent rights clause must be modified to identify the parties as follows: references to the Government are not changed, and the subcontractor has all rights and obligations of the Contractor in the clause. The Contractor shall not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(4) In subcontracts, at any tier, the agency, the subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and the agency with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (h) of this clause.

### **H.3 RESERVED**

### **H.4 RIGHTS IN DATA – SPECIAL WORKS (FAR 52.227-17) (DEC 2007)**

(a) *Definitions.* As used in this clause--

“Data” means recorded information, regardless of form or the medium on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

“Unlimited rights” means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) *Allocation of Rights.*

(1) The Government shall have—

(i) Unlimited rights in all data delivered under this contract, and in all data first produced in the performance of this contract, except as provided in paragraph (c) of this clause for copyright.

(ii) The right to limit assertion of copyright in data first produced in the performance of this contract, and to obtain assignment of copyright in that data, in accordance with paragraph (c)(1) of this clause.

(iii) The right to limit the release and use of certain data in accordance with paragraph (d) of this clause.

(2) The Contractor shall have, to the extent permission is granted in accordance with paragraph (c)(1) of this clause, the right to assert claim to copyright subsisting in data first produced in the performance of this contract.

(c) *Copyright—*

(1) *Data first produced in the performance of this contract.*

(i) The Contractor shall not assert or authorize others to assert any claim to copyright subsisting in any data first produced in the performance of this contract without prior written permission of the Contracting Officer. When copyright is asserted, the Contractor shall affix the appropriate copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. The Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license for all delivered data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.

(ii) If the Government desires to obtain copyright in data first produced in the performance of this contract and permission has not been granted as set forth in paragraph (c)(1)(i) of this clause, the Contracting Officer shall direct the Contractor to assign (with or without registration), or obtain the assignment of, the copyright to the Government or its designated assignee.

(2) *Data not first produced in the performance of this contract.* The Contractor shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract and which contain the copyright notice of 17 U.S.C. 401 or 402, unless the

Contractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause.

(d) *Release and use restrictions.* Except as otherwise specifically provided for in this contract, the Contractor shall not use, release, reproduce, distribute, or publish any data first produced in the performance of this contract, nor authorize others to do so, without written permission of the Contracting Officer.

(e) *Indemnity.* The Contractor shall indemnify the Government and its officers, agents, and employees acting for the Government against any liability, including costs and expenses, incurred as the result of the violation of trade secrets, copyrights, or right of privacy or publicity, arising out of the creation, delivery, publication, or use of any data furnished under this contract; or any libelous or other unlawful matter contained in such data. The provisions of this paragraph do not apply unless the Government provides notice to the Contractor as soon as practicable of any claim or suit, affords the Contractor an opportunity under applicable laws, rules, or regulations to participate in the defense of the claim or suit, and obtains the Contractor's consent to the settlement of any claim or suit other than as required by final decree of a court of competent jurisdiction; and these provisions do not apply to material furnished to the Contractor by the Government and incorporated in data to which this clause applies.

#### **H.5 RIGHTS IN DATA -- EXISTING WORKS (FAR 52.227-18) (DEC 2007)**

(a) Except as otherwise provided in this contract, the Contractor grants to the Government, and others acting on its behalf, a paid-up nonexclusive, irrevocable, worldwide license to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government, for all the material or subject matter called for under this contract, or for which this clause is specifically made applicable.

(b) The Contractor shall indemnify the Government and its officers, agents, and employees acting for the Government against any liability, including costs and expenses, incurred as the result of (1) the violation of trade secrets, copyrights, or right of privacy or publicity, arising out of the creation, delivery, publication or use of any data furnished under this contract; or (2) any libelous or other unlawful matter contained in such data. The provisions of this paragraph do not apply unless the Government provides notice to the Contractor as soon as practicable of any claim or suit, affords the Contractor an opportunity under applicable laws, rules, or regulations to participate in the defense of the claim or suit, and obtains the Contractor's consent to the settlement of any claim or suit other than as required by final decree of a court of competent jurisdiction; and do not apply to material furnished to the Contractor by the Government and incorporated in data to which this clause applies.

#### **H.6 BANKRUPTCY (FAR 52.242-13) (JUL 1995)**

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

**H.7 PRINTING (CAR 1352.208-70) (APR 2010)**

(a) The contractor is authorized to duplicate or copy production units provided the requirement does not exceed 5,000 production units of any one page or 25,000 production units in the aggregate of multiple pages. Such pages may not exceed a maximum image size of 103/4by 141/4inches. A "production unit" is one sheet, size 81/2x 11 inches (215 x 280 mm), one side only, and one color ink. Production unit requirements are outlined in the Government Printing and Binding Regulations.

(b) This clause does not preclude writing, editing, preparation of manuscript copy, or preparation of related illustrative material as a part of this contract, or administrative duplicating/copying (for example, necessary forms and instructional materials used by the contractor to respond to the terms of the contract).

(c) Costs associated with printing, duplicating, or copying in excess of the limits in paragraph (a) of this clause are unallowable without prior written approval of the Contracting Officer. If the contractor has reason to believe that any activity required in fulfillment of the contract will necessitate any printing or substantial duplicating or copying, it shall immediately provide written notice to the Contracting Officer and request approval prior to proceeding with the activity. Requests will be processed by the Contracting Officer in accordance with FAR 8.802.

(d) The contractor shall include in each subcontract which may involve a requirement for any printing, duplicating, and copying in excess of the limits specified in paragraph (a) of this clause, a provision substantially the same as this clause, including this paragraph (d).

**H.8 KEY PERSONNEL (CAR 1352.237-75) (APR 2010)**

(a) The contractor shall assign to this contract the following key personnel:

| NAME                | POSITION                       |
|---------------------|--------------------------------|
| <b>Elise Gerich</b> | IANA Functions Program Manager |

|                        |  |
|------------------------|--|
| <b>Michelle Cotton</b> | IANA Function Liaison for Technical Protocol Parameters Assignment |
| <b>Kim Davies</b>      | IANA Function Liaison for Root Zone Management                     |
| <b>Leo Vegoda</b>      | IANA Function Liaison for Internet Number Resource Allocation      |
| <b>Tomofumi Okubo</b>  | Security Director  |
| <b>Steve Antonoff</b>  | Conflict of Interest Officer                                       |

(b) The contractor shall obtain the consent of the Contracting Officer prior to making key personnel substitutions. Replacements for key personnel must possess qualifications equal to or exceeding the qualifications of the personnel being replaced, unless an exception is approved by the Contracting Officer.

(c) Requests for changes in key personnel shall be submitted to the Contracting Officer at least 15 working days prior to making any permanent substitutions. The request should contain a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any additional information requested by the Contracting Officer. The Contracting Officer will notify the contractor within 10 working days after receipt of all required information of the decision on substitutions. The contract will be modified to reflect any approved changes.

#### **H.9 ORGANIZATIONAL CONFLICT OF INTEREST (CAR 1352.209-74) (APR 2010)**

(a) Purpose. The purpose of this clause is to ensure that the contractor and its subcontractors:

(1) Are not biased because of their financial, contractual, organizational, or other interests which relate to the work under this contract, and

(2) Do not obtain any unfair competitive advantage over other parties by virtue of their performance of this contract.

(b) Scope. The restrictions described herein shall apply to performance or participation by the contractor, its parents, affiliates, divisions and subsidiaries, and successors in interest (hereinafter collectively referred to as "contractor") in the activities covered by this clause as a prime contractor, subcontractor, co-sponsor, joint venturer, consultant, or in any similar capacity. For the purpose of this clause, affiliation occurs when a business concern is controlled by or has the power to control another or when a third party has the power to control both.

(c) Warrant and Disclosure. The warrant and disclosure requirements of this paragraph apply with full force to both the contractor and all subcontractors. The contractor warrants that, to the best of the contractor's knowledge and belief, there are no relevant facts or circumstances which would give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, and that the contractor has disclosed all relevant information regarding any actual or potential conflict. The contractor agrees it shall make an immediate and full disclosure, in writing, to the

Contracting Officer of any potential or actual organizational conflict of interest or the existence of any facts that may cause a reasonably prudent person to question the contractor's impartiality because of the appearance or existence of bias or an unfair competitive advantage. Such disclosure shall include a description of the actions the contractor has taken or proposes to take in order to avoid, neutralize, or mitigate any resulting conflict of interest.

(d) Remedies. The Contracting Officer may terminate this contract for convenience, in whole or in part, if the Contracting Officer deems such termination necessary to avoid, neutralize or mitigate an actual or apparent organizational conflict of interest. If the contractor fails to disclose facts pertaining to the existence of a potential or actual organizational conflict of interest or misrepresents relevant information to the Contracting Officer, the Government may terminate the contract for default, suspend or debar the contractor from Government contracting, or pursue such other remedies as may be permitted by law or this contract.

(e) Subcontracts. The contractor shall include a clause substantially similar to this clause, including paragraphs (f) and (g), in any subcontract or consultant agreement at any tier expected to exceed the simplified acquisition threshold. The terms "contract," "contractor," and "Contracting Officer" shall be appropriately modified to preserve the Government's rights.

(f) Prime Contractor Responsibilities. The contractor shall obtain from its subcontractors or consultants the disclosure required in FAR Part 9.507-1, and shall determine in writing whether the interests disclosed present an actual, or significant potential for, an organizational conflict of interest. The contractor shall identify and avoid, neutralize, or mitigate any subcontractor organizational conflict prior to award of the contract to the satisfaction of the Contracting Officer. If the subcontractor's organizational conflict cannot be avoided, neutralized, or mitigated, the contractor must obtain the written approval of the Contracting Officer prior to entering into the subcontract. If the contractor becomes aware of a subcontractor's potential or actual organizational conflict of interest after contract award, the contractor agrees that the Contractor may be required to eliminate the subcontractor from its team, at the contractor's own risk.

(g) Waiver. The parties recognize that this clause has potential effects which will survive the performance of this contract and that it is impossible to foresee each circumstance to which it might be applied in the future. Accordingly, the contractor may at any time seek a waiver from the Head of the Contracting Activity by submitting such waiver request to the Contracting Officer, including a full written description of the requested waiver and the reasons in support thereof.

#### **H.10 RESTRICTIONS AGAINST DISCLOSURE (CAR 1352.209-72) (APR 2010)**

(a) The contractor agrees, in the performance of this contract, to keep the information furnished by the Government or acquired/developed by the contractor in performance of the contract and designated by the Contracting Officer or Contracting Officer's Representative, in

the strictest confidence. The contractor also agrees not to publish or otherwise divulge such information, in whole or in part, in any manner or form, nor to authorize or permit others to do so, taking such reasonable measures as are necessary to restrict access to such information while in the contractor's possession, to those employees needing such information to perform the work described herein, *i.e.*, on a "need to know" basis. The contractor agrees to immediately notify the Contracting Officer in writing in the event that the contractor determines or has reason to suspect a breach of this requirement has occurred.

(b) The contractor agrees that it will not disclose any information described in subsection (a) to any person unless prior written approval is obtained from the Contracting Officer. The contractor agrees to insert the substance of this clause in any consultant agreement or subcontract hereunder.

#### **H.11 COMPLIANCE WITH LAWS (CAR 1352.209-73) (APR 2010)**

The contractor shall comply with all applicable laws, rules and regulations which deal with or relate to performance in accord with the terms of the contract.

#### **H.12 DUPLICATION OF EFFORT (CAR 1352.231-71) (APR 2010)**

The contractor hereby certifies that costs for work to be performed under this contract and any subcontracts hereunder are not duplicative of any costs charged against any other Government contract, subcontract, or other Government source. The contractor agrees to advise the Contracting Officer, in writing, of any other Government contract or subcontract it has performed or is performing which involves work directly related to the purpose of this contract. The contractor also certifies and agrees that any and all work performed under this contract shall be directly and exclusively for the use and benefit of the Government, and not incidental to any other work, pursuit, research, or purpose of the contractor, whose responsibility it will be to account for it accordingly.

#### **H.13 HARMLESS FROM LIABILITY**

The Contractor shall hold and save the Government, its officers, agents, and employees harmless from liability of any nature or kind, including costs and expenses to which they may be subject, for or on account of any or all suits or damages of any character whatsoever resulting from injuries or damages sustained by any person or persons or property by virtue of performance of this contract, arising or resulting in whole or in part from the fault, negligence, wrongful act or wrongful omission of the Contractor, or any subcontractor, their employees, and agents.

#### **H.14 CONTRACTOR IDENTIFICATION RESPONSIBILITIES**

(a) All Contractor personnel attending meetings, answering Government telephones, and working in other situations where their Contractor status is not obvious to third parties, are required to identify themselves as such to avoid creating an impression in the minds of the public that they are Government officials.

(b) All documents or reports produced by the Contractor shall be suitably marked as Contractor products or that Contractor participation is appropriately identified.

#### **H.15 NOTICE REQUIREMENT**

The Contractor agrees that it will immediately inform the Contracting Officer and the Contracting Officer's Representative in the event that the Contractor's Chairman of the Board of Directors initiates any investigation by an independent auditor of potential corporate insolvency.

#### **H.16 CERTIFICATION REGARDING TERRORIST FINANCING IMPLEMENTING EXECUTIVE ORDER 13224**

(a) By signing and submitting this application, the prospective Contractor provides the certification set out below:

(1) The Contractor, to the best of its current knowledge, did not provide, within the previous ten years, and will take all reasonable steps to ensure that it does not and will not knowingly provide, material support or resources to any individual or entity that commits, attempts to commit, advocates, facilitates or participates in terrorist acts, or has committed, attempted to commit, facilitated or participated in terrorist acts, as that term is defined in Executive Order 13224.

(2) Before providing any material support or resources to an individual or entity, the Contractor will consider all information about that individual or entity of which it is aware and all public information that is reasonably available to it or of which it must be aware.

(3) The Contractor also will implement reasonable monitoring and oversight procedures to safeguard against assistance being diverted to support terrorist activity.

(b) For the purposes of this certification, the Contractor's obligations under paragraph "a" are not applicable to the procurement of goods and/or services by the Contractor that are acquired in the ordinary course of business through contract or purchase, e.g., utilities, rents, office supplies, gasoline, unless the Contractor has reason to believe that a vendor or supplier of such goods and services commits, attempts to commit, advocates, facilitates or participates in terrorist acts, or has committed, attempted to commit, facilitated or participated in terrorist acts.

(c) This certification is an express term and condition of any agreement issued as a result of this application, and any violation of it shall be grounds for unilateral termination of the agreement by DoC prior to the end of its term.

## SECTION I - CONTRACT CLAUSES

### FEDERAL ACQUISITION REGULATION (FAR)

#### I.1 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address:

<https://www.acquisition.gov/far/>

#### I.2 52.202-1 DEFINITIONS (JUL 2004)

#### I.3 52.203-3 GRATUITIES (APR 1984)

#### I.4 52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

#### I.5 52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995)

#### I.6 52.203-7 ANTI-KICKBACK PROCEDURES (JUL 1995)

#### I.7 52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

#### I.8 52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (SEPT 2007)

#### I.9 52.203-13 CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT (APR 2010)

#### I.10 52.204-2 SECURITY REQUIREMENTS (AUG 2000)

#### I.11 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

#### I.12 52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)

#### I.13 52.215-8 ORDER OF PRECEDENCE—UNIFORM CONTRACT FORMAT (OCT 1997)

#### I.14 52.216-7 ALLOWABLE COST AND PAYMENT (JUN 2011)

#### I.15 RESERVED

#### I.16 52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

#### I.17 52.222-26 EQUAL OPPORTUNITY (MAR 2007)

- I.18 52.222.35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEP 2006)**
- I.19 52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)**
- I.20 52.222-37 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEP 2006)**
- I.21 52.222-50 COMBATting TRAFFICKING IN PERSONS (FEB 2009)**
- I.22 52.222.54 EMPLOYMENT ELIGIBILITY VERIFICATION (JAN 2009)**
- I.23 52.223-6 DRUG-FREE WORKPLACE (MAY 2001)**
- I.24 52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (AUG 2011)**
- I.25 52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUN 2008)**
- I.26 52.227-1 AUTHORIZATION AND CONSENT (DEC 2007)**
- I.27 52.227-2 NOTICE OF ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (DEC 2007)**
- I.28 52.227-3 PATENT INDEMNITY (APR 1984)**
- I.29 52.227-14 RIGHTS IN DATA—GENERAL, ALTERNATES I, II, III, IV (DEC 2007)**
- I.30 52.229-3 FEDERAL, STATE AND LOCAL TAXES (APR 2003)**
- I.31 52.232-20 LIMITATION OF COST (APR 1984)**
- I.32 52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)**
- I.33 52.232-25 PROMPT PAYMENT (OCT 2008)**
- I.34 52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (OCT 2003)**
- I.35 52.233-1 DISPUTES (JUL 2002), ALTERNATE I (DEC 1991)**
- I.36 52.233-3 PROTEST AFTER AWARD (AUG 1996)**

- I.37 52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004)**
- I.38 52.239-1 PRIVACY OR SECURITY SAFEGUARDS (AUG 1996)**
- I.39 52.242-1 NOTICE OF INTENT TO DISALLOW COSTS (APR 1984)**
- I.40 52.242-4 CERTIFICATION OF FINAL INDIRECT COSTS (JAN 1997)**
- I.41 52.242-13 BANKRUPTCY (JUL 1995)**
- I.42 52.242-14 SUSPENSION OF WORK (APR 1984)**
- I.43 52.242-15 STOP-WORK ORDER (AUG 1989)**
- I.44 52.243-1 CHANGES-FIXED PRICE (AUG 1987) Alternate I (APR 1984)**
- I.45 52.243-2 CHANGES--COST-REIMBURSEMENT (AUG 1987), ALTERNATE I (APR 1984)**
- I.46 52.244-2 SUBCONTRACTS (OCT 2010)**
- I.47 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (DEC 2010)**
- I.48 52.245-1 GOVERNMENT PROPERTY (APR 2012)**
- I.49 52.246-20 WARRANTY OF SERVICES (MAY 2001)**  
[The Contracting Officer shall give written notice of any defect or nonconformance to the Contractor within 120 days from the date of acceptance by the Government.]
- I.50 52.246-25 LIMITATION OF LIABILITY—SERVICES (FEB 1997)**
- I.51 52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (MAY 2004) ALT II (SEP 1996)**
- I.52 52.249-5 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (EDUCATIONAL AND OTHER NONPROFIT INSTITUTIONS) (SEP 1996)**
- I.53 52.249-6 TERMINATION (COST REIMBURSEMENT) (MAY 2004) (ALT V) (SEP 1996)**
- I.54 52.249-14 EXCUSABLE DELAYS (APR 1984)**
- I.55 52.253-1 COMPUTER GENERATED FORMS (JAN 1991)**

**CLAUSES INCORPORATED IN FULL TEXT**

**I.56 52.204-7 CENTRAL CONTRACTOR REGISTRATION (FEB 2012)**

(a) Definitions. As used in this clause—

*“Central Contractor Registration (CCR) database”* means the primary Government repository for Contractor information required for the conduct of business with the Government.

*“Data Universal Numbering System (DUNS) number”* means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

*“Data Universal Numbering System+4 (DUNS+4) number”* means the DUNS number means the number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see the FAR at Subpart 32.11) for the same concern.

*“Registered in the CCR database”* means that—

(1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database; and

(2) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS), and has marked the record “Active”. The Contractor will be required to provide consent for TIN validation to the Government as a part of the CCR registration process.

(b)

(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.

(2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation “DUNS” or “DUNS+4” followed by the DUNS or DUNS+4 number that identifies the offeror’s name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number—

(i) Via the internet at <http://fedgov.dnb.com/webform> or if the offeror does not have internet access, it may call Dun and Bradstreet at 1-866-705-5711 if located within the United States; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office. The offeror should indicate that it is an offeror for a U.S. Government contract when contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and Zip Code.

(iv) Company mailing address, city, state and Zip Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(g)

(1)

(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to:

(A) Change the name in the CCR database;

(B) Comply with the requirements of Subpart 42.12 of the FAR;

(C) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of

assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(h) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the CCR accessed through <https://www.acquisition.gov> or by calling 1-888-227-2423, or 269-961-5757.

**I.57 52.216-11 COST CONTRACT – NO FEE (APR 1984)**

(a) The Government shall not pay the Contractor a fee for performing this contract.

**I.58 52.217-8 OPTION TO EXTEND SERVICES (NOV 1999)**

The Government may require continued performance of any services within the limits and at the rates specified in the contract. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 15 calendar days of expiration of the contract.

**I.59 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)**

(a) The Government may extend the term of this contract by written notice to the Contractor **within 15 calendar days before the expiration of the contract**; provided that the Government gives the Contractor a preliminary written notice of its intent to extend **at least 30 calendar days before the contract expires**. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed seven years.

**I.60 52.233-2 SERVICE OF PROTEST (SEP 2006)**

(a) Protests, as defined in section 31.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer addressed as follows: Mona-Lisa Dunn, Contracting Officer, 1401 Constitution Avenue, NW, Room 6521, Washington, DC 20230 by obtaining written and dated acknowledgment of receipt from Mona-Lisa Dunn.

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

**I.61 52.237-3 CONTINUITY OF SERVICES (JAN 1991)**

(a) The Contractor recognizes that the services under this contract are vital to the Government and must be continued without interruption and that, upon contract expiration, a successor, either the Government or another contractor, may continue them. The Contractor agrees to --

(1) Furnish phase-in training; and

(2) Exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.

(b) The Contractor shall, upon the Contracting Officer's written notice,

(1) furnish phase-in, phase-out services for up to 90 days after this contract expires and

(2) negotiate in good faith a plan with a successor to determine the nature and extent of phase-in, phase-out services required.

The plan shall specify a training program and a date for transferring responsibilities for each division of work described in the plan, and shall be subject to the Contracting Officer's approval. The Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the services called for by this contract are maintained at the required level of proficiency.

(c) The Contractor shall allow as many personnel as practicable to remain on the job to help the successor maintain the continuity and consistency of the services required by this contract. The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.

(d) The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs (i.e., costs incurred within the agreed period after contract expiration that result from phase-in, phase-out operations) and a fee (profit) not to exceed a pro rata portion of the fee (profit) under this contract.

**COMMERCE ACQUISITION REGULATION (CAR) CLAUSES INCORPORATED IN FULL TEXT**

**I.62 1352.208-70 RESTRICTIONS ON PRINTING AND DUPLICATING (APR 2010)**

(a) The contractor is authorized to duplicate or copy production units provided the requirement does not exceed 5,000 production units of any one page or 25,000 production units in the aggregate of multiple pages. Such pages may not exceed a maximum image size of 10-3/4 by 14-1/4 inches. A "production unit" is one sheet, size 8-1/2 x 11 inches (215 x 280 mm), one side only, and one color ink. Production unit requirements are outlined in the Government Printing and Binding Regulations.

(b) This clause does not preclude writing, editing, preparation of manuscript copy, or preparation of related illustrative material as a part of this contract, or administrative duplicating/copying (for example, necessary forms and instructional materials used by the contractor to respond to the terms of the contract).

(c) Costs associated with printing, duplicating, or copying in excess of the limits in paragraph (a) of this clause are unallowable without prior written approval of the Contracting Officer. If the contractor has reason to believe that any activity required in fulfillment of the contract will necessitate any printing or substantial duplicating or copying, it shall immediately provide written notice to the Contracting Officer and request approval prior to proceeding with the activity. Requests will be processed by the Contracting Officer in accordance with FAR 8.802.

(d) The contractor shall include in each subcontract which may involve a requirement for any printing, duplicating, and copying in excess of the limits specified in paragraph (a) of this clause, a provision substantially the same as this clause, including this paragraph (d).

#### **I.63 1352.209-72 RESTRICTIONS AGAINST DISCLOSURE (APR 2010)**

(a) The contractor agrees, in the performance of this contract, to keep the information furnished by the Government or acquired/developed by the contractor in performance of the contract and designated by the Contracting Officer or Contracting Officer's Representative, in the strictest confidence. The contractor also agrees not to publish or otherwise divulge such information, in whole or in part, in any manner or form, nor to authorize or permit others to do so, taking such reasonable measures as are necessary to restrict access to such information while in the contractor's possession, to those employees needing such information to perform the work described herein, *i.e.*, on a "need to know" basis. The contractor agrees to immediately notify the Contracting Officer in writing in the event that the contractor determines or has reason to suspect a breach of this requirement has occurred.

(b) The contractor agrees that it will not disclose any information described in subsection (a) to any person unless prior written approval is obtained from the Contracting Officer. The contractor agrees to insert the substance of this clause in any consultant agreement or subcontract hereunder.

**I.64 1352.209-73 COMPLIANCE WITH THE LAWS (APR 2010)**

The contractor shall comply with all applicable laws, rules and regulations which deal with or relate to performance in accord with the terms of the contract.

**I.65 1352.233-70 AGENCY PROTESTS (APR 2010)**

(a) An agency protest may be filed with either: (1) The Contracting Officer, or (2) at a level above the Contracting Officer, with the appropriate agency Protest Decision Authority. See 64 FR 16,651 (April 6, 1999).

(b) Agency protests filed with the Contracting Officer shall be sent to the following address:

**Ms. Mona-Lisa Dunn, Contracting Officer**  
U.S. Department of Commerce  
Office of Acquisition Management  
Commerce Acquisition Solutions, Room 6521  
14th and Constitution Avenue, NW  
Washington, D.C. 20230  
Fax: 202-482-1470  
Email: mdunn@doc.gov

(c) Agency protests filed with the agency Protest Decision Authority shall be sent to the following address:

**Mr. Mark Langstein, Esquire**  
U.S. Department of Commerce  
Office of the General Counsel  
Contract Law Division--Room 5893  
Herbert C. Hoover Building  
14th Street and Constitution Avenue, NW  
Washington, D.C. 20230.  
FAX: (202) 482-5858

(d) A complete copy of all agency protests, including all attachments, shall be served upon the Contract Law Division of the Office of the General Counsel within one day of filing a protest with either the Contracting Officer or the Protest Decision Authority.

(e) Service upon the Contract Law Division shall be made as follows: U.S. Department of Commerce, Office of the General Counsel, Chief, Contract Law Division, Room 5893, Herbert C. Hoover Building, 14th Street and Constitution Avenue, NW., Washington, DC 20230. FAX: (202) 482-5858.

**I.66 1352.233-71 GAO AND COURT OF FEDERAL CLAIMS PROTESTS (APR 2010)**

(a) A protest may be filed with either the Government Accountability Office (GAO) or the Court of Federal Claims unless an agency protest has been filed.

(b) A complete copy of all GAO or Court of Federal Claims protests, including all attachments, shall be served upon (i) the Contracting Officer, and (ii) the Contract Law Division of the Office of the General Counsel, within one day of filing a protest with either GAO or the Court of Federal Claims.

(c) Service upon the Contract Law Division shall be made as follows: U.S. Department of Commerce, Office of the General Counsel, Chief, Contract Law Division, Room 5893, Herbert C. Hoover Building, 14th Street and Constitution Avenue, NW., Washington, DC 20230. FAX: (202) 482-5858.

**I.67 1352.237-71 SECURITY PROCESSING REQUIREMENTS - LOW RISK CONTRACTS (APR 2010)**

(a) Investigative Requirements for Low Risk Contracts. All contractor (and subcontractor) personnel proposed to be employed under a Low Risk contract shall undergo security processing by the Department's Office of Security before being eligible to work on the premises of any Department of Commerce owned, leased, or controlled facility in the United States or overseas, or to obtain access to a Department of Commerce IT system. All Department of Commerce security processing pertinent to this contract will be conducted at no cost to the contractor.

(b) Investigative requirements for Non-IT Service Contracts are:

- (1) Contracts more than 180 days – National Agency Check and Inquiries (NACI)
- (2) Contracts less than 180 days – Special Agency Check (SAC)

(c) Investigative requirements for IT Service Contracts are:

- (1) Contracts more than 180 days – National Agency Check and Inquiries (NACI)
- (2) Contracts less than 180 days – National Agency Check and Inquiries (NACI)

(d) In addition to the investigations noted above, non-U.S. citizens must have a background check that includes an Immigration and Customs Enforcement agency check.

(e) Additional Requirements for Foreign Nationals (Non-U.S. Citizens). Non-U.S. citizens (lawful permanent residents) to be employed under this contract within the United States must have:

- (1) Official legal status in the United States;
- (2) Continuously resided in the United States for the last two years; and
- (3) Obtained advance approval from the servicing Security Officer in consultation with the Office of Security headquarters.

(f) DoC Security Processing Requirements for Low Risk Non-IT Service Contracts. Processing requirements for Low Risk non-IT Service Contracts are as follows:

- (1) Processing of a NACI is required for all contract employees employed in Low Risk non-IT service contracts for more than 180 days. The Contracting Officer's Representative (COR) will invite the prospective contractor into e-QIP to complete the SF-85. The contract employee must also complete fingerprinting.
- (2) Contract employees employed in Low Risk non-IT service contracts for less than 180 days require processing of Form OFI-86C Special Agreement Check (SAC), to be processed. The Sponsor will forward a completed Form OFI-86C, FD-258, Fingerprint Chart, and Credit Release Authorization to the servicing Security Officer, who will send the investigative packet to the Office of Personnel Management for processing.
- (3) Any contract employee with a favorable SAC who remains on the contract over 180 days will be required to have a NACI conducted to continue working on the job site.
- (4) For Low Risk non-IT service contracts, the scope of the SAC will include checks of the Security/Suitability Investigations Index (SII), other agency files (INVA), Defense Clearance Investigations Index (DCII), FBI Fingerprint (FBIF), and the FBI Information Management Division (FBIN).
- (5) In addition, for those individuals who are not U.S. citizens (lawful permanent residents), the Sponsor may request a Customs Enforcement SAC on Form OFI-86C, by checking Block #7, Item I. In Block 13, the Sponsor should enter the employee's Alien Registration Receipt Card number to aid in verification.
- (6) Copies of the appropriate forms can be obtained from the Sponsor or the Office of Security. Upon receipt of the required forms, the Sponsor will forward the forms to the servicing Security Officer. The Security Officer will process the forms and advise the Sponsor and the Contracting Officer whether the contract employee can commence work prior to completion of the suitability determination based on the type of work and risk to the facility (i.e., adequate controls and restrictions are in place). The Sponsor will notify the contractor of favorable or unfavorable findings of

the suitability determinations. The Contracting Officer will notify the contractor of an approved contract start date.

(g) Security Processing Requirements for Low Risk IT Service Contracts. Processing of a NACI is required for all contract employees employed under Low Risk IT service contracts.

- (1) Contract employees employed in all Low Risk IT service contracts will require a National Agency Check and Inquiries (NACI) to be processed. The Contracting Officer's Representative (COR) will invite the prospective contractor into e-QIP to complete the SF-85. Fingerprints and a Credit Release Authorization must be completed within three working days from start of work, and provided to the Servicing Security Officer, who will forward the investigative package to OPM.
- (2) For Low Risk IT service contracts, individuals who are not U.S. citizens (lawful permanent residents) must undergo a NACI that includes an agency check conducted by the Immigration and Customs Enforcement Service. The Sponsor must request the ICE check as a part of the NAC.

(h) Notification of Disqualifying Information. If the Office of Security receives disqualifying information on a contract employee, the Sponsor and Contracting Officer will be notified. The Sponsor shall coordinate with the Contracting Officer for the immediate removal of the employee from duty requiring access to Departmental facilities or IT systems. Contract employees may be barred from working on the premises of a facility for any of the following reasons:

- (1) Conviction of a felony crime of violence or of a misdemeanor involving moral turpitude.
- (2) Falsification of information entered on security screening forms or of other documents submitted to the Department.
- (3) Improper conduct once performing on the contract, including criminal, infamous, dishonest, immoral, or notoriously disgraceful conduct or other conduct prejudicial to the Government regardless of whether the conduct was directly related to the contract.
- (4) Any behavior judged to pose a potential threat to Departmental information systems, personnel, property, or other assets.

(i) Failure to comply with security processing requirements may result in termination of the contract or removal of contract employees from Department of Commerce facilities or denial of access to IT systems.

(j) Access to National Security Information. Compliance with these requirements shall not be construed as providing a contract employee clearance to have access to national security information.

(k) The contractor shall include the substance of this clause, including this paragraph, in all subcontracts.

**I.68 1352.242-70 POSTAWARD CONFERENCE (APR 2010)**

A post award conference with the successful Offeror may be required. If required, the Contracting Officer will contact the contractor within 10 days of contract award to arrange the conference.

**I.69 1352.246-70 PLACE OF ACCEPTANCE (APR 2010)**

(a) The Contracting Officer or the duly authorized representative will accept supplies and services to be provided under this contract.

(b) The place of acceptance will be:  
U.S Department of Commerce – NTIA  
Office of International Affairs  
1401 Constitution Avenue, NW,  
Room 4701  
Washington, DC 20230

**I.70 1352.270-70 PERIOD OF PERFORMANCE (APR 2010)**

(a) The base period of performance of this contract is from October 1, 2012 through September 30, 2015. If an option is exercised, the period of performance shall be extended through the end of that option period.

(b) The option periods that may be exercised are as follows:

| <b>Period</b> | <b>Start Date</b> | <b>End Date</b>    |
|---------------|-------------------|--------------------|
| Option I      | October 1, 2015   | September 30, 2017 |
| Option II     | October 1, 2017   | September 30, 2019 |

(c) The notice requirements for unilateral exercise of option periods are set out in FAR 52.217-9 (see Paragraph I.59 above).

## Domain Names

## Overview

**Root Zone Management**

Overview

Root Database

Hint and Zone Files

**Change Requests**

Instructions &amp; Guides

Root Servers

.INT Registry

.ARPA Registry

IDN Practices Repository

Root Key Signing Key (DNSSEC)

Reserved Domains

## New DNS Root Zone Management System



This document is historical and no longer maintained. It is preserved for reference purposes but should not be relied upon for up-to-date information, and should not be considered active.

ICANN, VeriSign and the Department of Commerce have worked collaboratively to automate certain aspects of DNS root zone management. The new automated system, simplifies and expedites the process top-level domain name administrators must engage in to modify the information they maintain with ICANN.

### What does the system do?

The new automated system moves processing of DNS root zone change requests from a predominantly manual system into a system that will shepherd top-level domain change requests through its various processing stages. The new automated system will improve the workflow for processing root zone changes by automating some aspects of the process that are currently handled manually, and can be reliably automated. Automating the DNS root zone process will improve overall processing time and accuracy of the root zone management function. The new automation system provides key benefits such as greater transparency on the status of requests to their requestors, plus optimization of some tasks that are currently labor intensive.

In addition to automating this workflow, ICANN's systems will provide improvements that will be visible to top-level domain managers. As well as preserving existing methods of lodging change requests (e.g. via email), the system will allow users to log in with a username and password and lodge change requests via a web interface. This web interface will provide immediate feedback during the submission of a request, and help identify common errors straight away. The system will also give greater visibility to the status of a request. A TLD manager will be able to use the system to track the status of their request in real time.

Once a request is lodged, many of the steps will be automated in the system. For example, the process of obtain confirmation from the administrative and technical contacts will be performed automatically by the system, rather than manually by ICANN staff.

### What types of changes are handled by the system?

The current version of the system handles regular maintenance changes to existing top-level domains. All top-level domain operators will be issued with credentials to use the system. The current version of the system does not accommodate requests from non-credentialed parties: for example, redelegation requests from third parties, or requests to delegate new top-level domains. For the moment, these will continue to be performed by ICANN staff through normal processes.

### Will there be any downtime?

The root zone will remain functional for the entire period of the transition. There is no public impact of the migration to this new system. However, in order to reconcile data between the legacy, and the new system, there will be a one day period on 21 July 2011 in which root zone change requests by top-level domain operators will be not be processed by ICANN staff. Any pending requests will be resumed on Friday, 22 July 2011. Top-level domain managers have been emailed directly regarding this change, and presentations have been given at several TLD management conferences in advance of this change.

### How are credentials being issued?

We are performing a phased roll-out of credentials to top-level domain operators. We have randomly ordered TLDs and will be issuing the login details in batches. We expect to complete issuing all credentials by October 2011.

### What is the future of this project?

The main focus of this system has been to ensure that it operates correctly with the current set of requirements for DNS root zone management. We are very aware of the critical requirements for root stability, and have taken an extended period evaluating the system from this perspective. Future work on the system will be guided by feedback from top-level domain managers.

### I still have a question — who can I ask?

All questions about the system and the transition can be sent to [root-mgmt@iana.org](mailto:root-mgmt@iana.org), we'd be happy to assist.

**Domain Names**    [Root Zone Registry](#)   [.INT Registry](#)   [.ARPA Registry](#)   [IDN Repository](#)

**Number Resources**    [Abuse Information](#)

**Protocols**    [Protocol Registries](#)   [Time Zone Database](#)

**About Us**    [Presentations](#)   [Reports](#)   [Performance](#)   [Reviews](#)   [Excellence](#)   [Contact Us](#)

The IANA functions coordinate the Internet's globally unique identifiers, and are provided by **Public Technical Identifiers**, an affiliate of **ICANN**.

[Privacy Policy](#) [Terms of Service](#)

## Summary of Conversation with Deputy Director Tammy L. Journet

Due to the fact that we had not heard from the Contracting Officer. We elected to ring the DoC's CO to find out if they had received our email or registered hard copy. Receptionist did not have anyone on their list and we asked for the the Director of the Department. The Deputy Director , Tammy Journetwho informed us that CO Kathleen McGrath no longer worked there as of November 2014. According to her the primary reason she has not responded is because her email had been discontinued, but she had no explanation as to why the hard copy had not been answered. She gave us the name and telephone to someone she thought we should contact Kurt Boykin who was the acting department head. She gave us the name of Garry Harris and his phone number who had taken over the desk for Kathleen McGrath.

# Warrant Request

Inbox

3/25/15

**Moses Boone**

**moses.boone@thedoteco.com**

planet.ECO LLC, is hereby requesting a warrant for Contracting Officer, Gerry Harris, who resides within the Department of Commerce. He has responsibility for contract SA1310-12-CN-0035.

Mr. Garry L. Harris Contracting Officer  
U.S. Department of Commerce Commerce Acquisition Solutions Division  
Office of Acquisition Management  
1401 Constitution Avenue, NW, Room 6521 Washington, DC 20230

VIA EMAIL: Gharris@doc.gov (October 2, 2015) | CERTIFIED MAIL Re:  
Request for Update - Contract # SA1301-12-CN-0035 / Applicant # 1-1710-  
92415

Dear Mr. Garry L. Harris,  
We are requesting an update regarding both letters and emails addressed to you on August 21, 2015. Please see attached. Over 30 days has elapsed. We would like to know when we may expect a response to our request.

Sincerely,  
Jean D. William  
CEO/Chairman  
planet.ECO LLC (SDB)

cc: Mr. Barry Berkowitz Senior Procurement Executive and Director of  
Acquisition Management

Contract NO. SA1301-12-CN-0035 / Applicant # 1-1710-92415

Dear Madame Contracting Officer,

We, planet.ECO LLC - Applicant # 1-1710-92415, have completed all requirements of the contract listed in the above email subject.

We are respectfully requesting our current status, based upon the contract and with your office.

Sincerely,

Jean William  
Chairman and CEO  
planet.ECO LLC

April 7, 2016

Ms. LaVonne Jinks-Umstead  
Contracting Officer  
U.S. Department of Commerce  
Commerce Acquisition Solutions Division  
Office of Acquisition Management  
1401 Constitution Avenue, NW, Room 6521  
Washington, DC 20230

VIA EMAIL: [ljinks-umstead@doc.gov](mailto:ljinks-umstead@doc.gov) (April 7, 2016) | CERTIFIED MAIL

Re: Uninitiated Applicant Refund Form -  
Contract # SA1301-12-CN-0035 / Applicant # 1-1710-92415

Dear Ms. Jinks-Umstead,

In our desire to support an accountable and transparent gTLD Program we wish to inform you of some new developments we have recently been made aware of regarding clarification for gTLD Applicant Refund.

On April 5, 2016 although not having previously requested any gTLD Applicant Refund information, we received an email with a subject reading ("*Subject: Case 00218892 has been resolved*"). The email offered clarification on the procedures and form for the submission of gTLD Application Refund. (See Appendix Below) Although the email was identified as "resolved", we never made the initial request, nor are we familiar with this case or the resolution made from the Contractor.

On April 7, 2016 we received a follow up email with a subject reading ("*Subject: Your Recent Experience with the ICANN Support Center*"), requesting that I answer a satisfaction survey for a person, only identified on the 2nd email of the uninitiated gTLD Application Refund request. (See Appendix Below)

In view of the "request and response" for clarity of the gTLD Applicant Refund Process and as previously requested from your office, please provide us with a status update and the accounting of all costs associated with the processing of the .ECO gTLD Application # 1-1710-92415, in accordance to IANA Contract Clause C.2.3.

In our humble opinion, having read the IANA Contract SA1301-12-CN-0035 several times over, we fail to see any clause in the IANA Contract that would cover such a situation or process. The Applicant Guidebook does not supersede the IANA Contract SA1301-12-12CN-0035.

planet.eco

Jean William - Chairman

address: Stamford, CT 06902

email: [jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)

website: [www.planetdoteco.com](http://www.planetdoteco.com)

office: 203-517-0929

cell: 203-921-8829

Sincerely,



Jean D. William  
CEO/Chairman  
planet.ECO LLC (SDB)

## Appendix

**Subject:** Case 00218892 has been resolved  
**From:** New gTLD Customer Service <newgtld@icann.org>  
**Date:** Tue, Apr 05, 2016 5:15 pm  
**To:** "jeanwilliam@planetdoteco.com" <jeanwilliam@planetdoteco.com>



New Generic Top-Level  
**Domains**

Dear Jean William:

Thank you for contacting New gTLD Customer Service. This serves as a resolution to your recent inquiry: 00218892.

This case was about:

**Account:** Planet Dot Eco, LLC  
**Subject:** Application Fee Refund Information  
**Description:** Dear Jean William:

We are writing to provide clarification on the application fee refund calculation as it applies to applications that are in contention sets resolved by the Community Priority Evaluation (CPE) process.

As you know, applications are eligible for partial refund if they are withdrawn from the New gTLD Program before the applicant has entered into a Registry Agreement with ICANN. Applicant Guidebook (AGB) Section 1.5.1 defines the application fee refund schedule based on the point in the process at which an application withdrawal is requested. The refund amount is reduced from 35% to 20% of the application fee [a]fter the applicant has completed Dispute Resolution, Extended Evaluation, or String Contention Resolution(s).

We would like to clarify that if a contention set has been resolved by CPE, the applications other than the prevailing community application in the contention set are eligible for a 35% refund (except for in cases where the application in question participated in Extended Evaluation or was the subject of an Objection).

Please note that should you withdraw your application in the next few weeks, the system-generated message may not align with the information provided here. Before your refund is processed, a member of the New gTLD Program Operations team will contact you to confirm the correct refund amount.

Thank you for your attention. If you have any questions about this message, please contact our Global Support Center at [myicann.secure.force.com](https://myicann.secure.force.com).

Regards,

New gTLD Program Operations

If you have any questions, please contact New gTLD Customer Service via the CSC Portal at <https://myicann.secure.force.com/>.

This is a system-generated email. Please do not respond to this email.

Kind regards,

Jean William - Chairman

address: Stamford, CT 06902  
email: [jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)  
website: [www.planetdoteco.com](http://www.planetdoteco.com)  
office: 203-517-0929  
cell: 203-921-8829

**Subject:** Your Recent Experience with the ICANN Support Center  
**From:** New gTLD Customer Service <no-reply-gtld@icann.org>  
**Date:** Wed, Apr 06, 2016 5:15 pm  
**To:** "jeanwilliam@planetdoteco.com" <jeanwilliam@planetdoteco.com>



## One World, One Internet

Dear Jean,

You recently worked with Jared Erwin from ICANN's Customer Support Center (CSC) on case 00218892 - Application Fee Refund Information.

In the interest of continuously improving service, ICANN started a Satisfaction Survey program on 13 July 2015 to gather feedback upon resolution of an inquiry.

Please help us by taking a few minutes to tell us about your experience with Jared and the CSC. We value you as a member of the ICANN community and want to make sure we meet your expectations.

To begin the survey, please [click here](#).

To opt-out, please [click here](#) (doing so will result in exclusion from all future case surveys).

Sincerely,

Michaela Quinzy  
Director of Customer Service

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# 2016-05-20, at 16:44 PM Where's the CO, Madam Secretary?

Created: 2016-06-22 08:02 AM  
Source: <https://mail.google.com/mail/u/0/#search/aj/154caa3753f25369>

On May 20, 2016, at 4:44 PM, "[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)" <[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)> wrote:

The Honorable  
Penny Pritzker  
United States Secretary of Commerce  
Herbert C. Hoover Building  
1401 Constitution Ave NW  
Washington District Of Columbia 20230  
United States

Dear Madam Secretary:

Yesterday, as normally done since February 18, 2015, we sent an email to the Contracting Officer managing the IANA functions Contract SA1301-12-CN-0035 / Applicant 1-1710-92415.

Attached please find the following email, "Undeliverable email to Ms. Lavonne Jinks-Umstead.pdf", we received in response to our email sent to Contracting Officer Ms. LaVonne Jinks-Umstead.

Searching for Ms. Jinks-Umstead we immediately followed up by phone calls to the Department of Acquisitions only to receive a series of dropped calls and eventually re-directed to the voicemail of General Council.

Unable to locate Ms. Jinks-Umstead we forward the intended communications to the IANA functions 0035 Contracting Officer to your office.

Respectfully,

Jean William

# 2016-05-20, at 19:34 Rodenbaugh Law COI - IANA Contract Barry Berkowitz responds

**Created:** 2016-06-22 07:58 AM  
**Source:** <https://mail.google.com/mail/u/0/#search/aj/154caa3753f25369>

Subject: Re: [FWD: Re: Rodenbaugh Law COI - IANA Contract #

SA1301-12-CN-0035 / Applicant # 1-1710-92415 (planet.ECO LLC)]

From: "Berkowitz, Barry" <[BBerkowitz@doc.gov](mailto:BBerkowitz@doc.gov)>

Date: Fri, May 20, 2016 7:34 pm

To: "[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)" <[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)>

Cc: "Ajayi, Akinsola" <[AAjayi@doc.gov](mailto:AAjayi@doc.gov)>, "Journet, Tammy"

<[TJournet@doc.gov](mailto:TJournet@doc.gov)>

Ms. William,

Thank you for your email. I am sorry you had issues contacting Ms. Jinks-Umstead, but Ms. Jinks-Umstead has retired and left Government service. Her replacement is Mr. Ajayi Akinsola who is copied on this email will take the required actions associated with you email. Mr. Akinsola may be reached at: (202) 482-2810, or at [aajayi@doc.gov](mailto:aajayi@doc.gov).

Again I am sorry you had problems contacting the contracting officer, but hopefully this email will clear up the problem. Please do not hesitate to reach out Mr. Akinsola is you have any questions.

Cheers

Barry Berkowitz

# 2016-05-20, at 19:34 Rodenbaugh Law COI - IANA Contract Barry Berkowitz responds

**Created:** 2016-06-22 07:58 AM  
**Source:** <https://mail.google.com/mail/u/0/#search/aj/154caa3753f25369>

Subject: Re: [FWD: Re: Rodenbaugh Law COI - IANA Contract #

SA1301-12-CN-0035 / Applicant # 1-1710-92415 (planet.ECO LLC)]

From: "Berkowitz, Barry" <[BBerkowitz@doc.gov](mailto:BBerkowitz@doc.gov)>

Date: Fri, May 20, 2016 7:34 pm

To: "[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)" <[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)>

Cc: "Ajayi, Akinsola" <[AAjayi@doc.gov](mailto:AAjayi@doc.gov)>, "Journet, Tammy"

<[TJournet@doc.gov](mailto:TJournet@doc.gov)>

Ms. William,

Thank you for your email. I am sorry you had issues contacting Ms. Jinks-Umstead, but Ms. Jinks-Umstead has retired and left Government service. Her replacement is Mr. Ajayi Akinsola who is copied on this email will take the required actions associated with you email. Mr. Akinsola may be reached at: (202) 482-2810, or at [aajayi@doc.gov](mailto:aajayi@doc.gov).

Again I am sorry you had problems contacting the contracting officer, but hopefully this email will clear up the problem. Please do not hesitate to reach out Mr. Akinsola is you have any questions.

Cheers

Barry Berkowitz

Mr. Barry Berkowitz

Senior Procurement Executive and Director of Acquisition Management

U.S. Department of Commerce

Office of Acquisition Management

1401 Constitution Avenue NW

Washington, DC 20230

VIA EMAIL: BBerkowitz@doc.gov (May 23, 2016) | CERTIFIED MAIL

Re: Verification Request – Contracting Officer Mr. Ajayi Akinsola

Contract # SA1301-12-CN-0035 / Applicant # 1-1710-92415

Dear Mr. Berkowitz,

Thank you for clarifying that the Current Contracting Officer responsible for the management of the

IANA # SA1301-12-CN-0035 Functions Contract is Mr. Akinsola.

As per Commerce Acquisition Manual October 2014 1301.6 Section 4 - Contracting Officer Warrant

Program, we the undersigned, Co-Founders of and representing planet.ECO LLC (".ECO"), a United

States small disadvantaged business corporation, respectfully request your assistance in providing

written verification that Mr. Akinsola has been issued the requisite Warrant and Letter of Appointment,

as required by law and would appreciate a copy of such document, including the following

documents:

- Resume
- Education level

- Documented procurement training
- Documented procurement experience
- Most Recent Performance Rating
- Documented Level of Authority per contract
- Current Conflict of Interest Disclosure
- Documented Waivers if applicable
- Copies of all Contract Descriptions

**Ajayi, Akinsola (Federal)**

<AAjayi@doc.gov>

to: "jeanwilliam@planetdoteco.com" <jeanwilliam@planetdoteco.com>

cc: Moses Boone <moses.boone@thedoteco.com>,  
Jean William <jean.william@thedoteco.com>

date: Thu, May 26, 2016 at 10:03 AM

subject: RE: [FWD: Re: Rodenbaugh Law COI - IANA Contract # SA1301-12-CN-0035 /  
Applicant # 1-1710-92415 (planet.ECO LLC)]

mailed-by: doc.gov

signed-by: docgov.onmicrosoft.com

Good morning Mr. William,

I am writing to let you know that your email was received but it cannot be acted on as you are not a party to IANA Contract # SA1301-12-CN-0035. You also need to cease and desist from misrepresenting yourself as a party to the aforementioned contract. The contract is between the U.S. Department of Commerce and ICANN. You are neither a representative of ICANN nor affiliated in any way with ICANN. If you have dealings as an applicant with ICANN, you need to address those dealings directly with ICANN.

As the Contracting Officer on SA1301-12-CN-0035, there is nothing I can do for you as what you are requesting has got nothing to do with the contract as written.

Regards,

*Akinsola "AJ" Ajayi*

*Acting Director, Commerce Acquisition Solutions & Senior Bureau Procurement Official*

*Office of the Secretary*

*U. S. Department of Commerce*

*1401 Constitution Ave., N.W., Suite 6521*

*Washington, DC 20230*

*Office: 202-482-2810*  
*Email: [aajayi@doc.gov](mailto:aajayi@doc.gov)*

June 7, 2016

Mr. Ajayi Akinsola  
Contracting Officer  
U.S. Department of Commerce  
Commerce Acquisition Solutions Division  
Office of Acquisition Management  
1401 Constitution Avenue, NW, Room 6521  
Washington, DC 20230  
VIA EMAIL: aajayi@doc.gov

CERTIFIED MAIL

Re: Response to Contracting Officer -  
Contract # SA1301-12-CN-0035 / Applicant # 1-1710-92415

Dear Sir,

Our response to your e-mail received on May 25, 2016 is as follows:

.ECO finds it interesting that your charges and statements are not supported by the FAR, the CAM or the IANA Functions Contract. Please make available what the Contracting Officer used in the email as related to the statements and charges made.

.ECO separates your email to what it finds to be 6 statements and responds to the statements.

.ECO has always been guided by the IANA Functions Contract 0035, U.S. Laws, Rules, and Regulations and is an interested and affected party. (See IANA Functions Contract Clause C.1.3)

Below please find statements from Contracting Officer and responses from .ECO

**Statement 1:**

*I am writing to let you know that your email was received but it cannot be acted on as you are not a party to IANA Contract # SA1301-12-CN-0035.*

**Response 1:**

**.ECO DISAGREES.** See IANA Functions Contract Clause C.1.3.

**Statement 2:**

*You also need to cease and desist from misrepresenting yourself as a party to the aforementioned contract.*

**Response 2:**

**.ECO DISAGREES.** See IANA Functions Contract Clause C.1.3.

**Statement 3:**

*The contract is between the U.S. Department of Commerce and ICANN.*

**Response 3:**

**.ECO AGREES.**

**Statement 4:**

*You are neither a representative of ICANN nor affiliated in any way with ICANN.*

**Response 4:**

**.ECO AGREES.**

**Statement 5:**

*If you have dealings as an applicant with ICANN, you need to address those dealings directly with ICANN.*

**Response 5:**

**.ECO DISAGREES.** Please see F.5 Government Rights to Deliverables.

**Statement 6:**

*As the Contracting Officer on SA1301-12-CN-0035, there is nothing I can do for you as what you are requesting has got nothing to do with the contract as written.*

**Response 6:**

**.ECO DISAGREES.** Please see C.1.3 & F.5 Government Rights to Deliverables.

The above covers .ECO's interpretation of the contract.

In addition please see:

IANA Functions Contract 0035 Clauses C.6 and H.9

IANA Functions Contract 0035 Clauses H.11

On several occasions .ECO has asked for information pertaining to the contracting officer.

.ECO now make the same request again for:

- The requisite Warrant and Letter of Appointment
- Resume
- Education level
- Documented procurement training
- Documented procurement experience
- Most Recent Performance Rating
- Documented Level of Authority per contract
- Current Conflict of Interest Disclosure
- Documented Waivers if applicable

- Copies of all Contract Descriptions

The request is guided by FAR 1.602

In light of the foregoing, .ECO respectfully request that the wrongful and illegal charges made by the Contracting Officer be rescinded, correct all that has been injurious and continues to cause irreparable harm to .ECO. Delegate the .ECO gTLD to .ECO immediately, allowing for its normal fields of expansion or please provide .ECO with your final decision.

Sincerely,



Jean D. William  
CEO/Chairman  
planet.ECO LLC (“.ECO”) (SDB)

## Exhibits

Exhibit 1 - May 25, 2016

Good morning Mr. William,

I am writing to let you know that your email was received but it cannot be acted on as you are not a party to IANA Contract # SA1301-12-CN-0035. You also need to cease and desist from misrepresenting yourself as a party to the aforementioned contract. The contract is between the U.S. Department of Commerce and ICANN. You are neither a representative of ICANN nor affiliated in any way with ICANN. If you have dealings as an applicant with ICANN, you need to address those dealings directly with ICANN.

As the Contracting Officer on SA1301-12-CN-0035, there is nothing I can do for you as what you are requesting has got nothing to do with the contract as written.

Regards,

*Akinsola “AJ” Ajayi  
Acting Director, Commerce Acquisition Solutions & Senior Bureau Procurement Official  
Office of the Secretary  
U. S. Department of Commerce  
1401 Constitution Ave., N.W., Suite 6521  
Washington, DC 20230  
Office: 202-482-2810  
Email: aajayi@doc.gov*

August 15, 2016

Mr. Ajayi Akinsola  
Contracting Officer  
U.S. Department of Commerce  
Commerce Acquisition Solutions Division  
Office of Acquisition Management  
1401 Constitution Avenue, NW, Room 6521  
Washington, DC 20230  
VIA EMAIL: aajayi@doc.gov

CERTIFIED MAIL

Re: An Unsolicited Proposal  
Contract # SA1301-12-CN-0035 / Applicant # 1-1710-92415

Dear Sir,

1. Serious and willful violations have taken place with regard to IANA Functions Contract SA1301-12-CN-0035 Clause G.1, which states in part, ***“The Contracting Officer is the only person authorized to make or approve any changes in any of the requirements of this contract, and, notwithstanding any provisions contained elsewhere in this contract, the said authority remains solely in the Contracting Officer. In the event the contractor makes any changes at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract terms and conditions, including price”***. On August 3, 2016 and August 10, 2016 your no cost, non-profit Contractor ICANN (“Contractor”) sent emails directly to .ECO®) and furthermore, the emails contained fraudulent statements. (See Exhibit 1 - Email1 - August 3, 2016 and Exhibit 2 - Email2 - August 10, 2016)
2. The wording of the August 3, 2016 email from Contractor appears to be in violation of Contract Clause I.9 - Contractor Code of Business Ethics and Conduct (FAR 52.203-13), as this email states it is in response to an inquiry/request from planet.ECO. No inquiry was made from planet.ECO LLC (“.ECO®”) to Contractor. We are totally unaware of any actions taken by myself or any other authorized member of my board or company in attempting to make contact with any of Contractor or its members. As an Interested and affected party to the IANA Functions Contract, and in accordance with Contract Clause C.1.3, .ECO® would not make such an inquiry of Contractor.
3. For .ECO® to respond to Contractor’s emails would only create confusion and thus, we will only respond to the directives issued by the Contracting Officer in the execution of a Federal

planet.ECO  
Jean William - Chairman

address: Stamford, CT 06902  
email: jeanwilliam@planetdoteco.com  
website: www.planetdoteco.com  
office: 203-517-0929  
cell: 203-921-8829

Requirement, all in accordance with Contract Clauses; H.11 Compliance with Laws (CAR 1352.209-73), I.64 - Compliance with the Laws (48 CFR 1352.209-73).

4. In addition to purporting to be a response to an inquiry from .ECO®, the August 3, 2016 email from Contractor clearly indicates the Contracting Officer, per Contract Clause G.1, Contracting Officer's Authority (CAR 1352.201-70), has entered into Registry Agreement with Big Room Inc., a Canadian Corporation. This would be in violation of Contract Clause I.9 - Contractor Code of Business Ethics and Conduct (FAR 52.203-13), as Big Room Inc. has been/is operating unlawfully and in bad faith to become the .ECO Registry Operator.
5. Furthermore the August 3, 2016 email from Contractor indicates .ECO® Will Not Proceed and may request a refund for the remaining \$37,000 of the \$185,000 provided. Although .ECO® also provided a copy of its “.ECO®” USPTO trademark assignment (See Exhibit 3 - .ECO USPTO Trademark assignment) on May 30, 2012 in exchange for a fair and transparent evaluation process, such an evaluation has never occurred.
6. The August 3, 2016 email from Contractor is another source of harm to Protester ECO®, and thus .ECO® finds it necessary to once again reiterate facts it provided to you earlier which outline the seriousness of the illegal matters that have and continue bringing harm unto .ECO®, a U.S. based small disadvantaged entrepreneurial business (“SDB”) that has been taken advantage of while complying with all contractual requirements and competing against former no cost, non-profit Contractor ICANN's Managerial Personnel for the root zone delegation of .ECO (C.2.9.2d).
7. Adherence to Contract Clause I.9 - Contractor Code of Business Ethics and Conduct (FAR 52.203-13) and examination of Big Room Inc's previous actions would prohibit the Contracting Officer from entering into a Registry Agreement with Big Room Inc.
8. In 2007, Big Room Inc. was co-founded by one of Contractor's Managerial Personnel. Nearing the tail end of Big Room Inc's Ploy the company's intention to willfully encroach and Infringe upon .ECO®'s trademark rights are ever visible as the company has set forth, since 2007 to win .ECO, and has not deviated seeking delegation, in the hopes of finally receiving a favorable decision from you in order to legitimize and validate its unlawful Registry Agreement and bad-faith activities.
9. In January 2007, while co-founder Jacob Malthouse worked as an executive for Contractor and 5 years prior to the public offering of the gTLD Program, Malthouse's colleague Trevor Bowden decided to purchase .dot-ECO.org and .dot-ECO.Info (“dotECO” Domains) which both co-founders later only used to campaign Big Room's so-called .ECO Community (created

in or around 2009). For this reason alone, the .ECO Community applicant, Big Room Inc. appears to have an unfair and an unlawful advantage due to either inside information, front-running, gaming of the New gTLD Program and/or Cyber Squatting. Also in 2007, Bowden and Malthouse developed Big Room Inc's Business Plan while Malthouse worked for Contractor. Malthouse resigned from ICANN in September 2007 to co-found Big Room Inc. on November 14, 2007.

10. In 2008 Big Room Inc. filed 2 U.S. Trademark applications and a third in 2009 attempting to obtain trademark rights to .ECO trademarks. On December 7, 2009 the USPTO wrote to Big Room Inc. informing it of its determination and position. The USPTO in part writes, ***“Registration of the applied-for mark is refused because of a likelihood of confusion with the mark in U.S. Registration No. 3716170. Trademark Act Section 2(d), 15 U.S.C. §1052(d); see TMEP §§1207.01 et seq.”*** (See Exhibit 4 - USPTO’s Determination and <https://tsdr.uspto.gov/documentviewer?caseId=sn77523015&docId=OOA20091207101341#docIndex=9&page=1> Big Room Inc. continued to willfully encroach and infringe upon .ECO<sup>®</sup> and on December 2011 Big Room seeks a worldwide trademark license from .ECO<sup>®</sup> sending an email offer to .ECO<sup>®</sup> for, ***“the sum of US\$15,000 in exchange for a worldwide license to use the Mark in connection with our application for the TLD and our operation of the TLD, including all uses of the Mark in the ordinary course of operating and promoting the TLD. We would propose to pay you US\$5,000 at the time of license signing, and US\$10,000 upon execution of a registry agreement with ICANN.”*** The offer was not accepted and Big Room Inc. continued to willfully infringed upon our ECO<sup>®</sup> trademark and began filing numerous frivolous trademark petitions to dislodge .ECO<sup>®</sup> trademark rights so it could obtain unfair priority to use towards delegation. This conduct is in violation of Contract Clause I.9 - FAR 52.203-13 Contractor Code of Business Ethics and Conduct.
11. Big Room Inc. has failed 6 times in the USPTO in its attempts to obtain .ECO<sup>®</sup> Priority via applying for U.S. .ECO trademark rights and subjecting .ECO<sup>®</sup> to frivolous trademark cancellation petitions in the Trademark Trial and Appeals Board. Each attempt for trademark cancellation by Petitioner Big Room Inc. was met with the USPTO/TTAB Board Termination or Withdrawal by Petitioner. In the final trademark cancellation, a motion to dismiss was GRANTED and Petitioner Big Room Inc. was allowed and did take an opportunity to cure its defect and later on made a motion to WITHDRAW. (See Exhibit 5 - Big Room USPTO filings) In a long line of a series of unlawful activities, Big Room Inc. created a so-called .ECO Community, seeking to obtain its long sought after .ECO via a “Community Priority”. This is unethical as Big Room Inc. participated in the development of the Community Priority Mechanism with Contractor; another violation of Contract Clause I.9 Contractor Code of Business Ethics and Conduct (FAR 52.203-13).

12. In response to Big Room Inc's. second attempt to obtain a U.S. .ECO trademark, on December 7, 2009 the USPTO provided applicant Big Room with a determination which in part read, ***"Application Serial No. 77452991 has now matured into a registered mark."... "The overriding concern is not only to prevent buyer confusion as to the source of the goods and/or services, but to protect the registrant from adverse commercial impact due to use of a similar mark by a newcomer. See In re Shell Oil Co., 992 F.2d 1204, 1208, 26 USPQ2d 1687, 1690 (Fed. Cir. 1993). Therefore, any doubt regarding a likelihood of confusion determination is resolved in favor of the registrant."***
13. Priority is and always has been used as a strategic ploy by others and Big Room Inc., a company co-founded by Managerial Personnel of Contractor. Specifically, Jacob Malthouse, participated in the development of the Community Priority Evaluation ("CPE") process and as a significant contributor, has participated in providing a vast majority of Community Priority Evaluation content onto the Contractor's wiki Community Priority Evaluation Page and the Contractor's wiki .ECO Page that it also managed, while infringing upon .ECO®'s rights and disregarding USPTO's determination and clearly a Conflict of Interest C.6, H.9. (See Exhibit 6 - Malthouse Contractor's wiki Contributions)
14. Regardless of the Community Priority expertise and / or involvement of Malthouse, Big Room Inc. was well aware of the potential, now actual, .ECO trademark issues, as indicated from the December 7, 2009 USPTO refusal letter. Big Room Inc. was informed of the USPTO's determination regarding the .ECO registered .ECO mark by planet.ECO LLC (co-founder Moses Boone) and their .ECO applied for mark, years ahead of the gTLD public application window. Although no one has commented on Big Room's appeared intentions to game the gTLD system via .ECO trademarks, the USPTO writes, ***"the marks are sufficiently similar to cause a likelihood of confusion under Trademark Act Section 2(d)" and "the services provided by the registrant, the applicant's services would clearly be within the registrant's normal fields of expansion" and "the contemporaneous use of highly similar marks that are phonetic equivalents, consumers are likely to conclude that the services are related and originate from a single source. As such, registration must be refused under Trademark Act Section 2(d)"***.  
(<https://tsdr.uspto.gov/documentviewer?caseId=sn77523015&docId=OOA20091207101341#docIndex=9&page=1>)
15. Nonetheless, Big Room Inc. who has no legal basis for seeking to interfere with .ECO®'s trademark rights or willfully use a counterfeit mark in the United States, has been and is still allowed to continue to act in unfair competition, encroaching and usurping .ECO®'s trademark rights under U.S. Trademark Law. The newly created CPE mechanism, foreign to Federal Procurement, is being used to grant priority to a so-called .ECO Community applicant priority, with no consideration to .ECO®'s highly related Internet Services trademark and in

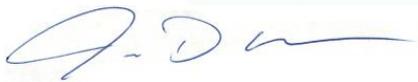
16. conflict with U.S. Trademark Law. (See Exhibit 7 - The .ECO Ploy (Attached)) It is illegal and in violation of the IANA Functions
17. Contract SA1301-12-CN-0035 and not permitted anywhere under Federal Regulations; as such the aforementioned actions would be in willful violation of Contract Clauses:
  - C.2.9.2d - Delegation and Redelelegation of a Generic Top Level Domain (gTLD)
  - C.6 - Conflict of Interest Requirements
  - F.5 - Government Rights to Deliverables
  - G.1- Contracting Officer's Authority (CAR 1352.201-70)
  - H.9- Organizational Conflict of Interest ( CAR 1352.209-74)
  - H.11- Compliance with Laws (CAR 1352.209-73)
  - I.9 - Contractor Code of Business Ethics and Conduct (FAR 52.203-13)
18. Per Clause C.2.9.2d which in part reads: ***“Contractor must provide documentation verifying that ICANN followed its own policy framework and was supportive of the global public interest...”*** Willful Trademark and Conflict of Interest violations against a gTLD Small Disadvantaged Business or any Applicant does not support global public interest and violates Clause C.2.9.2d.
19. Since 2008 .ECO<sup>®</sup> has established constructive nationwide priority covering highly related Internet services (Exhibit 8 - .ECO<sup>®</sup> Trademark) and prior to applying for .ECO<sup>®</sup> gTLD evaluation offered and continues to offer a wide variety of services online in the United States under its mark .ECO<sup>®</sup>, including domain name registration services, web hosting services, SSL & security services, email account services, marketing tools, and website building services. A complete detailed list of the services for each of these categories can be found on the most current site, <http://www.dot-eco.com>
20. .ECO<sup>®</sup> continues to rightfully and lawfully seek expansion of its trademark services and respectfully requests your response to the email sent to you on June 7, 2016. (See Exhibit 8 - Email to Contracting Officer June 7, 2016)
21. In performing the IANA functions as called for in Section C.2.9.2d of the IANA Functions contract, ICANN's IANA Department will verify that all gTLD delegation redelegation requests are consistent with the approved and documented processes for making such requests.<sup>1</sup> It is clear that applicant Big Room Inc. and other .ECO gTLD applicants (See Exhibit 9 COI Letter to SBA Ombudsman 6\_5\_2014) are in Conflict of Interest and have

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<sup>1</sup> Consultation on gTLD Delegation and Redelelegation User Instructions and Source of Policy and Procedures

22. infringed upon our .ECO<sup>®</sup> trademark and therefore shall not qualify for such a request to be granted.
23. In light of the foregoing, .ECO<sup>®</sup>, respectfully requests that you rescind every word and every paragraph mentioned in any framework, process or procedure regarding the illegal / unconstitutional Community Priority Evaluation (CPE) process, all in accordance with Module 1 Sections: 1.2.3, 1.2.3.1 and Module 4 Sections: 4.2, 4.2.1, 4.2.2, 4.2.3.
24. .ECO<sup>®</sup> also respectfully requests that the unconstitutional Module 6; section 6 also be rescinded.
25. In conclusion, .ECO<sup>®</sup>, reiterates its request that you correct the aforementioned errors and delegate .ECO Registry Operations to the only qualified applicant standing, .ECO<sup>®</sup>, all in accordance with
  - CAM 1301.6
  - Clauses: C.2.9.2d
  - C.6 Conflict of Interest Requirements
  - G.1, Contracting Officer's Authority (CAR 1352.201-70)
  - H.9, Organizational Conflict of Interest (CAR 1352.209-74)
  - H.11, Compliance with Laws (CAR 1352.209-73)
  - I.9, Contractor Code of Business Ethics and Conduct (FAR 52.203-13)

Sincerely,



Jean D. William  
CEO/Chairman  
planet.ECO LLC (".ECO") (SDB)



# Exhibits

**Exhibit 1 - August 3, 2016**

|   |
|---|
|  <p><b>New Generic Top-Level<br/>Domains</b></p>   |
| <p>Dear Jean William:</p> <p>Thank you for contacting New gTLD Customer Service. This serves as a resolution to your recent inquiry: 00228057.<br/>This case was about:</p> <p>Account: Planet Dot Eco, LLC<br/>Subject: Reminder Regarding Withdrawal/Refund<br/>Description: Dear Jean William,</p> <p>This is a courtesy notification that the prevailing .ECO applicant has entered into a Registry Agreement with ICANN (<a href="https://www.icann.org/resources/agreement/eco-2016-07-08-en">https://www.icann.org/resources/agreement/eco-2016-07-08-en</a>). As previously communicated with the results of the CPE, the status of your application for .ECO was updated to “Will Not Proceed”. If a contention set has been resolved by CPE, the applications other than the prevailing community application in the contention set are eligible for a 35% refund, except for in cases where the application in question participated in Extended Evaluation or was the subject of an Objection. Pursuant to Section 1.5.1 of the Applicant Guidebook, your application is eligible for a refund of 20%, or \$37,000, as it has completed Extended Evaluation. To be issued a refund of \$37,000, the application must be withdrawn by the Primary Contact via the ICANN Customer Portal.</p> <p>Thank you for your timely attention to this matter. If you have any questions about this message, please contact us at <a href="mailto:globalsupport@icann.org">globalsupport@icann.org</a>.</p> <p>Thank you and best regards,</p> <p>Jared Erwin<br/>New gTLD Operations<br/>If you have any questions, please contact New gTLD Customer Service via the CSC Portal at <a href="https://myicann.secure.force.com/">https://myicann.secure.force.com/</a>.<br/>This is a system-generated email. Please do not respond to this email.</p> |
| <p><b>Exhibit 2 - Email2 - August 10, 2016</b></p>  |

planet.eco

Jean William - Chairman

address: Stamford, CT 06902

email: [jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)

website: [www.planetdoteco.com](http://www.planetdoteco.com)

office: 203-517-0929

cell: 203-921-8829

because you care

----- Original Message -----

Subject: A comment has been added to case 00228057  
From: New gTLD Customer Service <[no-reply-gtld@icann.org](mailto:no-reply-gtld@icann.org)>  
Date: Wed, August 10, 2016 12:11 pm  
To: "jeanwilliam@planetdoteco.com" <[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)>



Dear Jean William:

Please note that a new case comment has been added to this case. [Click Here](#) to login to the Customer Service Portal and view the case details.

**Case Information:**

CASE NUMBER: 00228057  
ACCOUNT NAME: Planet Dot Eco, LLC  
APPLICATION ID: 1-1710-92415  
SUBJECT: Reminder Regarding Withdrawal/Refund

Kind regards,

ICANN Customer Service

Email: [newgtld@icann.org](mailto:newgtld@icann.org)

DISCLAIMER: This email is for information only and does not represent all requirements and criteria that the applicant must satisfy. ICANN is not providing legal, financial, business or any other kind of advice. This email does not represent a modification to the Applicant Guidebook, or the terms and conditions to the new gTLD program. This email also does not represent a waiver of any ICANN policy, procedure or agreement. In the event that any information provided in this email appears to be inconsistent with any information published elsewhere by ICANN, please do not rely on this email without confirmation or clarification from ICANN.

© 2014 Internet Corporation For Assigned Names and Numbers

[ICANN New gTLDs CSC Site Map](#)

### Exhibit 3 - .ECO USPTO Trademark assignment

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Assignments on the Web > [Trademark Query](#)

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**Trademark Assignment Abstract of Title**

**Total Assignments: 2**

Serial #: [77452991](#)      Filing Dt: 04/20/2008      Reg #: [3716170](#)      Reg. Dt: 11/24/2009

Registrant: Colored Planet Connexion  
Mark: .ECO

---

**Assignment: 1**

Reel/Frame: [4715/0630](#)      Received: 02/07/2012      Recorded: 01/29/2012      Pages: 2

Conveyance: ASSIGNS THE ENTIRE INTEREST

Assignor: [BOONE, MOSES](#)

Exec Dt: 01/29/2012  
Entity Type: INDIVIDUAL  
Citizenship: UNITED STATES

Assignee: [PLANET.ECO.LLC](#)

Composed of:  
COMPOSED OF JEAN WILLIAM, CEO MOSES BOONE, PRES.  
45 WEST NORTH ST  
STAMFORD, CONNECTICUT 06902

Entity Type: LIMITED LIABILITY COMPANY  
Citizenship: UNITED STATES

Correspondent: COLORED PLANET CONNEXION  
40 STIMSON RD  
NEW HAVEN, CONNECTICUT 06511

---

**Assignment: 2**

Reel/Frame: [4716/0715](#)      Received: 02/10/2012      Recorded: 01/29/2012      Pages: 2

Conveyance: ASSIGNS THE ENTIRE INTEREST

Assignor: [BOONE, MOSES](#)

Exec Dt: 01/29/2012  
Entity Type: INDIVIDUAL  
Citizenship: UNITED STATES

Assignee: [PLANET.ECO.LLC](#)

Composed of:  
COMPOSED OF JEAN WILLIAM, CEO MOSES BOONE PRES.  
45 WEST NORTH ST  
STAMFORD, CONNECTICUT 06902

Entity Type: LIMITED LIABILITY COMPANY  
Citizenship: CONNECTICUT

### Exhibit 4 - USPTO's Determination

Print: Dec 7, 2009      77452991

**DESIGN MARK**  
**Serial Number**  
77452991  
**Status**  
REGISTERED  
**Word Mark**  
.ECO  
**Standard Character Mark**  
Yes  
**Registration Number**  
3716170  
**Date Registered**  
2009/11/24  
**Type of Mark**  
SERVICE MARK  
**Register**  
PRINCIPAL  
**Mark Drawing Code**  
(4) STANDARD CHARACTER MARK  
**Owner**  
Colored Planet Connection DBA Colored Planet CORPORATION CONNECTICUT  
40 Stimson RD New Haven CONNECTICUT 06511  
**Goods/Services**  
Class Status -- ACTIVE. IC 042. US 100 101. G & S: Design, creation, hosting and maintenance of internet sites for third parties; Hosting of digital content on the Internet; Providing specific information as requested by customers via the Internet. First Use: 2008/12/02. First Use In Commerce: 2009/09/18.  
**Filing Date**  
2008/04/20  
**Examining Attorney**  
BENMAMAN, ALICE

### Exhibit 5 - Big Room USPTO filings



**United States Patent and Trademark Office**

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**TTABVue. Trademark Trial and Appeal Board Inquiry System**

## Summary

**Query:** Proceeding Status is: ALL  
**and** Party Name contains all words: BIG ROOM  
**Number of results:** 2

| Proceeding Filing Date                 | Defendant(s), Property(ies)  | Plaintiff(s), Property(ies)    |
|--|--|--------------------------------|
| <a href="#">92060403</a><br>11/20/2014 | <a href="#">planet.ECO LLC</a><br><b>Mark:</b> .ECO <b>S#:</b> <a href="#">77452991</a> <b>R#:</b> <a href="#">3716170</a> | <a href="#">Big Room, Inc.</a> |
| <a href="#">92055197</a><br>02/17/2012 | <a href="#">Planet.Eco LLC</a><br><b>Mark:</b> .ECO <b>S#:</b> <a href="#">77452991</a> <b>R#:</b> <a href="#">3716170</a> | <a href="#">Big Room, Inc.</a> |

Results as of 08/14/2016 11:41 AM



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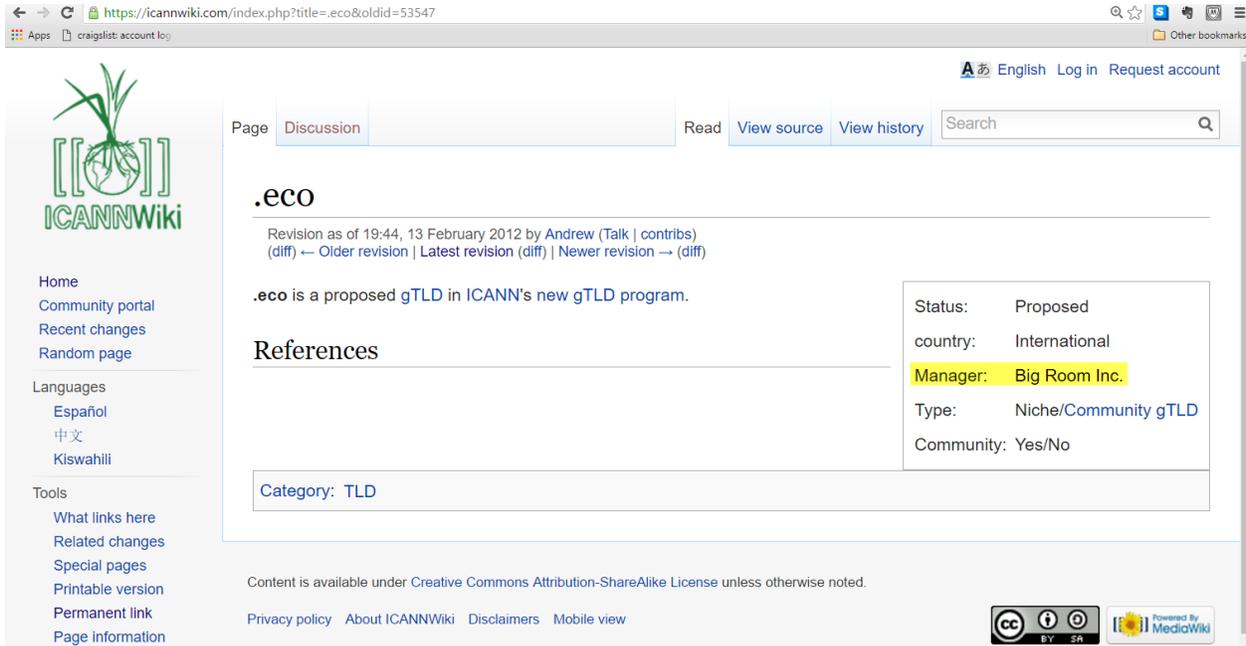
Start List At:  OR Jump to record:  **14 Records**

Refine Search  Submit

Current Search: S1: [\(big room inc\)\[OW\]](#) docs: 14 occ: 42

|    | Serial Number | Reg. Number | Word Mark          | Check Status | Live/Dead |
|----|---------------|-------------|--------------------|--------------|-----------|
| 1  | 79017737      |             | OMNI               | TSDR         | DEAD      |
| 2  | 79049189      | 3485353     | OMNIPRO            | TSDR         | DEAD      |
| 3  | 79041963      | 3480906     | OMNIGRIP           | TSDR         | DEAD      |
| 4  | 79038448      | 3454013     | ENERGIZE YOUR LIFE | TSDR         | DEAD      |
| 5  | 79042053      | 3454097     | OMNITECH           | TSDR         | DEAD      |
| 6  | 79041419      | 3454087     | OMNISELECT         | TSDR         | DEAD      |
| 7  | 79058431      | 3744837     | ITRAINER           | TSDR         | LIVE      |
| 8  | 79055479      |             | DIALTECH           | TSDR         | DEAD      |
| 9  | 78923172      |             | HUMMER             | TSDR         | DEAD      |
| 10 | 77646029      |             | .ECO               | TSDR         | DEAD      |
| 11 | 77523015      |             | .ECO               | TSDR         | DEAD      |
| 12 | 77523010      |             | DOT ECO            | TSDR         | DEAD      |
| 13 | 74695159      |             |                    | TSDR         | DEAD      |
| 14 | 74694709      |             | APPLE BAG          | TSDR         | DEAD      |

## Exhibit 6 - Malthouse Contractor's wiki Contributions



The screenshot shows a web browser window displaying the ICANN Wiki page for the '.eco' domain. The page title is '.eco'. The content includes a revision history entry from February 13, 2012, by Andrew. The main text states that '.eco' is a proposed gTLD in ICANN's new gTLD program. A metadata box on the right lists: Status: Proposed; country: International; Manager: Big Room Inc. (highlighted in yellow); Type: Niche/Community gTLD; Community: Yes/No. A category box at the bottom left indicates 'Category: TLD'. The page footer contains Creative Commons Attribution-ShareAlike license information and various utility links like 'Privacy policy' and 'About ICANNWiki'.

## Exhibit 7 - The .ECO Ploy (See Attached)

*Exhibit 8 - Email to Contracting Officer June 7, 2016*



environmentally beyond .COM

June 7, 2016

Mr. Ajayi Akinsola  
Contracting Officer  
U.S. Department of Commerce  
Commerce Acquisition Solutions Division  
Office of Acquisition Management  
1401 Constitution Avenue, NW, Room 6521  
Washington, DC 20230  
VIA EMAIL: aajayi@doc.gov

CERTIFIED MAIL

Re: Response to Contracting Officer -  
Contract # SA1301-12-CN-0035 / Applicant # 1-1710-92415

Dear Sir,

Our response to your e-mail received on May 25, 2016 is as follows:

.ECO finds it interesting that your charges and statements are not supported by the FAR, the CAM or the IANA Functions Contract. Please make available what the Contracting Officer used in the email as related to the statements and charges made.

.ECO separates your email to what it finds to be 6 statements and responds to the statements.

.ECO has always been guided by the IANA Functions Contract 0035, U.S. Laws, Rules, and Regulations and is an interested and affected party. (See IANA Functions Contract Clause C.1.3)

Below please find statements from Contracting Officer and responses from .ECO

**Statement 1:**

*I am writing to let you know that your email was received but it cannot be acted on as you are not a party to IANA Contract # SA1301-12-CN-0035.*

**Response 1:**

.ECO DISAGREES. See IANA Functions Contract Clause C.1.3.

**Statement 2:**

*You also need to cease and desist from misrepresenting yourself as a party to the aforementioned contract.*

**Response 2:**

.ECO DISAGREES. See IANA Functions Contract Clause C.1.3.

because you care

1

planet.eco  
Jean William - Chairman  
address: Stamford, CT 06902  
email: jeanwilliam@planetdoteco.com  
website: www.planetdoteco.com  
office: 203-517-0929  
cell: 203-921-8829

**Statement 3:**

*The contract is between the U.S. Department of Commerce and ICANN.*

**Response 3:**

**.ECO AGREES.**

**Statement 4:**

*You are neither a representative of ICANN nor affiliated in any way with ICANN.*

**Response 4:**

**.ECO AGREES.**

**Statement 5:**

*If you have dealings as an applicant with ICANN, you need to address those dealings directly with ICANN.*

**Response 5:**

**.ECO DISAGREES.** Please see F.5 Government Rights to Deliverables.

**Statement 6:**

*As the Contracting Officer on SA1301-12-CN-0035, there is nothing I can do for you as what you are requesting has got nothing to do with the contract as written.*

**Response 6:**

**.ECO DISAGREES.** Please see C.1.3 & F.5 Government Rights to Deliverables.

The above covers .ECO's interpretation of the contract.

In addition please see:

IANA Functions Contract 0035 Clauses C.6 and H.9  
IANA Functions Contract 0035 Clauses H.11

On several occasions .ECO has asked for information pertaining to the contracting officer.

.ECO now make the same request again for:

- The requisite Warrant and Letter of Appointment
- Resume
- Education level
- Documented procurement training
- Documented procurement experience
- Most Recent Performance Rating
- Documented Level of Authority per contract
- Current Conflict of Interest Disclosure
- Documented Waivers if applicable

- Copies of all Contract Descriptions

The request is guided by FAR 1.602

In light of the foregoing, .ECO respectfully request that the wrongful and illegal charges made by the Contracting Officer be rescinded, correct all that has been injurious and continues to cause irreparable harm to .ECO. Delegate the .ECO gTLD to .ECO immediately, allowing for its normal fields of expansion or please provide .ECO with your final decision.

Sincerely,



Jean D. William  
CEO/Chairman  
planet.ECO LLC (" .ECO") (SDB)

## Exhibits

Exhibit 1 - May 25, 2016

Good morning Mr. William,

I am writing to let you know that your email was received but it cannot be acted on as you are not a party to IANA Contract # SA1301-12-CN-0035. You also need to cease and desist from misrepresenting yourself as a party to the aforementioned contract. The contract is between the U.S. Department of Commerce and ICANN. You are neither a representative of ICANN nor affiliated in any way with ICANN. If you have dealings as an applicant with ICANN, you need to address those dealings directly with ICANN.

As the Contracting Officer on SA1301-12-CN-0035, there is nothing I can do for you as what you are requesting has got nothing to do with the contract as written.

Regards,

Akinsola "AJ" Ajayi  
Acting Director, Commerce Acquisition Solutions & Senior Bureau Procurement Official  
Office of the Secretary  
U. S. Department of Commerce  
1401 Constitution Ave., N.W., Suite 6521  
Washington, DC 20230  
Office: 202-482-2810  
Email: aajayi@doc.gov

because you care

3

planet.eco  
Jean William - Chairman  
address: Stamford, CT 06902  
email: jeanwilliam@planetdoteco.com  
website: www.planetdoteco.com  
office: 203-517-0929  
cell: 203-921-8829

planet.eco  
Jean William - Chairman  
address: Stamford, CT 06902  
email: jeanwilliam@planetdoteco.com  
website: www.planetdoteco.com  
office: 203-517-0929  
cell: 203-921-8829

**Exhibit 9 COI Letter to SBA Ombudsman 6\_5\_2014 (See Attached)**

**1.602-2 Responsibilities.**

Contracting officers are responsible for ensuring performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract, and safeguarding the interests of the United States in its contractual relationships. In order to perform these responsibilities, contracting officers should be allowed wide latitude to exercise business judgment. Contracting officers shall—

(a) Ensure that the requirements of 1.602-1(b) have been met, and that sufficient funds are available for obligation;

(b) Ensure that contractors receive impartial, fair, and equitable treatment; and

(c) Request and consider the advice of specialists in audit, law, engineering, information security, transportation, and other fields, as appropriate.

[48 FR 42103, Sept. 19, 1983, as amended at 70 FR 57451, Sept. 30, 2005]

**1.602-3 Ratification of unauthorized commitments.***(a) Definitions.*

*Ratification*, as used in this subsection, means the act of approving an unauthorized commitment by an official who has the authority to do so.

*Unauthorized commitment*, as used in this subsection, means an agreement that is not binding solely because the Government representative who made it lacked the authority to enter into that agreement on behalf of the Government.

(b) *Policy.* (1) Agencies should take positive action to preclude, to the maximum extent possible, the need for ratification actions. Although procedures are provided in this section for use in those cases where the ratification of an unauthorized commitment is necessary, these procedures may not be used in a manner that encourages such commitments being made by Government personnel.

(2) Subject to the limitations in paragraph (c) of this subsection, the head of the contracting activity, unless a higher level official is designated by the agency, may ratify an unauthorized commitment.

(3) The ratification authority in subparagraph (b)(2) of this subsection may

be delegated in accordance with agency procedures, but in no case shall the authority be delegated below the level of chief of the contracting office.

(4) Agencies should process unauthorized commitments using the ratification authority of this subsection instead of referring such actions to the Government Accountability Office for resolution. (See 1.602-3(d).)

(5) Unauthorized commitments that would involve claims subject to resolution under the Contract Disputes Act of 1978 should be processed in accordance with subpart 33.2, Disputes and Appeals.

(c) *Limitations.* The authority in subparagraph (b)(2) of this subsection may be exercised only when—

(1) Supplies or services have been provided to and accepted by the Government, or the Government otherwise has obtained or will obtain a benefit resulting from performance of the unauthorized commitment;

(2) The ratifying official has the authority to enter into a contractual commitment;

(3) The resulting contract would otherwise have been proper if made by an appropriate contracting officer;

(4) The contracting officer reviewing the unauthorized commitment determines the price to be fair and reasonable;

(5) The contracting officer recommends payment and legal counsel concurs in the recommendation, unless agency procedures expressly do not require such concurrence;

(6) Funds are available and were available at the time the unauthorized commitment was made; and

(7) The ratification is in accordance with any other limitations prescribed under agency procedures.

(d) *Nonratifiable commitments.* Cases that are not ratifiable under this subsection may be subject to resolution as recommended by the Government Accountability Office under its claim procedure (GAO Policy and Procedures Manual for Guidance of Federal Agencies, Title 4, Chapter 2), or as authorized by FAR Subpart 50.1. Legal advice should be obtained in these cases.

[53 FR 3689, Feb. 8, 1988, as amended at 60 FR 48225, Sept. 18, 1995; 71 FR 57380, Sept. 28, 2006, 72 FR 63029, Nov. 7, 2007]

|   |   |  |  |   |              |  |         |
|---|---|--|--|---|--------------|--|---------|
| <b>AWARD/CONTRACT</b>   |   | 1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) <span style="float: right;">▶</span>                       | RATING   | PAGE OF PAGES<br>1   65   |              |  |         |
| 2. CONTRACT (Proc. Inst. Ident.) NO.<br>SA1301-12-CN-0035   |   | 3. EFFECTIVE DATE<br>10/01/2012  | 4. REQUISITION/PURCHASE REQUEST/PROJECT NO.<br>AA-OAM-??-7-12-00934              |   |              |  |         |
| 5. ISSUED BY  |   | CODE 000SA   | 6. ADMINISTERED BY (if other than Item 5)  |   | CODE 000SA   |  |         |
| U.S. DEPARTMENT OF COMMERCE<br>14TH & CONSTITUTION AVE. NW<br>ACQUISITION SERVICES- ROOM 6520<br>WASHINGTON DC 20230  |   | U.S. DEPARTMENT OF COMMERCE<br>14TH & CONSTITUTION AVE. NW<br>ACQUISITION SERVICES- ROOM 6520<br>WASHINGTON DC 20230 |  |   |              |  |         |
| 7. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and Zip Code)  |   |  |  | 8. DELIVERY   |              |  |         |
| INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS<br>4676 ADMIRALTY WAY, SUITE #330<br>MARINA DEL REY CA 902926648<br>Vendor ID: 00000428<br>DUNS: 045511487<br>Cage Code: 4A4S9<br>CEC:  |   |  |  | <input type="checkbox"/> FOB ORIGIN <input type="checkbox"/> OTHER (See below)                    |              |  |         |
|   |   |  |  | 9. DISCOUNT FOR PROMPT PAYMENT  |              |  |         |
|   |   |  |  | NET 30  |              |  |         |
| 11. SHIP TO/MARK FOR  |   |  |  | 12. PAYMENT WILL BE MADE BY   |              |  |         |
| NATIONAL TEL. AND INFO. ADMIN<br>1401 CONSTITUTION AVE. NW<br>ROOM 4888, HCHB   |   | CODE NTIA-HCH  | NIST ACCOUNTS PAYABLE OFFICE<br>BLDG 101, ROOM A-836 MS 1621<br>100 BUREAU DRIVE |   | CODE NISTFSG |  |         |
| 13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION.   |   |  |  | 14. ACCOUNTING AND APPROPRIATION DATA   |              |  |         |
| <input type="checkbox"/> 10 U.S.C. 2304(c) <input type="checkbox"/> 41 U.S.C. 253(c)  |   |  |  |   |              |  |         |
| 15A. ITEM NO.   | 15B. SUPPLIES/SERVICES                      | 15C. QUANTITY  | 15D. UNIT  | 15E. UNIT PRICE   | 15F. AMOUNT  |  |         |
|   | Please See Continuation Page for Line Items |  |  |   |              |  |         |
| 15G. TOTAL AMOUNT OF CONTRACT ▶   |   |  |  |   | \$ 0.00      |  |         |
| 16. TABLE OF CONTENTS   |   |  |  |   |              |  |         |
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| CONTRACTING OFFICER WILL COMPLETE ITEM 17 (SEALED-BID OR NEGOTIATED PROCUREMENT) OR 18 (SEALED-BID PROCUREMENT) AS APPLICABLE   |   |  |  |   |              |  |         |
| 17. <input checked="" type="checkbox"/> CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 1 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.) |   |  |  | 18. <input type="checkbox"/> SEALED-BID AWARD (Contractor is not required to sign this document.) |              |  |         |
| 15A. NAME AND TITLE OF SIGNER (Type or Print)<br>ROD A. BECKSTROM<br>PRESIDENT & CEO, ICANN   |   |  |  | 20A. NAME OF CONTRACTING OFFICER<br>KATHLEEN M. MCGRATH   |              |  |         |
| 19B. NAME OF CONTRACTOR<br>BY <i>Rod Beckstrom</i><br>(Signature of person authorized to sign)  |   |  |  | 19C. DATE SIGNED<br>JULY 29, 2012   |              | 20B. UNITED STATES OF AMERICA<br>BY <i>Kathleen M. McGrath</i><br>(Signature of Contracting Officer) |         |
|   |   |  |  |   |              | 20C. DATE SIGNED<br>JUL 02, 2012   |         |

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Prescribed by GSA - FAR (48 CFR) 53.214(e)

**SCHEDULE Continued**

| ITEM NO. | SUPPLIES/SERVICES   | QUANTITY | UNIT | UNIT PRICE \$ | AMOUNT \$   |
|----------|---|----------|------|---------------|-------------|
|          | <p>Contracting Officer: Mona-Lisa Dunn, 202-482-1470</p> <p>Primary Contracting Officer Representative: Vernita D. Harris, 202-482-4686, vharris@NTIA.doc.gov</p> <p>Alternate Contracting Officer Representative(s):</p> <p>Technical Point of Contact: Vernita D. Harris, 202-482-4686, vharris@NTIA.doc.gov</p> <p>The Contractor shall provide the services in accordance with the terms, conditions, and prices described herein.</p> <p>The Contractor's proposal dated May 31, 2012 and as amended through agreed terms and conditions dated June 23, 2012 and June 26, 2012 are hereby incorporated by reference.</p> |          |      |               |             |
| 0001     | <p>BASE YEAR - October 1, 2012 - September 30, 2015. The Contractor shall provide the services necessary for the operation of the Internet Assigned Numbers Authority (IANA) in accordance with the attached Statement of Work. The Contractor may not charge the United States Government for performance of the requirements of this contract.</p> <p>Period of Performance: 10/01/2012 to 09/30/2015</p>   | 0.00     | EA   | 0.00          | 0.00        |
| 0002     | <p>OPTION YEAR 1 - October 1, 2015 - September 30, 2017. The Contractor shall provide the services necessary for the operation of the Internet Assigned Numbers Authority (IANA) in accordance with the attached Statement of Work. The Contractor may not charge the United States Government for performance of the requirements of this contract.</p> <p>Accounting and Appropriation Data:<br/>61.12.1200012.100.0012.010102000.<br/>0400000000000000.25970000.000000<br/>\$0.00</p> <p>Period of Performance: 10/01/2015 to 09/30/2017<br/>Pricing Option: Time and Material</p>   | 1.00     | JB   | 0.00          | OPT<br>0.00 |
| 0003     | <p>OPTION YEAR 2 - October 1, 2017 - September 30, 2019. The Contractor shall provide the services necessary for the operation of the Internet Assigned Numbers Authority (IANA) in accordance with the attached Statement of Work. The Contractor may not charge the United States Government for performance of the requirements of this contract.</p> <p>Accounting and Appropriation Data:<br/>61.12.1200012.100.0012.010102000.<br/>0400000000000000.25970000.000000<br/>\$0.00</p> <p>Period of Performance: 10/01/2017 to 09/30/2019<br/>Pricing Option: Time and Material</p>   | 1.00     | JB   | 0.00          | OPT<br>0.00 |

### **SECTION B SUPPLIES OR SERVICES AND PRICES/COSTS**

This is a no cost, \$0.00 time and material contract.

#### **B.2 COST/PRICE**

The Contractor may not charge the United States Government to perform the requirements of this Contract. The Contractor may establish and collect fees from third parties provided the fee levels are approved by the Contracting Officer and are fair and reasonable. If fees are charged, the Contractor shall base any proposed fee structure on the cost of providing the specific service for which the fee is charged and the resources necessary to monitor the fee driven requirements. The Contractor may propose an interim fee for the first year of the contract, which will expire one year after the contract award. If the Contractor intends to establish and collect fees from third parties beyond the first year of the Contract, the Contractor must collaborate with the interested and affected parties as enumerated in Section C.1.3 to develop a proposed fee structure based on a methodology that tracks the actual costs incurred for each discrete IANA function. The Contractor must submit a copy of proposed fee structure, tracking methodology and description of the collaboration efforts and process to the Contracting Officer.

#### **B.3 PRE-AWARD SURVEY – FAR 9.106 and 9.106-4(a)**

At the discretion of the Contracting Officer, a site visit to the Offeror's facility (ies) may also be requested and conducted by the Department of Commerce (Commerce) or its designee. The purpose of this visit will be to gather information relevant to the Offeror's responsibility and prospective capability to perform the requirements under any contract that may be awarded. The Contracting Officer will arrange such a visit at least seven (7) days in advance with the Offeror.

## **SECTION C – DESCRIPTION / SPECS / WORK STATEMENT**

### **STATEMENT OF WORK/SPECIFICATIONS**

The Contractor shall furnish the necessary personnel, materials, equipment, services and Facilities (except as otherwise specified) to perform the following Statement Work/Specifications.

#### **C.1 BACKGROUND**

**C.1.1** The U.S. Department of Commerce (DoC), National Telecommunications and Information Administration (NTIA) has initiated this contract to maintain the continuity and stability of services related to certain interdependent Internet technical management functions, known collectively as the Internet Assigned Numbers Authority (IANA).

**C.1.2** Initially, these interdependent technical functions were performed on behalf of the Government under a contract between the Defense Advanced Research Projects Agency (DARPA) and the University of Southern California (USC), as part of a research project known as the Tera-node Network Technology (TNT). As the TNT project neared completion and the DARPA/USC contract neared expiration in 1999, the Government recognized the need for the continued performance of the IANA functions as vital to the stability and correct functioning of the Internet.

**C.1.3** The Contractor, in the performance of its duties, must have or develop a close constructive working relationship with all interested and affected parties to ensure quality and satisfactory performance of the IANA functions. The interested and affected parties include, but are not limited to, the multi-stakeholder, private sector led, bottom-up policy development model for the domain name system (DNS) that the Internet Corporation for Assigned Names and Numbers (ICANN) represents; the Internet Engineering Task Force (IETF) and the Internet Architecture Board (IAB); Regional Internet Registries (RIRs); top-level domain (TLD) operators/managers (e.g., country codes and generic); governments; and the Internet user community.

**C.1.4** The Government acknowledges that data submitted by applicants in connection with the IANA functions may be confidential information. To the extent required by law, the Government shall accord any confidential data submitted by applicants in connection with the IANA functions with the same degree of care as it uses to protect its own confidential information, but not less than reasonable care, to prevent the unauthorized use, disclosure, or publication of confidential information. In providing data that is subject to such a confidentiality obligation to the Government, the Contractor shall advise the Government of that obligation.

## **C.2 CONTRACTOR REQUIREMENTS**

**C.2.1** The Contractor must perform the required services for this contract as a prime Contractor, not as an agent or subcontractor. The Contractor shall not enter into any subcontracts for the performance of the services, or assign or transfer any of its rights or obligations under this Contract, without the Government's prior written consent and any attempt to do so shall be void and without further effect. The Contractor shall be a) a wholly U.S. owned and operated firm or fully accredited United States University or College operating in one of the 50 states of the United States or District of Columbia; b) incorporated within one of the fifty (50) states of the United States or District of Columbia; and c) organized under the laws of a state of the United States or District of Columbia. The Contractor shall perform the primary IANA functions of the Contract in the United States and possess and maintain, throughout the performance of this Contract, a physical address within the United States. The Contractor must be able to demonstrate that all primary operations and systems will remain within the United States (including the District of Columbia). The Government reserves the right to inspect the premises, systems, and processes of all security and operational components used for the performance of all Contract requirements and obligations.

**C.2.2** The Contractor shall furnish the necessary personnel, material, equipment, services, and facilities, to perform the following requirements without any cost to the Government. The Contractor shall conduct due diligence in hiring, including full background checks.

**C.2.3** The Contractor may not charge the United States Government for performance of the requirements of this contract. The Contractor may establish and collect fees from third parties provided the fee levels are approved by the Contracting Officer (CO) and are fair and reasonable. If fees are charged, the Contractor shall base any proposed fee structure on the cost of providing the specific service for which the fee is charged. The Contractor may propose an interim fee for the first year of the contract, which will expire one year after the contract award. The documentation must be based upon the anticipated cost for providing the specific service for which the fee is charged, including start up costs, if any, equipment, personnel, software, etc. If the Contractor intends to establish and collect fees from third parties beyond the first year of the contract, the Contractor must collaborate with the interested and affected parties as enumerated in Section C.1.3 to develop a proposed fee structure based on a methodology that tracks the actual costs incurred for each discrete IANA function enumerated and described in C.2.9. The Contractor must submit a copy of any proposed fee structure including tracking methodology and description of the collaboration and process efforts for fees being proposed after the first year contract award to the Contracting Officer. The performance exclusion C.8.3 shall apply to any fee proposed.

**C.2.4** The Contractor is required to perform the IANA functions, which are critical for the operation of the Internet's core infrastructure, in a stable and secure manner. The IANA functions are administrative and technical in nature based on established policies developed by

interested and affected parties, as enumerated in Section C.1.3. The Contractor shall treat each of the IANA functions with equal priority and process all requests promptly and efficiently.

**C.2.5 Separation of Policy Development and Operational Roles** -- The Contractor shall ensure that designated IANA functions staff members will not initiate, advance, or advocate any policy development related to the IANA functions. The Contractor's staff may respond to requests for information requested by interested and affected parties as enumerated in Section C.1.3 to inform ongoing policy discussions and may request guidance or clarification as necessary for the performance of the IANA functions.

**C.2.6 Transparency and Accountability** -- Within six (6) months of award, the Contractor shall, in collaboration with all interested and affected parties as enumerated in Section C.1.3, develop user instructions including technical requirements for each corresponding IANA function and post via a website.

**C.2.7 Responsibility and Respect for Stakeholders** -- Within six (6) months of award, the Contractor shall, in collaboration with all interested and affected parties as enumerated in Section C.1.3, develop for each of the IANA functions a process for documenting the source of the policies and procedures and how it will apply the relevant policies and procedures for the corresponding IANA function and post via a website.

**C.2.8 Performance Standards** -- Within six (6) months of award, the Contractor shall develop performance standards, in collaboration with all interested and affected parties as enumerated in Section C.1.3, for each of the IANA functions as set forth at C.2.9 to C.2.9.4 and post via a website.

**C.2.9 Internet Assigned Numbers Authority (IANA) Functions** -- include (1) the coordination of the assignment of technical Internet protocol parameters; (2) the administration of certain responsibilities associated with the Internet DNS root zone management; (3) the allocation of Internet numbering resources; and (4) other services related to the management of the ARPA and INT top-level domains (TLDs).

**C.2.9.1 Coordinate The Assignment Of Technical Protocol Parameters including the management of the Address and Routing Parameter Area (ARPA) TLD** -- The Contractor shall review and assign unique values to various parameters (*e.g.*, operation codes, port numbers, object identifiers, protocol numbers) used in various Internet protocols based on established guidelines and policies as developed by interested and affected parties as enumerated in Section C.1.3. The Contractor shall disseminate the listings of assigned parameters through various means (including on-line publication via a website) and shall review technical documents for consistency with assigned values. The Contractor shall operate the ARPA TLD within the current registration policies for this TLD, as documented in RFC 3172-Management Guidelines & Operational Requirements for the Address and Routing Parameter Area Domain,

and any further clarification of this RFC. The Contractor shall also implement DNSSEC in the ARPA TLD.

**C.2.9.2 Perform Administrative Functions Associated With Root Zone Management** -- The Contractor shall facilitate and coordinate the root zone of the domain name system, and maintain 24 hour-a-day/7 days-a-week operational coverage. The process flow for root zone management involves three roles that are performed by three different entities through two separate legal agreements: the Contractor as the IANA Functions Operator, NTIA as the Administrator, and VeriSign (or any successor entity as designated by the U.S. Department of Commerce) as articulated in Cooperative Agreement Amendment 11, as the Root Zone Maintainer. The Requirements are detailed at Appendix 1 entitled Authoritative Root Zone Management Process that is incorporated by reference herein as if fully set forth. The Contractor shall work collaboratively with NTIA and the Root Zone Maintainer, in the performance of this function.

**C.2.9.2.a Root Zone File Change Request Management** -- The Contractor shall receive and process root zone file change requests for TLDs. These change requests include addition of new or updates to existing TLD name servers (NS) and delegation signer (DS) resource record (RR) information along with associated 'glue' (A and AAAA RRs). A change request may also include new TLD entries to the root zone file. The Contractor shall process root zone file changes as expeditiously as possible.

**C.2.9.2.b Root Zone "WHOIS" Change Request and Database Management** -- The Contractor shall maintain, update, and make publicly accessible a Root Zone "WHOIS" database with current and verified contact information for all TLD registry operators. The Root Zone "WHOIS" database, at a minimum, shall consist of the TLD name; the IP address of the primary nameserver and secondary nameserver for the TLD; the corresponding names of such nameservers; the creation date of the TLD; the name, postal address, email address, and telephone and fax numbers of the TLD registry operator; the name, postal address, email address, and telephone and fax numbers of the technical contact for the TLD registry operator; and the name, postal address, email address, and telephone and fax numbers of the administrative contact for the TLD registry operator; reports; and date record last updated; and any other information relevant to the TLD requested by the TLD registry operator. The Contractor shall receive and process root zone "WHOIS" change requests for TLDs.

**C.2.9.2.c Delegation and Redelegation of a Country Code Top Level-Domain (ccTLD)** --The Contractor shall apply existing policy frameworks in processing requests related to the delegation and redelegation of a ccTLD, such as RFC 1591 Domain Name System Structure and Delegation, the Governmental Advisory Committee (GAC) Principles And Guidelines For The Delegation And Administration Of Country Code Top Level Domains, and any further clarification of these policies by interested and affected parties as enumerated in Section C.1.3. If a policy framework does not exist to cover a specific instance, the Contractor will consult with the interested and affected parties, as enumerated in Section C.1.3; relevant public authorities;

and governments on any recommendation that is not within or consistent with an existing policy framework. In making its recommendations, the Contractor shall also take into account the relevant national frameworks and applicable laws of the jurisdiction that the TLD registry serves. The Contractor shall submit its recommendations to the COR via a Delegation and Redelegation Report.

**C.2.9.2d Delegation and Redelegation of a Generic Top Level Domain (gTLD)** -- The Contractor shall verify that all requests related to the delegation and redelegation of gTLDs are consistent with the procedures developed by ICANN. In making a delegation or redelegation recommendation, the Contractor must provide documentation verifying that ICANN followed its own policy framework including specific documentation demonstrating how the process provided the opportunity for input from relevant stakeholders and was supportive of the global public interest. The Contractor shall submit its recommendations to the COR via a Delegation and Redelegation Report.

**C.2.9.2.e Root Zone Automation** -- The Contractor shall work with NTIA and the Root Zone Maintainer, and collaborate with all interested and affected parties as enumerated in Section C.1.3, to deploy a fully automated root zone management system within nine (9) months after date of contract award. The fully automated system must, at a minimum, include a secure (encrypted) system for customer communications; an automated provisioning protocol allowing customers to manage their interactions with the root zone management system; an online database of change requests and subsequent actions whereby each customer can see a record of their historic requests and maintain visibility into the progress of their current requests; and a test system, which customers can use to meet the technical requirements for a change request ; an internal interface for secure communications between the IANA Functions Operator; the Administrator, and the Root Zone Maintainer.

**C.2.9.2.f Root Domain Name System Security Extensions (DNSSEC) Key Management** --The Contractor shall be responsible for the management of the root zone Key Signing Key (KSK), including generation, publication, and use for signing the Root Keyset. As delineated in the Requirements at Appendix 2 entitled Baseline Requirements for DNSSEC in the Authoritative Root Zone that is incorporated by reference herein as if fully set forth. The Contractor shall work collaboratively with NTIA and the Root Zone Maintainer, in the performance of this function.

**C.2.9.2.g Customer Service Complaint Resolution Process (CSCR)** --The Contractor shall work with NTIA and collaborate with all interested and affected parties as enumerated in Section C.1.3 to establish and implement within six (6) months after date of contract award a process for IANA function customers to submit complaints for timely resolution that follows industry best practice and includes a reasonable timeframe for resolution.

**C.2.9.3 Allocate Internet Numbering Resources** --The Contractor shall have responsibility for allocated and unallocated IPv4 and IPv6 address space and Autonomous System Number (ASN)

space based on established guidelines and policies as developed by interested and affected parties as enumerated in Section C.1.3. The Contractor shall delegate IP address blocks to Regional Internet Registries for routine allocation typically through downstream providers to Internet end-users within the regions served by those registries. The Contractor shall also reserve and direct allocation of space for special purposes, such as multicast addressing, addresses for private networks as described in RFC 1918-Address Allocation for Private Internets, and globally specified applications.

**C.2.9.4 Other services** -- The Contractor shall operate the INT TLD within the current registration policies for the TLD. Upon designation of a successor registry by the Government, if any, the Contractor shall cooperate with NTIA to facilitate the smooth transition of operation of the INT TLD. Such cooperation shall, at a minimum, include timely transfer to the successor registry of the then-current top-level domain registration data. The Contractor shall also implement modifications in performance of the IANA functions as needed upon mutual agreement of the parties.

**C.2.10** The performance of the IANA functions as articulated in Section C.2 Contractor Requirements shall be in compliance with the performance exclusions enumerated in Section C. 8.

**C.2.11** The Contracting Officer's Representative(COR) will perform final inspection and acceptance of all deliverables and reports articulated in Section C.2 Contractor Requirements. *Prior to publication/posting of reports the Contractor shall obtain approval from the COR.* The COR shall not unreasonably withhold approval.

**C.2.12.a Program Manager.** The contractor shall provide trained, knowledgeable technical personnel according to the requirements of this contract. All contractor personnel who interface with the CO and COR must have excellent oral and written communication skills. "Excellent oral and written communication skills" is defined as the capability to converse fluently, communicate effectively, and write intelligibly in the English language. The IANA Functions Program Manager organizes, plans, directs, staffs, and coordinates the overall program effort; manages contract and subcontract activities as the authorized interface with the CO and COR and ensures compliance with Federal rules and regulations and responsible for the following:

- Shall be responsible for the overall contract performance and shall not serve in any other capacity under this contract.
- Shall have demonstrated communications skills with all levels of management.
- Shall meet and confer with COR and CO regarding the status of specific contractor activities and problems, issues, or conflicts requiring resolution.
- Shall be capable of negotiating and making binding decisions for the company.
- Shall have extensive experience and proven expertise in managing similar multi-task contracts of this type and complexity.

- Shall have extensive experience supervising personnel.
- Shall have a thorough understanding and knowledge of the principles and methodologies associated with program management and contract management.

**C.2.12.b** The Contractor shall assign to this contract the following key personnel: IANA Functions Program Manager (C.2.9); IANA Function Liaison for Technical Protocol Parameters Assignment (C.2.9.1); IANA Function Liaison for Root Zone Management (C.2.9.2); IANA Function Liaison for Internet Number Resource Allocation (C.2.9.3).

### **C.3 SECURITY REQUIREMENTS**

**C.3.1 Secure Systems** -- The Contractor shall install and operate all computing and communications systems in accordance with best business and security practices. The Contractor shall implement a secure system for authenticated communications between it and its customers when carrying out all IANA function requirements. The Contractor shall document practices and configuration of all systems.

**C.3.2 Secure Systems Notification** -- The Contractor shall implement and thereafter operate and maintain a secure notification system at a minimum, capable of notifying all relevant stakeholders of the discrete IANA functions, of such events as outages, planned maintenance, and new developments. In all cases, the Contractor shall notify the COR of any outages.

**C.3.3 Secure Data** -- The Contractor shall ensure the authentication, integrity, and reliability of the data in performing each of the IANA functions.

**C.3.4 Security Plan** --The Contractor shall develop and execute a Security Plan that meets the requirements of this contract and Section C.3. The Contractor shall document in the security plan the process used to ensure information systems including hardware, software, applications, and general support systems have effective security safeguards, which have been implemented, planned for, and documented. The Contractor shall deliver the plan to the COR after each annual update.

**C.3.5 Director of Security** -- The Contractor shall designate a Director of Security who shall be responsible for ensuring technical and physical security measures, such as personnel access controls. The Contractor shall notify and consult in advance the COR when there are personnel changes in this position. The Director of Security shall be one of the key personnel assigned to this contract.

### **C.4 PERFORMANCE METRIC REQUIREMENTS**

**C.4.1 Meetings** -- Program reviews and site visits shall occur annually.

**C.4.2 Monthly Performance Progress Report** -- The Contractor shall prepare and submit to the COR a performance progress report every month (no later than 15 calendar days following the end of each month) that contains statistical and narrative information on the performance of the IANA functions (*i.e.*, assignment of technical protocol parameters; administrative functions associated with root zone management; and allocation of Internet numbering resources) during the previous calendar month. The report shall include a narrative summary of the work performed for each of the functions with appropriate details and particularity. The report shall also describe major events, problems encountered, and any projected significant changes, if any, related to the performance of requirements set forth in C.2.9 to C.2.9.4.

**C.4.3 Root Zone Management Dashboard** -- The Contractor shall work collaboratively with NTIA and the Root Zone Maintainer, and all interested and affected parties as enumerated in Section C.1.3, to develop and make publicly available via a website, a dashboard to track the process flow for root zone management within nine (9) months after date of contract award.

**C.4.4 Performance Standards Reports** -- The Contractor shall develop and publish reports for each discrete IANA function consistent with Section C.2.8. The Performance Standards Metric Reports will be published via a website every month (no later than 15 calendar days following the end of each month) starting no later than six (6) months after date of contract award.

**C.4.5 Customer Service Survey (CSS)** --The Contractor shall collaborate with NTIA to develop and conduct an annual customer service survey consistent with the performance standards for each of the discrete IANA functions. The survey shall include a feedback section for each discrete IANA function. No later than 30 days after conducting the survey, the Contractor shall submit the CSS Report to the COR.

**C.4.6 Final Report** -- The Contractor shall prepare and submit a final report on the performance of the IANA functions that documents standard operating procedures, including a description of the techniques, methods, software, and tools employed in the performance of the IANA functions. The Contractor shall submit the report to the CO and the COR no later than 30 days after expiration of the contract.

**C.4.7 Inspection and Acceptance** -- The COR will perform final inspection and acceptance of all deliverables and reports articulated in Section C.4. *Prior to publication/posting of reports, the Contractor shall obtain approval from the COR.* The COR shall not unreasonably withhold approval.

## **C.5 AUDIT REQUIREMENTS**

**C.5.1 Audit Data** -- The Contractor shall generate and retain security process audit record data for one year and provide an annual audit report to the CO and the COR. All root zone management operations shall be included in the audit, and records on change requests to the root zone file. The Contractor shall retain these records in accordance with the clause at

52.215-2. The Contractor shall provide specific audit record data to the CO and COR upon request.

**C.5.2 Root Zone Management Audit Data** -- The Contractor shall generate and publish via a website a monthly audit report based on information in the performance of *Provision C.9.2(a-g) Perform Administrative Functions Associated With Root Zone Management*. The audit report shall identify each root zone file and root zone "WHOIS" database change request and the relevant policy under which the change was made as well as identify change rejections and the relevant policy under which the change request was rejected. The Report shall start no later than nine (9) months after date of contract award and thereafter is due to the COR no later than 15 calendar days following the end of each month.

**C.5.3 External Auditor** - - The Contractor shall have an external, independent, specialized compliance audit which shall be conducted annually and it shall be an audit of all the IANA functions security provisions against existing best practices and Section C.3 of this contract.

**C.5.4 Inspection and Acceptance** -- The COR will perform final inspection and acceptance of all deliverables and reports articulated in Section C.5. *Prior to publication/posting of reports, the Contractor shall obtain approval from the COR.* The COR shall not unreasonably withhold approval.

## **C. 6 CONFLICT OF INTEREST REQUIREMENTS**

**C.6.1** The Contractor shall take measures to avoid any activity or situation that could compromise, or give the appearance of compromising, the impartial and objective performance of the contract (e.g., a person has a conflict of interest if the person directly or indirectly appears to benefit from the performance of the contract). The Contractor shall maintain a written, enforced conflict of interest policy that defines what constitutes a potential or actual conflict of interest for the Contractor. At a minimum, this policy must address conflicts based on personal relationships or bias, financial conflicts of interest, possible direct or indirect financial gain from Contractor's policy decisions and employment and post-employment activities. The conflict of interest policy must include appropriate sanctions in case of non-compliance, including suspension, dismissal and other penalties.

**C.6.2** The Contractor shall designate a senior staff member to serve as a Conflict of Interest Officer who shall be responsible for ensuring the Contractor is in compliance with the Contractor's internal and external conflict of interest rules and procedures. The Conflict of Interest Officer shall be one of the key personnel assigned to this contract.

**C.6.2.1** The Conflict of Interest Officer shall be responsible for distributing the Contractor's conflict of interest policy to all employees, directors, and subcontractors upon their election, re-election or appointment and annually thereafter.

**C.6.2.2** The Conflict of Interest Officer shall be responsible for requiring that each of the Contractor's employees, directors and subcontractors complete a certification with disclosures of any known conflicts of interest upon their election, re-election or appointment, and annually thereafter.

**C.6.2.3** The Conflict of Interest Officer shall require that each of the Contractor's employees, directors, and subcontractors promptly update the certification to disclose any interest, transaction, or opportunity covered by the conflict of interest policy that arises during the annual reporting period.

**C.6.2.4** The Conflict of Interest Officer shall develop and publish subject to applicable laws and regulations, a Conflict Of Interest Enforcement and Compliance Report. The report shall describe major events, problems encountered, and any changes, if any, related to Section C.6.

**C.6.2.5** See also the clause at H.5. Organizational Conflict of Interest

## **C. 7 CONTINUITY OF OPERATIONS**

**C.7.1 Continuity of Operations (COP)** – The Contractor shall, at a minimum, maintain multiple redundant sites in at least 2, ideally 3 sites, geographically dispersed within the United States as well as multiple resilient communication paths between interested and affected parties as enumerated in Section C.1.3 to ensure continuation of the IANA functions in the event of cyber or physical attacks, emergencies, or natural disasters.

**C.7.2 Contingency and Continuity of Operations Plan (The CCOP)** – The Contractor shall collaborate with NTIA and the Root Zone Maintainer, and all interested and affected parties as enumerated in Section C.1.3, to develop and implement a CCOP for the IANA functions within nine (9) months after date of contract award. The Contractor in collaboration with NTIA and the Root Zone Maintainer shall update and test the plan annually. The CCOP shall include details on plans for continuation of each of the IANA functions in the event of cyber or physical attacks, emergencies, or natural disasters. The Contractor shall submit the CCOP to the COR after each annual update.

**C.7.3 Transition to Successor Contractor** – In the event the Government selects a successor contractor, the Contractor shall have a plan in place for transitioning each of the IANA functions to ensure an orderly transition while maintaining continuity and security of operations. The plan shall be submitted to the COR eighteen (18) months after date of contract award, reviewed annually, and updated as appropriate.

## **C.8 PERFORMANCE EXCLUSIONS**

**C.8.1** This contract does not authorize the Contractor to make modifications, additions, or deletions to the root zone file or associated information. (This contract does not alter the root

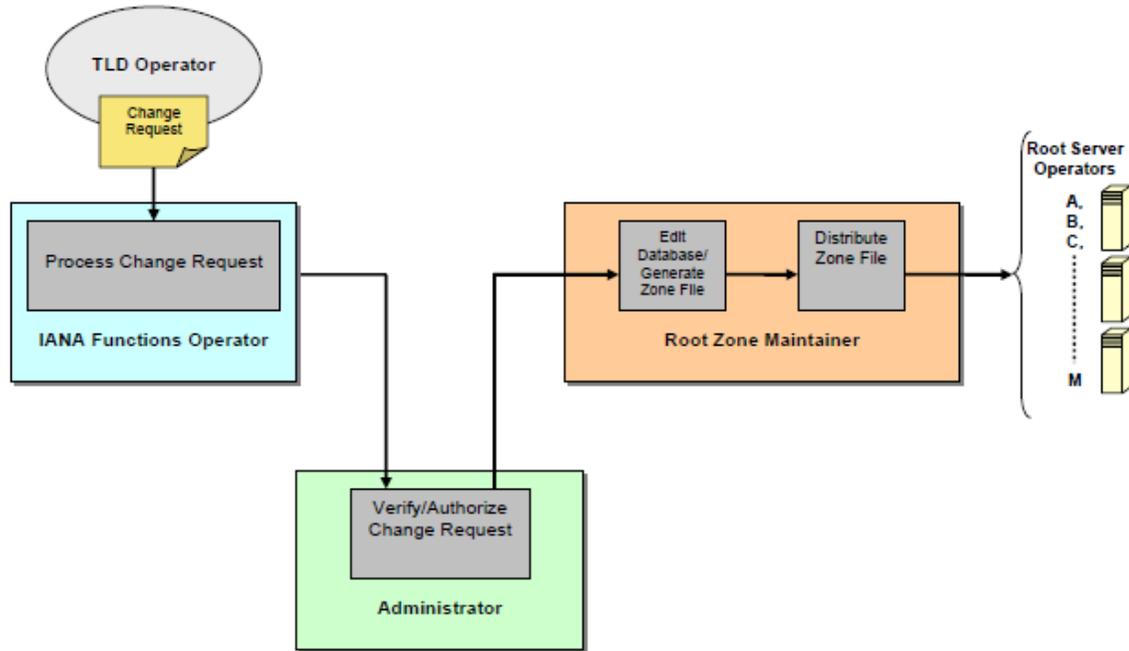
zone file responsibilities as set forth in Amendment 11 of the Cooperative Agreement NCR-9218742 between the U.S. Department of Commerce and VeriSign, Inc. or any successor entity as designated by the U.S. Department of Commerce). See Amendment 11 at [http://ntia.doc.gov/files/ntia/publications/amend11\\_052206.pdf](http://ntia.doc.gov/files/ntia/publications/amend11_052206.pdf).

**C.8.2** This contract does not authorize the Contractor to make material changes in the policies and procedures developed by the relevant entities associated with the performance of the IANA functions. The Contractor shall not change or implement the established methods associated with the performance of the IANA functions without prior approval of the CO.

**C.8.3** The performance of the functions under this contract, including the development of recommendations in connection with Section C.2.9.2, shall not be, in any manner, predicated or conditioned on the existence or entry into any contract, agreement or negotiation between the Contractor and any party requesting such changes or any other third-party. Compliance with this Section must be consistent with C.2.9.2d.

## Appendix 1: Authoritative Root Zone Management Process <sup>1</sup>

### Authoritative Root Zone Management Process (Present)



<sup>1</sup> The Root Zone management partners consist of the IANA Functions Operator (per the IANA functions contract), NTIA/Department of Commerce, and the Root Zone Maintainer (per the Cooperative Agreement with VeriSign (or any successor entity as designated by the U.S. Department of Commerce)).

## Appendix 2: Baseline Requirements for DNSSEC in the Authoritative Root Zone

DNSSEC at the authoritative Root Zone requires cooperation and collaboration between the root zone management partners and the Department.<sup>2</sup> The baseline requirements encompass the responsibilities and requirements for both the IANA Functions Operator and the Root Zone Maintainer as described and delineated below.

### General Requirements

The Root Zone system needs an overall security lifecycle, such as that described in ISO 27001, and any security policy for DNSSEC implementation must be validated against existing standards for security controls.

The remainder of this section highlights security requirements that must be considered in developing any solution. ISO 27002:2005 (formerly ISO 17799:2005) and NIST SP 800-53 are recognized sources for specific controls. Note that reference to SP 800-53 is used as a convenient means of specifying a set of technical security requirements.<sup>3</sup> It is expected that the systems referenced in this document will meet all the SP 800-53 technical security controls required by a HIGH IMPACT system.<sup>4</sup>

Whenever possible, references to NIST publications are given as a source for further information. These Special Publications (SP) and FIPS documents are not intended as a future auditing checklist, but as non-binding guidelines and recommendations to establish a viable IT security policy. Comparable security standards can be substituted where available and appropriate. All of the NIST document references can be found on the NIST Computer Security Research Center webpage (<http://www.csrc.nist.gov/>).

### 1) Security Authorization and Management Policy

- a) Each partner<sup>5</sup> in the Root Zone Signing process shall have a security policy in place; this security policy must be periodically reviewed and updated, as appropriate.

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<sup>2</sup> The Root Zone management partners consist of the IANA Functions Operator (per the IANA functions contract), NTIA/Department of Commerce, and Root Zone Maintainer (per the Cooperative Agreement with VeriSign). This document outlines requirements for both the IANA Functions Operator and Root Zone Maintainer in the operation and maintenance of DNSSEC at the authoritative root zone.

<sup>3</sup> Note in particular that the use of the requirements in SP 800-53 does not imply that these systems are subject to other Federal Information Security Management Act (FISMA) processes.

<sup>4</sup> For the purpose of identifying SP 800-53 security requirements, the Root Zone system can be considered a HIGH IMPACT system with regards to integrity and availability as defined in FIPS 199.

<sup>5</sup> For this document, the roles in the Root Zone Signing process are those associated with the Key Signing Key holder, the Zone Signing Key holder, Public Key Distributor, and others to be conducted by the IANA Functions Operator and the Root Zone Maintainer.

- i) Supplemental guidance on generating a Security Authorization Policy may be found in NIST SP 800-37.
- b) These policies shall have a contingency plan component to account for disaster recovery (both man-made and natural disasters).<sup>6</sup>
  - i) Supplemental guidance on contingency planning may be found in SP 800-34.
- c) These policies shall address Incident Response detection, handling and reporting (see 4 below).
  - i) Supplemental guidance on incident response handling may be found in NIST SP 800-61.

## **2) IT Access Control**

- a) There shall be an IT access control policy in place for each of the key management functions and it shall be enforced.
  - i) This includes both access to hardware/software components and storage media as well as ability to perform process operations.
  - ii) Supplemental guidance on access control policies may be found in NIST SP 800-12.
- b) Users without authentication shall not perform any action in key management.
- c) In the absence of a compelling operational requirement, remote access to any cryptographic component in the system (e.g. HSM) is not permitted.<sup>7</sup>

## **3) Security Training**

- a) All personnel participating in the Root Zone Signing process shall have adequate IT security training.
  - i) Supplemental guidance on establishing a security awareness training program may be found in NIST SP 800-50.

## **4) Audit and Accountability Procedures**

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<sup>6</sup> For the IANA Functions Operator, the contingency plan must be consistent with and/or included in the "Contingency and Continuity of Operations Plan" as articulated in Section C.7 of the IANA functions contract.

<sup>7</sup> Remote access is any access where a user or information system communicates through a non-organization controlled network (e.g., the Internet).

- a) The organization associated with each role shall develop, disseminate, and periodically review/update: (1) a formal, documented, audit and accountability policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance; and (2) formal, documented procedures to facilitate the implementation of the audit and accountability policy and associated audit and accountability controls.
  - i) Supplemental guidance on auditing and accountability policies may be found in NIST SP 800-12.
  - ii) Specific auditing events include the following:
    - o Generation of keys
    - o Generation of signatures
    - o Exporting of public key material
    - o Receipt and validation of public key material (i.e., from the ZSK holder or from TLDs)
    - o System configuration changes
    - o Maintenance and/or system updates
    - o Incident response handling
    - o Other events as appropriate
- b) Incident handling for physical and exceptional cyber attacks<sup>8</sup> shall include reporting to the Department's National Telecommunications and Information Administration (NTIA) in a timeframe and format as mutually agreed by the Department, IANA Functions Operator, and Root Zone Maintainer.
- c) The auditing procedures shall include monthly reporting to NTIA.<sup>9</sup>
- d) The auditing system shall be capable of producing reports on an ad-hoc basis.
- e) A version of these reports must be made publically available.

## 5) Physical Protection Requirements

- a) There shall be physical access controls in place to only allow access to hardware components and media to authorized personnel.
  - i) Supplemental guidance on token based access may be found in NIST SP 800-73 and FIPS 201.
  - ii) Supplemental guidance on token based access biometric controls may be found in

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<sup>8</sup> Non-exceptional events are to be included in monthly reporting as required in 4 c.

<sup>9</sup> For the IANA Functions Operator, audit reporting shall be incorporated into the audit report as articulated in C.5.2 of the IANA functions contract.

NIST SP 800-76.

- b) Physical access shall be monitored, logged, and registered for all users and visitors.
- c) All hardware components used to store keying material or generate signatures shall have short-term backup emergency power connections in case of site power outage. (See, SP 800-53r3)
- d) All organizations shall have appropriate protection measures in place to prevent physical damage to facilities as appropriate.

## 6) All Components

- a) All commercial off the shelf hardware and software components must have an established maintenance and update procedure in place.
  - i) Supplemental guidance on establishing an upgrading policy for an organization may be found in NIST SP 800-40.
- b) All hardware and software components provide a means to detect and protect against unauthorized modifications/updates/patching.

## Role Specific Requirements

### 7) Root Zone Key Signing Key (KSK) Holder<sup>10</sup>

The Root Zone KSK Holder (RZ KSK) is responsible for: (1) generating and protecting the private component of the RZ KSK(s); (2) securely exporting or importing any public key components, should this be required (3) authenticating and validating the public portion of the RZ Zone Signing Key (RZ ZSK); and (4) signing the Root Zone's DNSKEY record (ZSK/KSK).

#### a) Cryptographic Requirements

- i) The RZ KSK key pair shall be an RSA key pair, with a modulus of at least 2048 bits.
- ii) RSA key generation shall meet the requirements specified in FIPS 186-3.<sup>11</sup> In particular, key pair generation shall meet the FIPS 186-3 requirements for exponent size and primality testing.
- iii) The RZ KSK private key(s) shall be generated and stored on a FIPS 140-2 validated

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<sup>10</sup> The Root Zone KSK Holder is a responsibility performed by the IANA Functions Operator.

<sup>11</sup> Note that FIPS 186-3 and FIPS 140-2 are referenced as requirements in sections a and b, rather than supplemental guidance.

hardware cryptographic module (HSM)<sup>12</sup>, validated at Level 4 overall.<sup>13</sup>

- iv) RZ KSK Digital Signatures shall be generated using SHA-256.
- v) All cryptographic functions involving the private component of the KSK shall be performed within the HSM; that is, the private component shall only be exported from the HSM with the appropriate controls (FIPS 140-2) for purposes of key backup.

**b) Multi-Party Control**

At least two persons shall be required to activate or access any cryptographic module that contains the complete RZ KSK private signing key.

- i) The RZ KSK private key(s) shall be backed up and stored under at least two-person control. Backup copies shall be stored on FIPS 140-2 compliant HSM, validated at Level 4 overall, or shall be generated using m of n threshold scheme and distributed to organizationally separate parties.
- ii) Backup copies stored on HSMs shall be maintained in different physical locations<sup>14</sup>, with physical and procedural controls commensurate to that of the operational system.
- iii) In the case of threshold secret sharing, key shares shall be physically secured by each of the parties.
- iv) In all cases, the names of the parties participating in multi-person control shall be maintained on a list that shall be made available for inspection during compliance audits.

**c) Root Zone KSK Rollover**

- i) Scheduled rollover of the RZ KSK shall be performed.<sup>15</sup> (See Contingency planning for unscheduled rollover.)
- ii) RZ KSK rollover procedures shall take into consideration the potential future need for algorithm rollover.
- iii) DNSSEC users shall be able to authenticate the source and integrity of the new RZ KSK using the previously trusted RZ KSK's public key.

**d) Contingency Planning**

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<sup>12</sup> FIPS 140 defines hardware cryptographic modules, but this specification will use the more common HSM (for hardware security module) as the abbreviation.

<sup>13</sup> Note that FIPS 186-3 and FIPS 140-2 are referenced as requirements in sections a and b, rather than supplemental guidance.

<sup>14</sup> Backup locations are to be within the United States.

<sup>15</sup> The Department envisions the timeline for scheduled rollover of the RZ KSK to be jointly developed and proposed by the IANA Functions Operator and Root Zone Maintainer, based on consultation and input from the affected parties (e.g. root server operators, large-scale resolver operators, etc). Note that subsequent test plans may specify more or less frequent RZ KSK rollover to ensure adequate testing.

- i) Procedures for recovering from primary physical facility failures (e.g., fire or flood that renders the primary site inoperable) shall be designed to reconstitute capabilities within 48 hours.
- ii) Procedures for emergency rollover of the RZ KSK shall be designed to achieve key rollover and publication within 48 hours. These procedures, which are understood to address DNSSEC key provision only, should accommodate the following scenarios:
  - (1) The current RZ KSK has been compromised; and
  - (2) The current RZ KSK is unavailable, but is not believed to be compromised.

**e) DNS Record Generation/Supporting RZ ZSK rollover**

- i) The RZ KSK Holder shall authenticate the source and integrity of RZ ZSK public key material
  - (1) Mechanisms must support proof of possession and verify the parameters (i.e., the RSA exponent)
- ii) The signature on the root zone's DNSKEY record shall be generated using SHA-256.

**f) Audit Generation and Review Procedures**

- i) Designated Audit personnel may not participate in the multi-person control for the RZ ZSK or RZ KSK.
- ii) Audit logs shall be backed up offsite at least monthly.
- iii) Audit logs (whether onsite or offsite) shall be protected from modification or deletion.
- iv) Audit logs shall be made available upon request for Department review.

**8) RZ KSK Public Key Distribution**

- a) The RZ KSK public key(s) shall be distributed in a secure fashion to preclude substitution attacks.
- b) Each mechanism used to distribute the RZ KSK public key(s) shall either
  - i) Establish proof of possession of the RZ KSK private key (for public key distribution); or
  - ii) Establish proof of possession of the previous RZ KSK private key (for Root zone key rollover).

**9) RZ Zone Signing Key (RZ ZSK) Holder<sup>16</sup>**

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<sup>16</sup> The RZ ZSK holder is a function performed by the Root Zone Maintainer, NOT the IANA Functions Operator.

The Root Zone ZSK Holder (RZ ZSK) is responsible for (1) generating and protecting the private component of the RZ ZSK(s); (2) securely exporting or importing any public key components, should this be required and (3) generating and signing Zone File Data in accordance to the DNSSEC specifications.

**a) Cryptographic Requirements**

- i) The RZ ZSK key pair shall be an RSA key pair, with a modulus of at least 1024 bits.<sup>17</sup>
- ii) RSA key generation shall meet the requirements specified in FIPS 186-3.<sup>18</sup> In particular, key pair generation shall meet the FIPS 186-3 requirements for exponent size and primality testing.
- iii) RZ ZSK Digital Signatures shall be generated using SHA-256.
- iv) The RZ ZSK private key(s) shall be generated and stored on a FIPS 140-2 compliant HSM. At a minimum, the HSM shall be validated at Level 4 overall.
- v) All cryptographic functions involving the private component of the RZ ZSK shall be performed within the HSM; that is, the private component shall not be exported from the HSM except for purposes of key backup.

**b) Multi-Party Control**

- i) Activation of the RZ ZSK shall require at least two-person control. This requirement may be satisfied through a combination of physical and technical controls.
- ii) If the RZ ZSK private key(s) are backed up, they shall be backed up and stored under at least two-person control. Backup copies shall be stored on FIPS 140-2 validated HSM, validated at Level 4 overall.<sup>19</sup>
  - (1) Backup copies shall be maintained both onsite and offsite<sup>20</sup>, with physical and procedural controls commensurate to that of the operational system.
  - (2) The names of the parties participating in multi-person control shall be maintained on a list and made available for inspection during compliance audits.

**c) Contingency Planning**

- i) Procedures for recovery from failure of the operational HSM containing the RZ ZSK shall be designed to re-establish the capability to sign the zone within 2 hours.
- ii) Procedures for emergency rollover of the RZ ZSK shall be designed to achieve key

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<sup>17</sup> Note that these requirements correspond to those articulated in NIST SP 800-78 for authentication keys. Since there is no forward security requirement for the DNSSEC signed data, the more stringent requirements imposed on long term digital signatures do not apply.

<sup>18</sup> Note that FIPS 186-3 and FIPS 140-2 are referenced as requirements in sections 8a and 8 b, rather than as supplemental guidance.

<sup>19</sup> Note that FIPS 186-3 and FIPS 140-2 are referenced as requirements in sections 8a and 8 b, rather than as supplemental guidance.

<sup>20</sup> The Department expects backup locations to be within the United States.

rollover within a technically feasible timeframe as mutually agreed among the Department, Root Zone Maintainer, and the IANA functions operator. These procedures must accommodate the following scenarios:

- (1) The current RZ ZSK has been compromised; and
- (2) The current RZ ZSK is unavailable (e.g. destroyed), but is not believed to be compromised.

**d) Root Zone ZSK Rollover**

- i) The RZ ZSK shall be rolled over every six months at a minimum.<sup>21</sup>
- ii) DNSSEC users shall be able to authenticate the source and integrity of the new RZ ZSK using the previously trusted RZ ZSK's public key.
- iii) RZ ZSK holder shall be able to authenticate the source and integrity of the new RZ ZSK.

**e) Audit Generation and Review Procedures**

- i) Designated Audit personnel may not participate in the control for the RZ ZSK or RZ ZSK.
- ii) Audit logs shall be backed up offsite at least monthly.
- iii) Audit logs (whether onsite or offsite) shall be protected from unauthorized access, modification, or deletion.
- iv) Audit logs shall be made available upon request for NTIA review.

**Other Requirements**

**10) Transition Planning**

- a) The IANA Functions Operator and Root Zone Maintainer shall have plans in place for transitioning the responsibilities for each role while maintaining continuity and security of operations. In the event the IANA Functions Operator or Root Zone Maintainer are no longer capable of fulfilling their DNSSEC related roles and responsibilities (due to bankruptcy, permanent loss of facilities, etc.) or in the event the Department selects a successor, that party shall ensure an orderly transition of their DNSSEC roles and responsibilities in cooperation with the Department.<sup>22</sup>

**11) Personnel Security Requirements**

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<sup>21</sup> The timelines specified in this document apply to the operational system. Subsequent test plans may specify more or less frequent RZ ZSK rollover to ensure adequate testing.

<sup>22</sup> For the IANA Functions Operator, the transition plan shall be incorporated into that which is called for in section C.7.3 of the IANA functions contract.

**a) Separation of Duties**

- i) Personnel holding a role in the multi-party access to the RZ KSK may not hold a role in the multi-party access to the RZ ZSK, or vice versa.
- ii) Designated Audit personnel may not participate in the multi-person control for the RZ ZSK or KSK.
- iii) Audit Personnel shall be assigned to audit the RZ KSK Holder or the RZ ZSK Holder, but not both.

**b) Security Training**

- i) All personnel with access to any cryptographic component used with the Root Zone Signing process shall have adequate training for all expected duties.

**12) Root Zone Maintainer Basic Requirements**

- a) Ability to receive NTIA authorized TLD Resource Record Set (RRset) updates from NTIA and IANA Functions Operator
- b) Ability to integrate TLD RRset updates into the final zone file
- c) Ability to accept NTIA authorized signed RZ keyset(s) and integrate those RRsets into the final zone file

**13) IANA Functions Operator Interface Basic Functionality**

- a) Ability to accept and process TLD DS records. New functionality includes:
  - i) Accept TLD DS RRs
    - (1) Retrieve TLD DNSKEY record from the TLD, and perform parameter checking for the TLD keys, including verify that the DS RR has been correctly generated using the specified hash algorithm.
  - ii) Develop with, and communicate to, TLD operators procedures for:
    - (1) Scheduled roll over for TLD key material
    - (2) Supporting emergency key roll over for TLD key material.
    - (3) Moving TLD from signed to unsigned in the root zone.
- b) Ability to submit TLD DS record updates to NTIA for authorization and inclusion into the root zone by the Root Zone Maintainer.
- c) Ability to submit RZ keyset to NTIA for authorization and subsequent inclusion into the root zone by the Root Zone Maintainer.

**14) Root Zone Management Requirements<sup>23</sup>**

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<sup>23</sup> The Department envisions the IANA Functions Operator and Root Zone Maintainer jointly agree to utilizing pre-existing processes and/or deciding and proposing new methods by which each of these requirements are designed and implemented, subject to Department approval.

- a) Ability and process to store TLD delegations and DS RRs
- b) Ability and process to store multiple keys for a delegation with possibly different algorithms
- c) Ability and process to maintain a history of DS records used by each delegation
- d) Procedures for managing scheduled roll over for TLD key material
- e) Procedures for managing emergency key roll over for TLD key material.<sup>24</sup>
- f) Procedures for managing the movement of TLD from signed to unsigned.<sup>25</sup>
- g) Procedures for DNSSEC revocation at the root zone and returning the root zone to its pre-signed state.

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<sup>24</sup> To the extent possible, on 24 hour notice under the existing manual system and on 12 hours notice once the automated system is utilized.

<sup>25</sup> To the extent possible, this must be within 48 hours.

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**SECTION D - PACKAGING AND MARKING**

**RESERVED**

## **SECTION E - INSPECTION AND ACCEPTANCE**

### **E.1 INSPECTION AND ACCEPTANCE**

The Contracting Officer's Representative (COR) will perform final inspection and acceptance of all work performed, written communications regardless of form, reports, and other services and deliverables related to Section C prior to any publication/posting called for by this Contract. The CO reserves the right to designate other Government agents as authorized representatives upon unilateral written notice to the Contractor, which may be accomplished in the form of a transmittal of a copy of the authorization. The Government reserves the right to inspect the premises, systems, and processes of all security and operational components used for the performance of all Contract requirements and obligations.

### **E.2 INSPECTION -- TIME-AND-MATERIAL AND LABOR-HOUR (FAR 52.246-6) (MAY 2001)**

(a) *Definitions.* As used in this clause--

“Contractor’s managerial personnel” means any of the Contractor’s directors, officers, managers, superintendents, or equivalent representatives who have supervision or direction of --

- (1) All or substantially all of the Contractor’s business;
- (2) All or substantially all of the Contractor’s operation at any one plant or separate location where the contract is being performed; or
- (3) A separate and complete major industrial operation connected with the performance of this contract.

“Materials” includes data when the contract does not include the Warranty of Data clause.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the material, fabricating methods, work, and services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all materials furnished and services performed under this contract, to the extent practicable at all places and times, including the period of performance, and in any event before acceptance. The Government may also inspect the plant or plants of the Contractor or any subcontractor engaged in contract performance.

The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If the Government performs inspection or test on the premises of the Contractor or a subcontractor, the Contractor shall furnish and shall require subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

(e) Unless otherwise specified in the contract, the Government shall accept or reject services and materials at the place of delivery as promptly as practicable after delivery, and they shall be presumed accepted 60 days after the date of delivery, unless accepted earlier.

(f) At any time during contract performance, but not later than 6 months (or such other time as may be specified in the contract) after acceptance of the services or materials last delivered under this contract, the Government may require the Contractor to replace or correct services or materials that at time of delivery failed to meet contract requirements. Except as otherwise specified in paragraph (h) of this clause, the cost of replacement or correction shall be determined under the Payments Under Time-and-Materials and Labor-Hour Contracts clause, but the "hourly rate" for labor hours incurred in the replacement or correction shall be reduced to exclude that portion of the rate attributable to profit. The Contractor shall not tender for acceptance materials and services required to be replaced or corrected without disclosing the former requirement for replacement or correction, and, when required, shall disclose the corrective action taken.

(g)

(1) If the Contractor fails to proceed with reasonable promptness to perform required replacement or correction, and if the replacement or correction can be performed within the ceiling price (or the ceiling price as increased by the Government), the Government may --

(i) By contract or otherwise, perform the replacement or correction, charge to the Contractor any increased cost, or deduct such increased cost from any amounts paid or due under this contract; or

(ii) Terminate this contract for default.

(2) Failure to agree to the amount of increased cost to be charged to the Contractor shall be a dispute.

(h) Notwithstanding paragraphs (f) and (g) above, the Government may at any time require the Contractor to remedy by correction or replacement, without cost to the Government, any failure by the Contractor to comply with the requirements of this contract, if the failure is due to --

(1) Fraud, lack of good faith, or willful misconduct on the part of the Contractor's managerial personnel; or

(2) The conduct of one or more of the Contractor's employees selected or retained by the Contractor after any of the Contractor's managerial personnel has reasonable grounds to believe that the employee is habitually careless or unqualified.

(i) This clause applies in the same manner and to the same extent to corrected or replacement materials or services as to materials and services originally delivered under this contract.

(j) The Contractor has no obligation or liability under this contract to correct or replace materials and services that at time of delivery do not meet contract requirements, except as provided in this clause or as may be otherwise specified in the contract.

(k) Unless otherwise specified in the contract, the Contractor's obligation to correct or replace Government-furnished property shall be governed by the clause pertaining to Government property.

**SECTION F - DELIVERIES AND PERFORMANCE****F.1 PERIOD OF PERFORMANCE**

The period of performance of this contract is: October 1, 2012 – September 30, 2015.

**F.2 PLACE OF PERFORMANCE**

The Contractor shall perform all work at the Contractor's facilities.

**F.3 DISTRIBUTION OF DELIVERABLES**

The Contractor shall submit **one (1) copy** to the COR.

**F.4 DELIVERABLES**

The listed below are the deliverables required by this contract. Section C of this contract contains information about the deliverables.

| <b>Clause No.</b> | <b>Clause</b>  | <b>Deliverable</b>  | <b>Due Date</b>         |
|-------------------|--|---|-------------------------|
| C.2.6             | Transparency and Accountability                        | User instructional documentation including technical requirements | Six months after award  |
| C.2.7             | Responsibility and Respect for Stakeholders            | Documenting the source of the policies and procedures.            | Six months after award  |
| C.2.8             | Performance Standards                                  | Performance Standards   | Six months after award  |
| C.2.9.2e          | Root Zone Automation                                   | Automated Root Zone   | Nine months after award |
| C.2.9.2g          | Customer Service Complaint Resolution Process (CSCRCP) | Customer Compliant Process  | Six months after award  |
| C.3.4             | Security Plan  | Documenting Practices and configuration of all systems            | Annually                |
| C.4.1             | Monthly Performance Progress Report includes DNSSEC    | Report based on C.2   | Monthly                 |
| C.4.2             | Root Zone Management                                   | Root Zone Management  | Nine months             |

| Clause No. | Clause   | Deliverable  | Due Date  |
|------------|--|--|---|
|            | Dashboard  | Dashboard  | after award   |
| C.4.3      | Performance Standards Reports                            | Performance Standards Report   | Six months after award and monthly thereafter         |
| C.4.4      | Customer Service Survey                                  | Customer Service Survey  | Annual Report of Customer Survey                      |
| C.4.5      | Final Report   | Final Report   | Expiration of Contract                                |
| C.5.1      | Audit Data   | Audit Report   | Annually  |
| C.5.2      | Root Zone Management Audit Data                          | Root Zone Management Audit Report  | Nine Months after award and Monthly Report thereafter |
| C.5.3      | External Auditor   | External Audit Report  | Annually  |
| C.6.2.4    | Conflict of Interest Enforcement and Compliance Report   | Enforcement and Compliance Report  | Annually  |
| C.7.2      | Contingency and Continuity of Operations Plan (The CCOP) | Contingency and Continuity of Operations for the continuation of the IANA Functions in case of an emergency. | Annually  |
| C.7.3      | Transition to Successor                                  | Transition plan in case of successor contractor.   | Eighteen (18) months after date of contract award     |

## **F.5 GOVERNMENT RIGHTS TO DELIVERABLES**

All deliverables provided under this contract become the property of the U.S. Government.

## **F.6 GOVERNMENT REVIEW OF DELIVERABLES**

The Government shall review all deliverables and determine acceptability. Any deficiencies shall be corrected by the Contractor and resubmitted to the Government within ten (10) workdays after notification.

## **F.7 REQUIRED DELIVERABLES**

The Contractor shall transmit all deliverables so the deliverables are received by the parties listed above on or before the indicated due dates.

**F.8 MEETINGS**

Program reviews will be scheduled monthly and site visits will occur annually.

## **SECTION G - CONTRACT ADMINISTRATION DATA**

Notwithstanding the Contractor's responsibility for total management during the performance of the contract, the administration of the contract will require maximum coordination between the Department of Commerce and the Contractor. The following individuals will be the Department of Commerce points of contact during the performance of the contract.

### **G.1 CONTRACTING OFFICER'S AUTHORITY**

#### **CONTRACTING OFFICER'S AUTHORITY (CAR 1352.201-70) (APR 2010)**

The Contracting Officer is the only person authorized to make or approve any changes in any of the requirements of this contract, and, notwithstanding any provisions contained elsewhere in this contract, the said authority remains solely in the Contracting Officer. In the event the contractor makes any changes at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract terms and conditions, including price.

#### **CONTRACTING OFFICER'S REPRESENTATIVE (COR) (CAR 1352.201-72) (APR 2010)**

(a) **Vernita D. Harris, Deputy Associate Administrator** is hereby designated as the Contracting Officer's Representative (COR). The COR may be changed at any time by the Government without prior notice to the contractor by a unilateral modification to the contract.

The COR is located at:

1401 Constitution Avenue, N.W., Room 4701, Washington, DC 20230

PHONE NO: 202.482.4686

Email: [vharris@ntia.doc.gov](mailto:vharris@ntia.doc.gov)

(b) The responsibilities and limitations of the COR are as follows:

(1) The COR is responsible for the technical aspects of the contract and serves as technical liaison with the contractor. The COR is also responsible for the final inspection and acceptance of all deliverables and such other responsibilities as may be specified in the contract.

(2) The COR is not authorized to make any commitments or otherwise obligate the Government or authorize any changes which affect the contract price, terms or conditions. Any contractor request for changes shall be referred to the Contracting Officer directly or through the COR. No such changes shall be made without the express written prior authorization of the Contracting Officer. The Contracting Officer may designate assistant or alternate COR(s) to act for the COR by naming such

assistant/alternate(s) in writing and transmitting a copy of such designation to the contractor.

## SECTION H - SPECIAL CONTRACT REQUIREMENTS

### H.1 AUDIT AND RECORDS – NEGOTIATION (FAR 52.215-2) (OCT 2010)

(a) As used in this clause, “records” includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) *Examination of costs.* If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor’s plants, or parts of them, engaged in performing the contract.

(c) *Certified cost or pricing data.* If the Contractor has been required to submit certified cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor’s records, including computations and projections, related to --

- (1) The proposal for the contract, subcontract, or modification;
- (2) The discussions conducted on the proposal(s), including those related to negotiating;
- (3) Pricing of the contract, subcontract, or modification; or
- (4) Performance of the contract, subcontract or modification.

(d) *Comptroller General—*

(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor’s directly pertinent records involving transactions related to this contract or a subcontract hereunder and to interview any current employee regarding such transactions.

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) *Reports.* If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the

right to examine and audit the supporting records and materials, for the purpose of evaluating -

-

(1) The effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports; and

(2) The data reported.

(f) *Availability*. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition --

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, and --

(1) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these;

(2) For which certified cost or pricing data are required; or

(3) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause.

The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

*Alternate I (Mar 2009)*. As prescribed in [15.209](#) (b)(2), substitute the following paragraphs (d)(1) and (g) for paragraphs (d)(1) and (g) of the basic clause:

(d) *Comptroller General or Inspector General*.

(1) The Comptroller General of the United States, an appropriate Inspector General appointed under section 3 or 8G of the Inspector General Act of 1978 (5 U.S.C. App.), or an authorized representative of either of the foregoing officials, shall have access to and the right to—

- (i) Examine any of the Contractor's or any subcontractor's records that pertain to and involve transactions relating to this contract or a subcontract hereunder; and
- (ii) Interview any officer or employee regarding such transactions.

(g)(1) Except as provided in paragraph (g)(2) of this clause, the Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract. The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

(2) The authority of the Inspector General under paragraph (d)(1)(ii) of this clause does not flow down to subcontracts.

*Alternate II (Apr 1998).* As prescribed in 15.209(b)(3), add the following paragraph (h) to the basic clause:

(h) The provisions of OMB Circular No.A-133, "Audits of States, Local Governments, and Nonprofit Organizations," apply to this contract.

*Alternate III (Jun 1999).* As prescribed in 15.209(b)(4), delete paragraph (d) of the basic clause and redesignate the remaining paragraphs accordingly, and substitute the following paragraph (e) for the redesignated paragraph (e) of the basic clause:

(e) Availability. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), and (d) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition—

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

## **H.2 PATENT RIGHTS -- OWNERSHIP BY THE CONTRACTOR (FAR 52.227-11) (DEC 2007)**

(a) As used in this clause—

“Invention” means any invention or discovery that is or may be patentable or otherwise protectable under title 35 of the U.S. Code, or any variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, *et seq.*)

“Made” means—

(1) When used in relation to any invention other than a plant variety, the conception or first actual reduction to practice of the invention; or

(2) When used in relation to a plant variety, that the Contractor has at least tentatively determined that the variety has been reproduced with recognized characteristics.

“Nonprofit organization” means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

“Practical application” means to manufacture, in the case of a composition of product; to practice, in the case of a process or method, or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

“Subject invention” means any invention of the Contractor made in the performance of work under this contract.

(b) *Contractor’s rights.*

(1) *Ownership.* The Contractor may retain ownership of each subject invention throughout the world in accordance with the provisions of this clause.

(2) *License.*

(i) The Contractor shall retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, unless the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. The Contractor’s license extends to any domestic subsidiaries and affiliates within the corporate structure of which the Contractor

is a part, and includes the right to grant sublicenses to the extent the Contractor was legally obligated to do so at contract award. The license is transferable only with the written approval of the agency, except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(ii) The Contractor's license may be revoked or modified by the agency to the extent necessary to achieve expeditious practical application of the subject invention in a particular country in accordance with the procedures in FAR 27.302(i)2() and 27.(304(f).

*(c) Contractor's obligations.*

(1) The Contractor shall disclose in writing each subject invention to the Contracting Officer within 2 months after the inventor discloses it in writing to Contractor personnel responsible for patent matters. The disclosure shall identify the inventor(s) and this contract under which the subject invention was made. It shall be sufficiently complete in technical detail to convey a clear understanding of the subject invention. The disclosure shall also identify any publication, on sale (*i.e.*, sale or offer for sale), or public use of the subject invention, or whether a manuscript describing the subject invention has been submitted for publication and, if so, whether it has been accepted for publication. In addition, after disclosure to the agency, the Contractor shall promptly notify the Contracting Officer of the acceptance of any manuscript describing the subject invention for publication and any on sale or public use.

(2) The Contractor shall elect in writing whether or not to retain ownership of any subject invention by notifying the Contracting Officer within 2 years of disclosure to the agency. However, in any case where publication, on sale, or public use has initiated the 1-year statutory period during which valid patent protection can be obtained in the United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.

(3) The Contractor shall file either a provisional or a nonprovisional patent application or a Plant Variety Protection Application on an elected subject invention within 1 year after election. However, in any case where a publication, on sale, or public use has initiated the 1-year statutory period during which valid patent protection can be obtained in the United States, the Contractor shall file the application prior to the end of that statutory period. If the Contractor files a provisional application, it shall file a nonprovisional application within 10 months of the filing of the provisional application. The Contractor shall file patent applications in additional countries or international patent offices within either 10 months of the first filed patent application (whether provisional or nonprovisional) or 6 months from the date permission is granted by the Commissioner

of Patents to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

(4) The Contractor may request extensions of time for disclosure, election, or filing under paragraphs (c)(1), (c)(2), and (c)(3) of this clause.

(d) *Government's rights—*

(1) *Ownership.* The Contractor shall assign to the agency, on written request, title to any subject invention—

(i) If the Contractor fails to disclose or elect ownership to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain ownership; provided, that the agency may request title only within 60 days after learning of the Contractor's failure to disclose or elect within the specified times.

(ii) In those countries in which the Contractor fails to file patent applications within the times specified in paragraph (c) of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in paragraph (c) of this clause, but prior to its receipt of the written request of the agency, the Contractor shall continue to retain ownership in that country.

(iii) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

(2) *License.* If the Contractor retains ownership of any subject invention, the Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice, or have practiced for or on its behalf, the subject invention throughout the world.

(e) *Contractor action to protect the Government's interest.*

(1) The Contractor shall execute or have executed and promptly deliver to the agency all instruments necessary to—

(i) Establish or confirm the rights the Government has throughout the world in those subject inventions in which the Contractor elects to retain ownership; and

(ii) Assign title to the agency when requested under paragraph (d) of this clause and to enable the Government to obtain patent protection and plant variety protection for that subject invention in any country.

(2) The Contractor shall require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in the Contractor's format, each subject invention in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. The disclosure format should require, as a minimum, the information required by paragraph (c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, as to the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) The Contractor shall notify the Contracting Officer of any decisions not to file a nonprovisional patent application, continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response or filing period required by the relevant patent office.

(4) The Contractor shall include, within the specification of any United States nonprovisional patent or plant variety protection application and any patent or plant variety protection certificate issuing thereon covering a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by (identify the agency). The Government has certain rights in the invention."

(f) *Reporting on utilization of subject inventions.* The Contractor shall submit, on request, periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining utilization of the subject invention that are being made by the Contractor or its licensees or assignees. The reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and other data and information as the agency may reasonably specify. The Contractor also shall provide additional reports as may be requested by the agency in connection with any march-in proceeding undertaken by the agency in accordance with paragraph (h) of this clause. The Contractor also shall mark any utilization report as confidential/proprietary to help prevent inadvertent release outside the Government. As required by 35 U.S.C. 202(c)(5), the agency will not disclose that information to persons outside the Government without the Contractor's permission.

(g) *Preference for United States industry.* Notwithstanding any other provision of this clause, neither the Contractor nor any assignee shall grant to any person the exclusive right to use or sell any subject invention in the United States unless the person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement

for an agreement may be waived by the agency upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States, or that under the circumstances domestic manufacture is not commercially feasible.

(h) *March-in rights*. The Contractor acknowledges that, with respect to any subject invention in which it has retained ownership, the agency has the right to require licensing pursuant to 35 U.S.C. 203 and 210(c), and in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency in effect on the date of contract award.

(i) Special provisions for contracts with nonprofit organizations. If the Contractor is a nonprofit organization, it shall—

(1) Not assign rights to a subject invention in the United States without the written approval of the agency, except where an assignment is made to an organization that has as one of its primary functions the management of inventions, provided, that the assignee shall be subject to the same provisions as the Contractor;

(2) Share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (but through their agency if the agency deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;

(3) Use the balance of any royalties or income earned by the Contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions for the support of scientific research or education; and

(4) Make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business concerns, and give a preference to a small business concern when licensing a subject invention if the Contractor determines that the small business concern has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business concerns; provided, that the Contractor is also satisfied that the small business concern has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor.

(5) Allow the Secretary of Commerce to review the Contractor's licensing program and decisions regarding small business applicants, and negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when the Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of paragraph (i)(4) of this clause.

(j) *Communications.* [Complete according to agency instructions.]

(k) *Subcontracts.*

(1) The Contractor shall include the substance of this clause, including this paragraph (k), in all subcontracts for experimental, developmental, or research work to be performed by a small business concern or nonprofit organization.

(2) The Contractor shall include in all other subcontracts for experimental, developmental, or research work the substance of the patent rights clause required by FAR Subpart 27.3.

(3) At all tiers, the patent rights clause must be modified to identify the parties as follows: references to the Government are not changed, and the subcontractor has all rights and obligations of the Contractor in the clause. The Contractor shall not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(4) In subcontracts, at any tier, the agency, the subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and the agency with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (h) of this clause.

### **H.3 RESERVED**

### **H.4 RIGHTS IN DATA – SPECIAL WORKS (FAR 52.227-17) (DEC 2007)**

(a) *Definitions.* As used in this clause--

“Data” means recorded information, regardless of form or the medium on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

“Unlimited rights” means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) *Allocation of Rights.*

(1) The Government shall have—

(i) Unlimited rights in all data delivered under this contract, and in all data first produced in the performance of this contract, except as provided in paragraph (c) of this clause for copyright.

(ii) The right to limit assertion of copyright in data first produced in the performance of this contract, and to obtain assignment of copyright in that data, in accordance with paragraph (c)(1) of this clause.

(iii) The right to limit the release and use of certain data in accordance with paragraph (d) of this clause.

(2) The Contractor shall have, to the extent permission is granted in accordance with paragraph (c)(1) of this clause, the right to assert claim to copyright subsisting in data first produced in the performance of this contract.

(c) *Copyright—*

(1) *Data first produced in the performance of this contract.*

(i) The Contractor shall not assert or authorize others to assert any claim to copyright subsisting in any data first produced in the performance of this contract without prior written permission of the Contracting Officer. When copyright is asserted, the Contractor shall affix the appropriate copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. The Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license for all delivered data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.

(ii) If the Government desires to obtain copyright in data first produced in the performance of this contract and permission has not been granted as set forth in paragraph (c)(1)(i) of this clause, the Contracting Officer shall direct the Contractor to assign (with or without registration), or obtain the assignment of, the copyright to the Government or its designated assignee.

(2) *Data not first produced in the performance of this contract.* The Contractor shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract and which contain the copyright notice of 17 U.S.C. 401 or 402, unless the

Contractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause.

(d) *Release and use restrictions.* Except as otherwise specifically provided for in this contract, the Contractor shall not use, release, reproduce, distribute, or publish any data first produced in the performance of this contract, nor authorize others to do so, without written permission of the Contracting Officer.

(e) *Indemnity.* The Contractor shall indemnify the Government and its officers, agents, and employees acting for the Government against any liability, including costs and expenses, incurred as the result of the violation of trade secrets, copyrights, or right of privacy or publicity, arising out of the creation, delivery, publication, or use of any data furnished under this contract; or any libelous or other unlawful matter contained in such data. The provisions of this paragraph do not apply unless the Government provides notice to the Contractor as soon as practicable of any claim or suit, affords the Contractor an opportunity under applicable laws, rules, or regulations to participate in the defense of the claim or suit, and obtains the Contractor's consent to the settlement of any claim or suit other than as required by final decree of a court of competent jurisdiction; and these provisions do not apply to material furnished to the Contractor by the Government and incorporated in data to which this clause applies.

#### **H.5 RIGHTS IN DATA -- EXISTING WORKS (FAR 52.227-18) (DEC 2007)**

(a) Except as otherwise provided in this contract, the Contractor grants to the Government, and others acting on its behalf, a paid-up nonexclusive, irrevocable, worldwide license to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government, for all the material or subject matter called for under this contract, or for which this clause is specifically made applicable.

(b) The Contractor shall indemnify the Government and its officers, agents, and employees acting for the Government against any liability, including costs and expenses, incurred as the result of (1) the violation of trade secrets, copyrights, or right of privacy or publicity, arising out of the creation, delivery, publication or use of any data furnished under this contract; or (2) any libelous or other unlawful matter contained in such data. The provisions of this paragraph do not apply unless the Government provides notice to the Contractor as soon as practicable of any claim or suit, affords the Contractor an opportunity under applicable laws, rules, or regulations to participate in the defense of the claim or suit, and obtains the Contractor's consent to the settlement of any claim or suit other than as required by final decree of a court of competent jurisdiction; and do not apply to material furnished to the Contractor by the Government and incorporated in data to which this clause applies.

#### **H.6 BANKRUPTCY (FAR 52.242-13) (JUL 1995)**

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

**H.7 PRINTING (CAR 1352.208-70) (APR 2010)**

(a) The contractor is authorized to duplicate or copy production units provided the requirement does not exceed 5,000 production units of any one page or 25,000 production units in the aggregate of multiple pages. Such pages may not exceed a maximum image size of 103/4by 141/4inches. A “production unit” is one sheet, size 81/2x 11 inches (215 x 280 mm), one side only, and one color ink. Production unit requirements are outlined in the Government Printing and Binding Regulations.

(b) This clause does not preclude writing, editing, preparation of manuscript copy, or preparation of related illustrative material as a part of this contract, or administrative duplicating/copying (for example, necessary forms and instructional materials used by the contractor to respond to the terms of the contract).

(c) Costs associated with printing, duplicating, or copying in excess of the limits in paragraph (a) of this clause are unallowable without prior written approval of the Contracting Officer. If the contractor has reason to believe that any activity required in fulfillment of the contract will necessitate any printing or substantial duplicating or copying, it shall immediately provide written notice to the Contracting Officer and request approval prior to proceeding with the activity. Requests will be processed by the Contracting Officer in accordance with FAR 8.802.

(d) The contractor shall include in each subcontract which may involve a requirement for any printing, duplicating, and copying in excess of the limits specified in paragraph (a) of this clause, a provision substantially the same as this clause, including this paragraph (d).

**H.8 KEY PERSONNEL (CAR 1352.237-75) (APR 2010)**

(a) The contractor shall assign to this contract the following key personnel:

| NAME                | POSITION                       |
|---------------------|--------------------------------|
| <b>Elise Gerich</b> | IANA Functions Program Manager |

|                        |  |
|------------------------|--|
| <b>Michelle Cotton</b> | IANA Function Liaison for Technical Protocol Parameters Assignment |
| <b>Kim Davies</b>      | IANA Function Liaison for Root Zone Management                     |
| <b>Leo Vegoda</b>      | IANA Function Liaison for Internet Number Resource Allocation      |
| <b>Tomofumi Okubo</b>  | Security Director  |
| <b>Steve Antonoff</b>  | Conflict of Interest Officer                                       |

(b) The contractor shall obtain the consent of the Contracting Officer prior to making key personnel substitutions. Replacements for key personnel must possess qualifications equal to or exceeding the qualifications of the personnel being replaced, unless an exception is approved by the Contracting Officer.

(c) Requests for changes in key personnel shall be submitted to the Contracting Officer at least 15 working days prior to making any permanent substitutions. The request should contain a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any additional information requested by the Contracting Officer. The Contracting Officer will notify the contractor within 10 working days after receipt of all required information of the decision on substitutions. The contract will be modified to reflect any approved changes.

#### **H.9 ORGANIZATIONAL CONFLICT OF INTEREST (CAR 1352.209-74) (APR 2010)**

(a) Purpose. The purpose of this clause is to ensure that the contractor and its subcontractors:

(1) Are not biased because of their financial, contractual, organizational, or other interests which relate to the work under this contract, and

(2) Do not obtain any unfair competitive advantage over other parties by virtue of their performance of this contract.

(b) Scope. The restrictions described herein shall apply to performance or participation by the contractor, its parents, affiliates, divisions and subsidiaries, and successors in interest (hereinafter collectively referred to as "contractor") in the activities covered by this clause as a prime contractor, subcontractor, co-sponsor, joint venturer, consultant, or in any similar capacity. For the purpose of this clause, affiliation occurs when a business concern is controlled by or has the power to control another or when a third party has the power to control both.

(c) Warrant and Disclosure. The warrant and disclosure requirements of this paragraph apply with full force to both the contractor and all subcontractors. The contractor warrants that, to the best of the contractor's knowledge and belief, there are no relevant facts or circumstances which would give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, and that the contractor has disclosed all relevant information regarding any actual or potential conflict. The contractor agrees it shall make an immediate and full disclosure, in writing, to the

Contracting Officer of any potential or actual organizational conflict of interest or the existence of any facts that may cause a reasonably prudent person to question the contractor's impartiality because of the appearance or existence of bias or an unfair competitive advantage. Such disclosure shall include a description of the actions the contractor has taken or proposes to take in order to avoid, neutralize, or mitigate any resulting conflict of interest.

(d) Remedies. The Contracting Officer may terminate this contract for convenience, in whole or in part, if the Contracting Officer deems such termination necessary to avoid, neutralize or mitigate an actual or apparent organizational conflict of interest. If the contractor fails to disclose facts pertaining to the existence of a potential or actual organizational conflict of interest or misrepresents relevant information to the Contracting Officer, the Government may terminate the contract for default, suspend or debar the contractor from Government contracting, or pursue such other remedies as may be permitted by law or this contract.

(e) Subcontracts. The contractor shall include a clause substantially similar to this clause, including paragraphs (f) and (g), in any subcontract or consultant agreement at any tier expected to exceed the simplified acquisition threshold. The terms "contract," "contractor," and "Contracting Officer" shall be appropriately modified to preserve the Government's rights.

(f) Prime Contractor Responsibilities. The contractor shall obtain from its subcontractors or consultants the disclosure required in FAR Part 9.507-1, and shall determine in writing whether the interests disclosed present an actual, or significant potential for, an organizational conflict of interest. The contractor shall identify and avoid, neutralize, or mitigate any subcontractor organizational conflict prior to award of the contract to the satisfaction of the Contracting Officer. If the subcontractor's organizational conflict cannot be avoided, neutralized, or mitigated, the contractor must obtain the written approval of the Contracting Officer prior to entering into the subcontract. If the contractor becomes aware of a subcontractor's potential or actual organizational conflict of interest after contract award, the contractor agrees that the Contractor may be required to eliminate the subcontractor from its team, at the contractor's own risk.

(g) Waiver. The parties recognize that this clause has potential effects which will survive the performance of this contract and that it is impossible to foresee each circumstance to which it might be applied in the future. Accordingly, the contractor may at any time seek a waiver from the Head of the Contracting Activity by submitting such waiver request to the Contracting Officer, including a full written description of the requested waiver and the reasons in support thereof.

#### **H.10 RESTRICTIONS AGAINST DISCLOSURE (CAR 1352.209-72) (APR 2010)**

(a) The contractor agrees, in the performance of this contract, to keep the information furnished by the Government or acquired/developed by the contractor in performance of the contract and designated by the Contracting Officer or Contracting Officer's Representative, in

the strictest confidence. The contractor also agrees not to publish or otherwise divulge such information, in whole or in part, in any manner or form, nor to authorize or permit others to do so, taking such reasonable measures as are necessary to restrict access to such information while in the contractor's possession, to those employees needing such information to perform the work described herein, *i.e.*, on a "need to know" basis. The contractor agrees to immediately notify the Contracting Officer in writing in the event that the contractor determines or has reason to suspect a breach of this requirement has occurred.

(b) The contractor agrees that it will not disclose any information described in subsection (a) to any person unless prior written approval is obtained from the Contracting Officer. The contractor agrees to insert the substance of this clause in any consultant agreement or subcontract hereunder.

#### **H.11 COMPLIANCE WITH LAWS (CAR 1352.209-73) (APR 2010)**

The contractor shall comply with all applicable laws, rules and regulations which deal with or relate to performance in accord with the terms of the contract.

#### **H.12 DUPLICATION OF EFFORT (CAR 1352.231-71) (APR 2010)**

The contractor hereby certifies that costs for work to be performed under this contract and any subcontracts hereunder are not duplicative of any costs charged against any other Government contract, subcontract, or other Government source. The contractor agrees to advise the Contracting Officer, in writing, of any other Government contract or subcontract it has performed or is performing which involves work directly related to the purpose of this contract. The contractor also certifies and agrees that any and all work performed under this contract shall be directly and exclusively for the use and benefit of the Government, and not incidental to any other work, pursuit, research, or purpose of the contractor, whose responsibility it will be to account for it accordingly.

#### **H.13 HARMLESS FROM LIABILITY**

The Contractor shall hold and save the Government, its officers, agents, and employees harmless from liability of any nature or kind, including costs and expenses to which they may be subject, for or on account of any or all suits or damages of any character whatsoever resulting from injuries or damages sustained by any person or persons or property by virtue of performance of this contract, arising or resulting in whole or in part from the fault, negligence, wrongful act or wrongful omission of the Contractor, or any subcontractor, their employees, and agents.

#### **H.14 CONTRACTOR IDENTIFICATION RESPONSIBILITIES**

(a) All Contractor personnel attending meetings, answering Government telephones, and working in other situations where their Contractor status is not obvious to third parties, are required to identify themselves as such to avoid creating an impression in the minds of the public that they are Government officials.

(b) All documents or reports produced by the Contractor shall be suitably marked as Contractor products or that Contractor participation is appropriately identified.

#### **H.15 NOTICE REQUIREMENT**

The Contractor agrees that it will immediately inform the Contracting Officer and the Contracting Officer's Representative in the event that the Contractor's Chairman of the Board of Directors initiates any investigation by an independent auditor of potential corporate insolvency.

#### **H.16 CERTIFICATION REGARDING TERRORIST FINANCING IMPLEMENTING EXECUTIVE ORDER 13224**

(a) By signing and submitting this application, the prospective Contractor provides the certification set out below:

(1) The Contractor, to the best of its current knowledge, did not provide, within the previous ten years, and will take all reasonable steps to ensure that it does not and will not knowingly provide, material support or resources to any individual or entity that commits, attempts to commit, advocates, facilitates or participates in terrorist acts, or has committed, attempted to commit, facilitated or participated in terrorist acts, as that term is defined in Executive Order 13224.

(2) Before providing any material support or resources to an individual or entity, the Contractor will consider all information about that individual or entity of which it is aware and all public information that is reasonably available to it or of which it must be aware.

(3) The Contractor also will implement reasonable monitoring and oversight procedures to safeguard against assistance being diverted to support terrorist activity.

(b) For the purposes of this certification, the Contractor's obligations under paragraph "a" are not applicable to the procurement of goods and/or services by the Contractor that are acquired in the ordinary course of business through contract or purchase, e.g., utilities, rents, office supplies, gasoline, unless the Contractor has reason to believe that a vendor or supplier of such goods and services commits, attempts to commit, advocates, facilitates or participates in terrorist acts, or has committed, attempted to commit, facilitated or participated in terrorist acts.

(c) This certification is an express term and condition of any agreement issued as a result of this application, and any violation of it shall be grounds for unilateral termination of the agreement by DoC prior to the end of its term.

## SECTION I - CONTRACT CLAUSES

### FEDERAL ACQUISITION REGULATION (FAR)

#### I.1 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address:

<https://www.acquisition.gov/far/>

#### I.2 52.202-1 DEFINITIONS (JUL 2004)

#### I.3 52.203-3 GRATUITIES (APR 1984)

#### I.4 52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

#### I.5 52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995)

#### I.6 52.203-7 ANTI-KICKBACK PROCEDURES (JUL 1995)

#### I.7 52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

#### I.8 52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (SEPT 2007)

#### I.9 52.203-13 CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT (APR 2010)

#### I.10 52.204-2 SECURITY REQUIREMENTS (AUG 2000)

#### I.11 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

#### I.12 52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)

#### I.13 52.215-8 ORDER OF PRECEDENCE—UNIFORM CONTRACT FORMAT (OCT 1997)

#### I.14 52.216-7 ALLOWABLE COST AND PAYMENT (JUN 2011)

#### I.15 RESERVED

#### I.16 52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

#### I.17 52.222-26 EQUAL OPPORTUNITY (MAR 2007)

- I.18 52.222.35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEP 2006)
- I.19 52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)
- I.20 52.222-37 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEP 2006)
- I.21 52.222-50 COMBATting TRAFFICKING IN PERSONS (FEB 2009)
- I.22 52.222.54 EMPLOYMENT ELIGIBILITY VERIFICATION (JAN 2009)
- I.23 52.223-6 DRUG-FREE WORKPLACE (MAY 2001)
- I.24 52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (AUG 2011)
- I.25 52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUN 2008)
- I.26 52.227-1 AUTHORIZATION AND CONSENT (DEC 2007)
- I.27 52.227-2 NOTICE OF ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (DEC 2007)
- I.28 52.227-3 PATENT INDEMNITY (APR 1984)
- I.29 52.227-14 RIGHTS IN DATA—GENERAL, ALTERNATES I, II, III, IV (DEC 2007)
- I.30 52.229-3 FEDERAL, STATE AND LOCAL TAXES (APR 2003)
- I.31 52.232-20 LIMITATION OF COST (APR 1984)
- I.32 52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)
- I.33 52.232-25 PROMPT PAYMENT (OCT 2008)
- I.34 52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (OCT 2003)
- I.35 52.233-1 DISPUTES (JUL 2002), ALTERNATE I (DEC 1991)
- I.36 52.233-3 PROTEST AFTER AWARD (AUG 1996)

- I.37 52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004)**
- I.38 52.239-1 PRIVACY OR SECURITY SAFEGUARDS (AUG 1996)**
- I.39 52.242-1 NOTICE OF INTENT TO DISALLOW COSTS (APR 1984)**
- I.40 52.242-4 CERTIFICATION OF FINAL INDIRECT COSTS (JAN 1997)**
- I.41 52.242-13 BANKRUPTCY (JUL 1995)**
- I.42 52.242-14 SUSPENSION OF WORK (APR 1984)**
- I.43 52.242-15 STOP-WORK ORDER (AUG 1989)**
- I.44 52.243-1 CHANGES-FIXED PRICE (AUG 1987) Alternate I (APR 1984)**
- I.45 52.243-2 CHANGES--COST-REIMBURSEMENT (AUG 1987), ALTERNATE I (APR 1984)**
- I.46 52.244-2 SUBCONTRACTS (OCT 2010)**
- I.47 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (DEC 2010)**
- I.48 52.245-1 GOVERNMENT PROPERTY (APR 2012)**
- I.49 52.246-20 WARRANTY OF SERVICES (MAY 2001)**  
[The Contracting Officer shall give written notice of any defect or nonconformance to the Contractor within 120 days from the date of acceptance by the Government.]
- I.50 52.246-25 LIMITATION OF LIABILITY—SERVICES (FEB 1997)**
- I.51 52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (MAY 2004) ALT II (SEP 1996)**
- I.52 52.249-5 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (EDUCATIONAL AND OTHER NONPROFIT INSTITUTIONS) (SEP 1996)**
- I.53 52.249-6 TERMINATION (COST REIMBURSEMENT) (MAY 2004) (ALT V) (SEP 1996)**
- I.54 52.249-14 EXCUSABLE DELAYS (APR 1984)**
- I.55 52.253-1 COMPUTER GENERATED FORMS (JAN 1991)**

**CLAUSES INCORPORATED IN FULL TEXT**

**I.56 52.204-7 CENTRAL CONTRACTOR REGISTRATION (FEB 2012)**

(a) Definitions. As used in this clause—

*“Central Contractor Registration (CCR) database”* means the primary Government repository for Contractor information required for the conduct of business with the Government.

*“Data Universal Numbering System (DUNS) number”* means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

*“Data Universal Numbering System+4 (DUNS+4) number”* means the DUNS number means the number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see the FAR at Subpart 32.11) for the same concern.

*“Registered in the CCR database”* means that—

(1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database; and

(2) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS), and has marked the record “Active”. The Contractor will be required to provide consent for TIN validation to the Government as a part of the CCR registration process.

(b)

(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.

(2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation “DUNS” or “DUNS+4” followed by the DUNS or DUNS+4 number that identifies the offeror’s name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number—

(i) Via the internet at <http://fedgov.dnb.com/webform> or if the offeror does not have internet access, it may call Dun and Bradstreet at 1-866-705-5711 if located within the United States; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office. The offeror should indicate that it is an offeror for a U.S. Government contract when contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and Zip Code.

(iv) Company mailing address, city, state and Zip Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(g)

(1)

(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to:

(A) Change the name in the CCR database;

(B) Comply with the requirements of Subpart 42.12 of the FAR;

(C) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of

assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(h) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the CCR accessed through <https://www.acquisition.gov> or by calling 1-888-227-2423, or 269-961-5757.

**I.57 52.216-11 COST CONTRACT – NO FEE (APR 1984)**

(a) The Government shall not pay the Contractor a fee for performing this contract.

**I.58 52.217-8 OPTION TO EXTEND SERVICES (NOV 1999)**

The Government may require continued performance of any services within the limits and at the rates specified in the contract. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 15 calendar days of expiration of the contract.

**I.59 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)**

(a) The Government may extend the term of this contract by written notice to the Contractor **within 15 calendar days before the expiration of the contract**; provided that the Government gives the Contractor a preliminary written notice of its intent to extend **at least 30 calendar days before the contract expires**. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed seven years.

**I.60 52.233-2 SERVICE OF PROTEST (SEP 2006)**

(a) Protests, as defined in section 31.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer addressed as follows: Mona-Lisa Dunn, Contracting Officer, 1401 Constitution Avenue, NW, Room 6521, Washington, DC 20230 by obtaining written and dated acknowledgment of receipt from Mona-Lisa Dunn.

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

**I.61 52.237-3 CONTINUITY OF SERVICES (JAN 1991)**

(a) The Contractor recognizes that the services under this contract are vital to the Government and must be continued without interruption and that, upon contract expiration, a successor, either the Government or another contractor, may continue them. The Contractor agrees to --

(1) Furnish phase-in training; and

(2) Exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.

(b) The Contractor shall, upon the Contracting Officer's written notice,

(1) furnish phase-in, phase-out services for up to 90 days after this contract expires and

(2) negotiate in good faith a plan with a successor to determine the nature and extent of phase-in, phase-out services required.

The plan shall specify a training program and a date for transferring responsibilities for each division of work described in the plan, and shall be subject to the Contracting Officer's approval. The Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the services called for by this contract are maintained at the required level of proficiency.

(c) The Contractor shall allow as many personnel as practicable to remain on the job to help the successor maintain the continuity and consistency of the services required by this contract. The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.

(d) The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs (i.e., costs incurred within the agreed period after contract expiration that result from phase-in, phase-out operations) and a fee (profit) not to exceed a pro rata portion of the fee (profit) under this contract.

**COMMERCE ACQUISITION REGULATION (CAR) CLAUSES INCORPORATED IN FULL TEXT**

**I.62 1352.208-70 RESTRICTIONS ON PRINTING AND DUPLICATING (APR 2010)**

(a) The contractor is authorized to duplicate or copy production units provided the requirement does not exceed 5,000 production units of any one page or 25,000 production units in the aggregate of multiple pages. Such pages may not exceed a maximum image size of 10-3/4 by 14-1/4 inches. A "production unit" is one sheet, size 8-1/2 x 11 inches (215 x 280 mm), one side only, and one color ink. Production unit requirements are outlined in the Government Printing and Binding Regulations.

(b) This clause does not preclude writing, editing, preparation of manuscript copy, or preparation of related illustrative material as a part of this contract, or administrative duplicating/copying (for example, necessary forms and instructional materials used by the contractor to respond to the terms of the contract).

(c) Costs associated with printing, duplicating, or copying in excess of the limits in paragraph (a) of this clause are unallowable without prior written approval of the Contracting Officer. If the contractor has reason to believe that any activity required in fulfillment of the contract will necessitate any printing or substantial duplicating or copying, it shall immediately provide written notice to the Contracting Officer and request approval prior to proceeding with the activity. Requests will be processed by the Contracting Officer in accordance with FAR 8.802.

(d) The contractor shall include in each subcontract which may involve a requirement for any printing, duplicating, and copying in excess of the limits specified in paragraph (a) of this clause, a provision substantially the same as this clause, including this paragraph (d).

**I.63 1352.209-72 RESTRICTIONS AGAINST DISCLOSURE (APR 2010)**

(a) The contractor agrees, in the performance of this contract, to keep the information furnished by the Government or acquired/developed by the contractor in performance of the contract and designated by the Contracting Officer or Contracting Officer's Representative, in the strictest confidence. The contractor also agrees not to publish or otherwise divulge such information, in whole or in part, in any manner or form, nor to authorize or permit others to do so, taking such reasonable measures as are necessary to restrict access to such information while in the contractor's possession, to those employees needing such information to perform the work described herein, *i.e.*, on a "need to know" basis. The contractor agrees to immediately notify the Contracting Officer in writing in the event that the contractor determines or has reason to suspect a breach of this requirement has occurred.

(b) The contractor agrees that it will not disclose any information described in subsection (a) to any person unless prior written approval is obtained from the Contracting Officer. The contractor agrees to insert the substance of this clause in any consultant agreement or subcontract hereunder.

**I.64 1352.209-73 COMPLIANCE WITH THE LAWS (APR 2010)**

The contractor shall comply with all applicable laws, rules and regulations which deal with or relate to performance in accord with the terms of the contract.

**I.65 1352.233-70 AGENCY PROTESTS (APR 2010)**

(a) An agency protest may be filed with either: (1) The Contracting Officer, or (2) at a level above the Contracting Officer, with the appropriate agency Protest Decision Authority. See 64 FR 16,651 (April 6, 1999).

(b) Agency protests filed with the Contracting Officer shall be sent to the following address:

**Ms. Mona-Lisa Dunn, Contracting Officer**  
U.S. Department of Commerce  
Office of Acquisition Management  
Commerce Acquisition Solutions, Room 6521  
14th and Constitution Avenue, NW  
Washington, D.C. 20230  
Fax: 202-482-1470  
Email: mdunn@doc.gov

(c) Agency protests filed with the agency Protest Decision Authority shall be sent to the following address:

**Mr. Mark Langstein, Esquire**  
U.S. Department of Commerce  
Office of the General Counsel  
Contract Law Division--Room 5893  
Herbert C. Hoover Building  
14th Street and Constitution Avenue, NW  
Washington, D.C. 20230.  
FAX: (202) 482-5858

(d) A complete copy of all agency protests, including all attachments, shall be served upon the Contract Law Division of the Office of the General Counsel within one day of filing a protest with either the Contracting Officer or the Protest Decision Authority.

(e) Service upon the Contract Law Division shall be made as follows: U.S. Department of Commerce, Office of the General Counsel, Chief, Contract Law Division, Room 5893, Herbert C. Hoover Building, 14th Street and Constitution Avenue, NW., Washington, DC 20230. FAX: (202) 482-5858.

**I.66 1352.233-71 GAO AND COURT OF FEDERAL CLAIMS PROTESTS (APR 2010)**

(a) A protest may be filed with either the Government Accountability Office (GAO) or the Court of Federal Claims unless an agency protest has been filed.

(b) A complete copy of all GAO or Court of Federal Claims protests, including all attachments, shall be served upon (i) the Contracting Officer, and (ii) the Contract Law Division of the Office of the General Counsel, within one day of filing a protest with either GAO or the Court of Federal Claims.

(c) Service upon the Contract Law Division shall be made as follows: U.S. Department of Commerce, Office of the General Counsel, Chief, Contract Law Division, Room 5893, Herbert C. Hoover Building, 14th Street and Constitution Avenue, NW., Washington, DC 20230. FAX: (202) 482-5858.

**I.67 1352.237-71 SECURITY PROCESSING REQUIREMENTS - LOW RISK CONTRACTS (APR 2010)**

(a) Investigative Requirements for Low Risk Contracts. All contractor (and subcontractor) personnel proposed to be employed under a Low Risk contract shall undergo security processing by the Department's Office of Security before being eligible to work on the premises of any Department of Commerce owned, leased, or controlled facility in the United States or overseas, or to obtain access to a Department of Commerce IT system. All Department of Commerce security processing pertinent to this contract will be conducted at no cost to the contractor.

(b) Investigative requirements for Non-IT Service Contracts are:

- (1) Contracts more than 180 days – National Agency Check and Inquiries (NACI)
- (2) Contracts less than 180 days – Special Agency Check (SAC)

(c) Investigative requirements for IT Service Contracts are:

- (1) Contracts more than 180 days – National Agency Check and Inquiries (NACI)
- (2) Contracts less than 180 days – National Agency Check and Inquiries (NACI)

(d) In addition to the investigations noted above, non-U.S. citizens must have a background check that includes an Immigration and Customs Enforcement agency check.

(e) Additional Requirements for Foreign Nationals (Non-U.S. Citizens). Non-U.S. citizens (lawful permanent residents) to be employed under this contract within the United States must have:

- (1) Official legal status in the United States;
- (2) Continuously resided in the United States for the last two years; and
- (3) Obtained advance approval from the servicing Security Officer in consultation with the Office of Security headquarters.

(f) DoC Security Processing Requirements for Low Risk Non-IT Service Contracts. Processing requirements for Low Risk non-IT Service Contracts are as follows:

- (1) Processing of a NACI is required for all contract employees employed in Low Risk non-IT service contracts for more than 180 days. The Contracting Officer's Representative (COR) will invite the prospective contractor into e-QIP to complete the SF-85. The contract employee must also complete fingerprinting.
- (2) Contract employees employed in Low Risk non-IT service contracts for less than 180 days require processing of Form OFI-86C Special Agreement Check (SAC), to be processed. The Sponsor will forward a completed Form OFI-86C, FD-258, Fingerprint Chart, and Credit Release Authorization to the servicing Security Officer, who will send the investigative packet to the Office of Personnel Management for processing.
- (3) Any contract employee with a favorable SAC who remains on the contract over 180 days will be required to have a NACI conducted to continue working on the job site.
- (4) For Low Risk non-IT service contracts, the scope of the SAC will include checks of the Security/Suitability Investigations Index (SII), other agency files (INVA), Defense Clearance Investigations Index (DCII), FBI Fingerprint (FBIF), and the FBI Information Management Division (FBIN).
- (5) In addition, for those individuals who are not U.S. citizens (lawful permanent residents), the Sponsor may request a Customs Enforcement SAC on Form OFI-86C, by checking Block #7, Item I. In Block 13, the Sponsor should enter the employee's Alien Registration Receipt Card number to aid in verification.
- (6) Copies of the appropriate forms can be obtained from the Sponsor or the Office of Security. Upon receipt of the required forms, the Sponsor will forward the forms to the servicing Security Officer. The Security Officer will process the forms and advise the Sponsor and the Contracting Officer whether the contract employee can commence work prior to completion of the suitability determination based on the type of work and risk to the facility (i.e., adequate controls and restrictions are in place). The Sponsor will notify the contractor of favorable or unfavorable findings of

the suitability determinations. The Contracting Officer will notify the contractor of an approved contract start date.

(g) Security Processing Requirements for Low Risk IT Service Contracts. Processing of a NACI is required for all contract employees employed under Low Risk IT service contracts.

- (1) Contract employees employed in all Low Risk IT service contracts will require a National Agency Check and Inquiries (NACI) to be processed. The Contracting Officer's Representative (COR) will invite the prospective contractor into e-QIP to complete the SF-85. Fingerprints and a Credit Release Authorization must be completed within three working days from start of work, and provided to the Servicing Security Officer, who will forward the investigative package to OPM.
- (2) For Low Risk IT service contracts, individuals who are not U.S. citizens (lawful permanent residents) must undergo a NACI that includes an agency check conducted by the Immigration and Customs Enforcement Service. The Sponsor must request the ICE check as a part of the NAC.

(h) Notification of Disqualifying Information. If the Office of Security receives disqualifying information on a contract employee, the Sponsor and Contracting Officer will be notified. The Sponsor shall coordinate with the Contracting Officer for the immediate removal of the employee from duty requiring access to Departmental facilities or IT systems. Contract employees may be barred from working on the premises of a facility for any of the following reasons:

- (1) Conviction of a felony crime of violence or of a misdemeanor involving moral turpitude.
- (2) Falsification of information entered on security screening forms or of other documents submitted to the Department.
- (3) Improper conduct once performing on the contract, including criminal, infamous, dishonest, immoral, or notoriously disgraceful conduct or other conduct prejudicial to the Government regardless of whether the conduct was directly related to the contract.
- (4) Any behavior judged to pose a potential threat to Departmental information systems, personnel, property, or other assets.

(i) Failure to comply with security processing requirements may result in termination of the contract or removal of contract employees from Department of Commerce facilities or denial of access to IT systems.

(j) Access to National Security Information. Compliance with these requirements shall not be construed as providing a contract employee clearance to have access to national security information.

(k) The contractor shall include the substance of this clause, including this paragraph, in all subcontracts.

**I.68 1352.242-70 POSTAWARD CONFERENCE (APR 2010)**

A post award conference with the successful Offeror may be required. If required, the Contracting Officer will contact the contractor within 10 days of contract award to arrange the conference.

**I.69 1352.246-70 PLACE OF ACCEPTANCE (APR 2010)**

(a) The Contracting Officer or the duly authorized representative will accept supplies and services to be provided under this contract.

(b) The place of acceptance will be:  
U.S Department of Commerce – NTIA  
Office of International Affairs  
1401 Constitution Avenue, NW,  
Room 4701  
Washington, DC 20230

**I.70 1352.270-70 PERIOD OF PERFORMANCE (APR 2010)**

(a) The base period of performance of this contract is from October 1, 2012 through September 30, 2015. If an option is exercised, the period of performance shall be extended through the end of that option period.

(b) The option periods that may be exercised are as follows:

| <b>Period</b> | <b>Start Date</b> | <b>End Date</b>    |
|---------------|-------------------|--------------------|
| Option I      | October 1, 2015   | September 30, 2017 |
| Option II     | October 1, 2017   | September 30, 2019 |

(c) The notice requirements for unilateral exercise of option periods are set out in FAR 52.217-9 (see Paragraph I.59 above).

# Internet Assigned Numbers Authority (IANA)

U.S. Department of Commerce,  
National Telecommunications and  
Information Administration

## Volume I – Technical Proposal

Solicitation Number: SA1301-12-RP-0043  
May 31, 2012



Submitted to:  
Ms. Mona-Lisa Dunn  
U.S. Department of Commerce  
Office of Acquisition Management  
Commerce Acquisition Solutions, Room 6521  
14th and Constitution Avenue, NW  
Washington, D.C. 20230







May 31, 2012

Ms. Mona-Lisa Dunn  
Contracting Officer  
United States Department of Commerce  
Office of Acquisition Management  
Commerce Acquisition Solutions, Room 6521  
14<sup>th</sup> and Constitution Avenue, N. W.  
Washington, D. C. 20230

Reference: Request for Proposal (RFP) Number SA1301-12-RP-0043

Subject: Submission of Proposal

Dear Ms. Dunn:

The Internet Corporation for Assigned Names and Numbers (“ICANN”) submits the enclosed proposal in response to the above-captioned solicitation to perform technical services known as the Internet Assigned Numbers Authority (“IANA”) Functions. The proposal is submitted in three (3) originals, i.e. one original proposal with three original signatures, and one (1) copy. This proposal is valid for ninety (90) days through August 29, 2012. As the incumbent contractor, ICANN has a strong knowledge and familiarity with the IANA Functions and has all the necessary technical personnel, materials, equipment and facilities to perform the requirements of the solicitation.

ICANN is a not-for-profit public benefit corporation organized under the laws of the State of California. The Headquarters of ICANN is currently located in 4676 Admiralty Way, Suite 330, Marina del Ray, California. As of June 18, 2012, ICANN’s Headquarters will move to 12025 Waterfront Drive, Suite 300, Playa Vista, CA 90094-2536. The IANA work will be performed at ICANN’s Headquarters under the resultant contact.

This proposal consists of two volumes and sections in binders with dividers clearly indicating each section. Volume 1, Technical Proposal, includes the technical and management approach to executing the IANA Functions; all certifications and documents that will be used to perform the IANA Functions requirements; and resumes of key personnel. Volume II, Financial Information and Project Funding Strategy, includes the partially executed Standard Form 33, Solicitation, Offer and Award, Standard Form 30, Amendment of Solicitation, Representations, Certifications and Other Statements Of Offerors from Section K of the RFP; the audited financial statements; and a project funding plan that describes the sources of funds that will be used to cover the costs of providing the IANA Functions

|                       |   |                             |            |                          |                          |
|-----------------------|---|-----------------------------|------------|--------------------------|--------------------------|
| <b>Washington, DC</b> | <b>1101 New York Avenue NW, Suite 930</b> | <b>Washington, DC 20005</b> | <b>USA</b> | <b>T +1 202 570 7240</b> | <b>F +1 202 789 0104</b> |
| Brussels              | 6 Rond Point Schuman, Bt. 5               | B-1040 Brussels             | BELGIUM    | T +32 2 234 7870         | F +32 2 234 7848         |
| Marina del Rey        | 4676 Admiralty Way, Suite 330             | Marina del Rey, CA 90292    | USA        | T +1 310 823 9358        | F +1 310 823 8649        |
| Sydney                | Level 2, 48 Hunter Street                 | Sydney NSW 2000             | AUSTRALIA  | T +61 2 8236 7900        | F +61 2 8236 7913        |



requirements. Each volume includes all certifications, documents, reports and/or templates that ICANN proposes to use in fulfilling the requirements of the contract as well as the resumes of the ICANN key personnel that will perform and/or manage the requirements of the contract.

All primary operations of the IANA requirement will be performed within the continental United States at the above address for the entire life cycle of the resultant contract and at no cost to the Federal Government. ICANN is the incumbent contractor under contract number SA131-06-C-N0048. We have performed those requirements well and have received several complimentary evaluations. ICANN intends to use the same personnel on the resultant contract to continue its exemplary performance. ICANN will not charge any fees to the users of the IANA services for the life cycle of the contract.

ICANN is and will be a responsible contractor to the Federal government because (1) it has adequate financial resources to perform the contract; (2) it has the experience and capabilities to provide the required services in a timely and satisfactory manner to users under the contract; (3) it has a demonstrated record of performance; (4) it has performed the IANA functions with integrity and according to sound business ethics; and (5) it has the organization, experience, technical skills, accounting, and system of internal controls to provide quality service to third parties under a resultant contract.

ICANN certifies that it does not have an Organizational Conflict of Interest ("OCI"). Notwithstanding its' incumbency, ICANN has not obtained nor has it been exposed to unequal access to nonpublic information. ICANN has a competitive advantage by reason of its work on the current contract but it has not been furnished nor had access to any proprietary or source selection sensitive information because it did not participate in any way in the development of the reference RFP. Furthermore, ICANN did not provide any information to the government that would ensure an award of a resultant contract to itself. In addition, there are no covered employees who are performing an inherently governmental function requiring a financial disclosure statement, so there is no personal conflict of interest. Finally, ICANN has not provided any biased information to the government.

ICANN has prepared a list of Assertions that identify the Intellectual Property that was developed exclusively at private expense that will be used in the resultant contract and to which ICANN will retain title. In the event that ICANN develops a subject invention during the course of performance of the resultant contract, it will furnish written disclosure to the Contracting Officer within 60 days of the date of conception of the invention.

ICANN is a responsible contractor that is providing a proposal in compliance with the Solicitation. ICANN has the expertise and qualifications to provide the highest quality IANA services

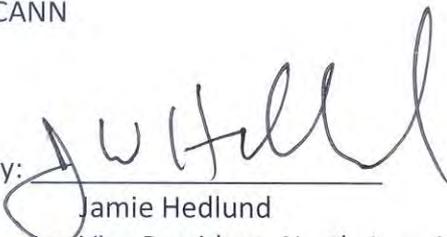


representing the best value to the Federal government and to the third party users of the services. ICANN is keenly aware of its responsibility and accountability to the global Internet community and is constantly working to affirm this obligation, and will continue to do so under the resultant contract. ICANN continues to invest in a Business Excellence Program, based on the globally recognized standard EFQM, to assess what it is doing well and where improvement in the performance of the IANA functions may be achieved.

The Standard Form 33 Solicitation, Offer, and Award, and the Standard Form 30, Amendment of Solicitation, signed by Mr. Rod Beckstrom, President and CEO of ICANN, who is authorized to bind and commit the company, is included in Volume II, immediately following this cover letter.

Thank you for your consideration of the enclosed proposal. Should you have any questions or concerns, please do not hesitate to contact me at (202) 570-7240, or by e-mail at [jamie.hedlund@icann.org](mailto:jamie.hedlund@icann.org).

Best regards,  
ICANN

By:   
\_\_\_\_\_  
Jamie Hedlund  
Vice President, North America



**Internet Assigned Numbers Authority (IANA)  
U.S. Department of Commerce, National Telecommunications  
and Information Administration**

**Volume I – Technical Proposal  
Solicitation Number: SA1301-12-RP-0043  
May 31, 2012**

Submitted to:  
Ms. Mona-Lisa Dunn  
U.S. Department of Commerce  
Office of Acquisition Management  
Commerce Acquisition Solutions, Room 6521  
14th and Constitution Avenue, NW  
Washington, D.C. 20230

Submitted by:  
Mr. Jamie Hedlund  
VP, North America  
The Internet Corporation for Assigned Names and Numbers (ICANN)  
1101 New York Avenue, Suite 930  
Washington, DC 20005



This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed—in whole or in part—for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of—or in connection with—the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in all sheets of this proposal.







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## Acronym List

|         |  |
|---------|--|
| AC      | Advisory Committees  |
| AD      | Actions for the Document   |
| AfNOG   | African Network Operators Group                                      |
| AFRINIC | Internet Numbers Registry for Africa                                 |
| AfTLD   | African Top Level Domains  |
| AICPA   | American Institute of Certified Public Accountants                   |
| ALAC    | At Large Advisory Committee  |
| ANSI    | American National Standards Institute                                |
| AoC     | Affirmation of Commitments   |
| APNIC   | Asia Pacific Network Information Center                              |
| APTLD   | Asia Pacific Top Level Domain  |
| ARIN    | American Registry for Internet Numbers                               |
| ARPA    | Address and Routing Parameter Area                                   |
| AS      | Address Space  |
| ASN     | Address Supporting   |
| ASO     | Address Supporting Organization                                      |
| CA      | Certification authorities  |
| ccNSO   | Country Code names Supporting Organization                           |
| CCOP    | Contingency and Continuity of Operations Plan                        |
| CENTR   | Council of European National Top Level Domain Registries             |
| CEO     | Chief Executive Officer  |
| CISSP   | Certified Information Systems Security Professional                  |
| CO      | Contract Office  |
| COR     | Contracting Officer's Representative                                 |
| CSCR    | Customer Service Complaint Resolution Process                        |
| CSR     | Certificate Signing Requests   |
| DNCRI   | Division of Networking and Communication Research and Infrastructure |
| DNS     | Domain Name System   |
| DNSSEC  | Domain Name System Security  |
| DoC     | Department of Commerce   |
| DPS     | DNSSES Policy Statement  |
| DS      | Delegation Signer  |
| DoC     | Department of Commerce   |
| DPS     | DNSSES Policy Statement  |
| ECML    | Electronic Commerce Language   |
| EPP     | Extensible Provisioning Protocol                                     |
| ETNO    | European Telecommunications Network Operators                        |
| ETSI    | European Telecommunications Standards Institute                      |
| FAR     | Federal Acquisition Regulation                                       |
| FCFS    | First Come First Served  |
| FISMA   | Federal Information Security Management Act                          |

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|        |   |
|--------|---|
| FNOI   | Further Notice of Inquiry                           |
| GAC    | Government Advisory Committee                       |
| GNSO   | Generic Names Supporting Organization               |
| GSI    | Generic Signing Infrastructure                      |
| HSM    | Hardware Security Modules                           |
| HTML   | Hyper Text Markup Language                          |
| HTTPS  | Hypertext Transfer Protocol Suite Secure            |
| I-D    | IPS Documents                                       |
| IAB    | Internet Architecture Board                         |
| IANA   | Internet Assigned Numbers Authority                 |
| IAOC   | IETF Administrative Oversight Committee             |
| IASA   | IETF Administrative Support Activity                |
| IC     | Internet Corporation                                |
| ICANN  | Internet Corporation for Assigned Names and Numbers |
| ICP    | Internet Coordination Policy                        |
| ID     | Internet Draft                                      |
| IDN    | Internationalized Domain Names                      |
| IESG   | Internet Engineering Steering Group                 |
| IETF   | Internet Engineering Task Force                     |
| IKOS   | ICANN KSK Operations Security                       |
| INR    | Internet Number Resource                            |
| IP     | Internet Protocol                                   |
| IPS    | IANA Project Specialist                             |
| IRSG   | Internet Research Steering Group                    |
| IRTF   | Internet Research Task Force                        |
| ISC    | Internet Systems Consortium                         |
| ISMS   | Information Security Management System              |
| ISO    | International Organization for Standardization      |
| ISOC   | Internet Society                                    |
| ISP    | Internet Service Providers                          |
| ITAC   | Internet Technical Advisory Committee               |
| ITAD   | Internet Technical Advisory                         |
| ITU    | International Telecommunication Union               |
| KPI    | Key Performance Indicators                          |
| KSK    | Key Signing Key                                     |
| KSR    | Key Signing Request                                 |
| LACNIC | Latin American Network Information Center           |
| LACTLD | Latin American and Caribbean TLD Association        |
| MENOG  | Middle East Network Operators Group                 |
| MIME   | Multipurpose Internet Mail Extensions               |
| MOU    | Memorandum of Understanding                         |
| N/A    | Not Applicable                                      |
| NANOG  | North American Network Operations Group             |

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|        |  |
|--------|--|
| NCC    | Network Coordination Center                                |
| NIST   | National Institute of Standards and Technology             |
| NOI    | Notice of Inquiry  |
| NRM    | Number Resources Manager                                   |
| NRO    | Number Resources Organization                              |
| NS     | Name Server  |
| NSF    | National Science Foundation                                |
| NSFNET | National Science Foundation Network                        |
| NSRC   | Network Startup Resource Center                            |
| NTIA   | National Telecommunications and Information Administration |
| NTT    | Nippon Telegraph and Telephone Corporation                 |
| OECD   | Organization for Economic Co Development                   |
| OFAC   | Office of Foreign Assets Control                           |
| PCH    | Packet Clearing House                                      |
| PDF    | Portable Document Format                                   |
| PDP    | Policy Development Program                                 |
| PEN    | Private Enterprise Number                                  |
| PGP    | Pretty Good Privacy  |
| PM     | Program Manager  |
| PMA    | Policy Management Authority                                |
| POC    | Point of Contact   |
| PPM    | Protocol Parameter Manager                                 |
| QNAME  | Qualified Name   |
| RALO   | Regional at Large Organizations                            |
| RFC    | Requests for Comments                                      |
| RFP    | Request for Proposal                                       |
| RIR    | Regional Internet Registries                               |
| RR     | Registries   |
| RRSet  | Resource Record Set  |
| RRSIG  | Resource Record Signature                                  |
| RSSAC  | Root Server System Advisory Committee                      |
| RT     | Requester Time   |
| RZ     | RZ ZSK   |
| RZM    | Root Zone Management                                       |
| S/MIME | Secure/Multipurpose Internet Mail Extension                |
| SANOG  | South Asian Network Operators Group                        |
| SDLC   | Software Development Life Cycle                            |
| SHA    | Secure Hash Algorithm                                      |
| SKR    | Signal Key Response  |
| SLA    | Service Level Agreement                                    |
| SO     | Supporting Organizations                                   |
| SOA    | Statement of Authority                                     |
| SOW    | Statement of Work  |

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|        |   |
|--------|---|
| SSAC   | Security and Stability Advisory Committee                 |
| SSL    | Secure Sockets Layer                                      |
| TCP    | Transmission Control Protocol                             |
| TCR    | Trusted Community Representative                          |
| TLD    | Top Level Domain  |
| TLG    | Technical Liaison Group                                   |
| TLS    | Technical Liaison   |
| U.S.   | United States   |
| UDP    | User Datagram Protocol                                    |
| UK     | United Kingdom  |
| URI    | Uniform Resource Identifier                               |
| URL    | Uniform Resource Locator                                  |
| VP     | Vice President  |
| VPN    | Virtual Private Network                                   |
| WEIRDS | WHOIS-based Extensible Internet Registration Data Service |
| WG     | Working Group   |
| WGC    | Working Group Chair                                       |
| ZSK    | Zone Signing Key  |

### Cross Reference Matrix

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| 4   | 4.0                     | Documentation Demonstrating Fulfillment of Mandatory Factor |               | L.6             | M.3             |

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## EXECUTIVE SUMMARY

For more than a decade, the Internet Corporation of Assigned Names and Numbers (ICANN) has performed the Internet Assigned Numbers Authority (IANA) Functions on behalf of the National Telecommunications and Information Administration (NTIA), an agency within the U.S. Department of Commerce (DoC). A major NTIA activity is promoting the stability and security of the Internet’s Domain Name System (DNS) through its management of the IANA Functions Contract.

In seeking an organizational partner to perform the IANA Functions, the NTIA requires an established and trusted contractor with existing close and constructive relationships with the multistakeholder community, and a contractor relied on by the stakeholders to bring IANA Functions’ experienced personnel to support this program. Importantly, NTIA requires a contractor that presents the lowest possible risk.

Only ICANN offers NTIA a demonstrated track record of contributing professional support to all IANA Functions.

ICANN was established in 1998 as a not-for-profit, public benefit corporation organized under the laws of the State of California. ICANN has two primary functions: (1) to coordinate, at the top level, the global Internet’s systems of unique identifiers (names, numbers and protocol parameters) and (2) to operate as the private sector-led, multistakeholder organization responsible for bottom-up policy development reasonably and appropriately related to these technical functions. ICANN is dedicated to keeping the Internet secure, stable and interoperable.

ICANN has successfully performed the IANA Functions since December 24, 1998. Beginning in February 2000, and, most recently, in August 2006, the DoC entered into four successive agreements with ICANN to perform the IANA Functions. Over the past 13 years, ICANN enhanced the IANA Functions capabilities to include 11 assigned staff, a redundant systems infrastructure and incorporating improvements recommended by DNS stakeholders and our own internal experts.

The multistakeholder community supports ICANN’s selection and has indicated that we are highly competent in our provision of the IANA Functions. More than 70 of the responses to NTIA’s Notice of Inquiry (NOI) and Further Notice of Inquiry (FNOI) urged ICANN’s continued performance of the IANA Functions contract. Many invoked the benefits of the close relationship between the successful administration of the IANA Functions and the other

**WHY CHOOSE ICANN?**

- ✓ **PROVEN AND UNIQUE CAPABILITY:** ONLY CONTRACTOR WITH 13+ YEARS PERFORMING IANA SUPPORT TO NTIA, PROVIDING ALL PERSONNEL, MATERIALS, EQUIPMENT, SERVICES AND FACILITIES
- ✓ **SHARED GOALS:** TRUSTED PARTNERSHIP ESTABLISHED BETWEEN NTIA AND ICANN ON IANA FUNCTIONS PROGRAM OVER FOUR CONTRACTS AND 20 AMENDMENTS
- ✓ **PRIME CONTRACTOR PERFORMING AT NO:** COST TO GOVERNMENT AND DELIVERING SECURE AND STABLE MANAGEMENT OF GLOBAL INTERNET’S SYSTEMS OF UNIQUE IDENTIFIERS
- ✓ **CONTINUITY:** ICANN LEVERAGES COMPETENCIES GARNERED UNDER CURRENT IANA FUNCTIONS CONTRACT
- ✓ **PM AND KEY PERSONNEL:** SUPPORTED BY STAFF WITH AN AVERAGE OF 5+ YEARS OF EXPERIENCE PERFORMING IANA FUNCTIONS IN ALL EIGHT SOW FUNCTIONAL AREAS

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capabilities within ICANN. The ICANN community support strongly attests to ICANN’s success in fulfilling the IANA Functions and believes it is the best choice moving forward.

As the Prime Contractor, ICANN will perform all IANA Functions, providing a single Point of Contact (POC) to NTIA with ultimate accountability for successful contract execution and completion. ICANN will continue to bring NTIA competent organizational oversight, strong central contract management, and excellence in execution – all essential for successful contract performance. We have a demonstrated track record of providing practical solutions in performance of current IANA Functions Contract. ICANN is committed to retaining the skills and expertise garnered from the current IANA Functions staff, and to bringing new and relevant technology to all interested and affected parties.

For this IANA Functions Contract, ICANN will provide highly qualified professionals to maintain the continuity and stability in the performance of the Functions, we will meet all Statement of Work (SOW) requirements and schedules, and we will respond in a timely manner to all requests. **Figure ES-1** summarizes NTIA’s requirements in the SOW with a brief description of the salient features of our offer, and the benefits that will accrue to NTIA and the multistakeholder community with an award to ICANN.

**Figure ES-1. ICANN Approach. NTIA benefits from continuity and stability brought by experienced personnel.**

| NTIA’S NEEDS  | ICANN PROPOSED APPROACH  | GENUINE, VALUE-ADDED BENEFITS TO NTIA AND STAKEHOLDERS   |
|---|--|--|
| <p><b>Continuity –</b><br/>                     Experienced team with proven technical expertise and in-depth understanding of IANA Functions</p>                                 | <ul style="list-style-type: none"> <li>ICANN provides highly competent support to the IANA Functions Contract with same/similar SOW requirements; ICANN will continue to provide same level of competence</li> <li>ICANN will capitalize and leverage on our extensive experience of over 13 years’ continuous performance of IANA Functions.</li> </ul>   | <ul style="list-style-type: none"> <li>High quality, responsive performance on day one</li> <li>No transition and performance risk</li> <li>Deep institutional knowledge</li> <li>Resident technical experts in DNS, Internet numbering, Domain Name System Security (DNSSEC), and Root Server Operations</li> </ul> |
| <p><b>Relationships –</b><br/>                     Established close, constructive working relationships with all interested and affected parties, including all stakeholders</p> | <ul style="list-style-type: none"> <li>ICANN will continue to meet monthly with the Internet Engineering Steering Group (IESG) and IANA Working Group.</li> <li>ICANN will continue to attend and participate annually in ten regularly scheduled meetings of the Regional Internet Registries (RIRs).</li> <li>Twice annually, ICANN will continue to participate in a workshop with the leadership of Internet Society (ISOC), American Registry for Internet Numbers (ARIN), The Internet Numbers Registry for Africa (AFRINIC), Latin American and Caribbean Internet Addresses Registry (LACNIC), Asia-Pacific Network Information Center (APNIC), Réseaux IP European Network</li> </ul> | <ul style="list-style-type: none"> <li>Quality</li> <li>Superior performance</li> <li>Existing high-quality relationships on day one</li> <li>Well-established communication channels with the multistakeholder community</li> </ul>   |

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| NTIA'S NEEDS  | ICANN PROPOSED APPROACH   | GENUINE, VALUE-ADDED BENEFITS TO NTIA AND STAKEHOLDERS   |
|---|---|--|
|   | <p>Coordination Center (RIPE NCC), Internet Architecture Board (IAB), Internet Engineering Task Force (IETF), and World Wide Web Consortium (W3C).</p> <ul style="list-style-type: none"> <li>• ICANN will continue to facilitate regular teleconferences of the Country Code Name Supporting Organization (ccNSO), Generic Name Supporting Organization (GNSO), At-Large Advisory Committee (ALAC), and Governmental Advisory Committee (GAC).</li> <li>• ICANN will continue to host face-to-face international public meetings annually where all interested and affected parties are invited to participate (currently three per year).</li> <li>• ICANN will attend the three meetings that are held annually by the IETF.</li> <li>• ICANN will meet regularly with the Root Zone Maintainer on technical matters and to support the end-to-end root zone process.</li> </ul> |  |
| <p><b>Stability –</b><br/>Ability to quickly place seasoned and qualified personnel to fill positions</p> | <ul style="list-style-type: none"> <li>• Experienced personnel will continue to support the contract.</li> <li>• Effective recruiting and employee retention programs; access to excellent personnel worldwide</li> <li>• Very low turnover</li> </ul>  | <ul style="list-style-type: none"> <li>• Full customer satisfaction</li> <li>• No risk transition</li> <li>• No loss of productivity</li> <li>• No learning curve</li> </ul> |
| <p><b>Quality –</b><br/>Proven, reliable management practices and procedures</p>                          | <ul style="list-style-type: none"> <li>• Led by proven IANA Functions PM, Elise Gerich, with 23 years of experience</li> <li>• Field-tested quality and management plans</li> </ul>   | <ul style="list-style-type: none"> <li>• Timely submission of deliverables</li> <li>• High quality performance</li> <li>• Quality management of team and products</li> </ul> |
| <p><b>Smooth Transition –</b><br/>Low risk, smooth transition</p>   | <ul style="list-style-type: none"> <li>• Already tested IANA Functions PM</li> <li>• Incumbent experienced staff in place</li> <li>• Established close and constructive relationships with stakeholders</li> <li>• Established headquartered in Los Angeles, California, where all IANA Functions are performed</li> </ul>  | <ul style="list-style-type: none"> <li>• Management continuity</li> <li>• Continuity – no learning curve</li> </ul>  |

Transitioning responsibilities as complex as the IANA Functions Contract adds risk. NTIA will have a truly seamless and low risk delivery of service, lacking any disruptions to the multistakeholder community by selecting an experienced operator. ICANN stands ready to continue and enhance support we currently provide.

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**PERFORMANCE CAPABILITY**

*ENHANCED BY ICANN'S IANA FUNCTIONS TEAM WITH SPECIALIZED SKILLS AND CORE COMPETENCIES HONED TO THE IANA FUNCTIONS CONTRACT STATEMENT OF WORK*

For more than 13 years, ICANN has performed the IANA Functions, delivering continuity, stability and expertise for every task and SOW requirement. We are ready to continue providing the dependable, high-quality support we currently deliver. We offer continuity and retention of institutional knowledge as we continue our close partnership with NTIA. ICANN possesses an intimate understanding of IANA Functions processes and procedures, and we have an in-depth understanding of the SOW requirements. We will leverage our experience and expertise to avoid mistakes, reduce program risks and fulfill the objectives of this contract in a timely and efficient manner achieving full customer satisfaction.

Our strong IANA Functions team has significant experience in the technical aspects of this contract and will continue to add value on the new contract. ICANN's IANA Functions Program Manager (PM), Liaison for Technical Protocol Parameters Assignment, Liaison for Root Zone Management, and Liaison for Internet Number Resource Management developed strong and healthy relationships with the interested parties identified in Section C.1.3 for more than six years on average. The Liaison for Technical Protocol Parameters does and will continue to meet monthly with the IETF-IANA Working Group. This group comprises the leaders of the Internet Technical community. Three times annually, the IANA Functions PM as well as the Liaison for the Technical Protocol Parameters Assignment meet and will continue to meet with the IAB Chair, Bernard Aboba; the IETF Chair, Russ Housley; IETF Administrative Director, Ray Pelletier; and other leaders of the Internet Engineering Steering Group (IESG). These regular meetings have forged a strong and collaborative working relationship between ICANN and this important technical stakeholder, the IETF.

The Liaison for Root Zone Management regularly attends and will attend regional Top-Level Domain meetings like CENTR and APTLD. In addition, the ccNSO has invited the Liaison for Root Zone Management to participate in meetings on a variety of topics. The invitations are a measure of the mutual respect between the leadership of the ccNSO, Lesley Cowley, Keith Davidson and Chris Disspain, and ICANN's Liaison of Root Zone Management. At the three annual ICANN meetings, the Liaison for Root Zone management has and will continue to meet with the ccNSO and to report on the status of the IANA Functions activities.

The Liaison for Internet Number Resource Allocation and the IANA Functions PM represent and will continue to represent ICANN at the ten annual meetings hosted by the five RIRs. At these meetings, the IANA Functions PM will attend face-to-face meetings with the CEOs of the RIRs. The CEOs with whom ICANN has established excellent relationships include John Curran, ARIN; Adiel Akplogan, AFRINIC; Axel Pawlik, RIPE NCC; Paul Wison, APNIC; and Raul Echeberria, LACNIC. In addition to the regular meetings with the leadership of the RIRs, ICANN today presents and will continue to present updates on the IANA Functions to the RIR membership at each of these ten meetings per year. The Address Supporting Organization (ASO) is one of ICANN's supporting organizations, and it is composed of members nominated by the RIRs. The

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Liaison for Internet Number Resource Allocation participates and will continue to participate in the monthly ASO teleconferences as an invited and respected subject matter expert.

*PAST PERFORMANCE*

*AN INDICATOR OF THE FUTURE EXCELLENCE: MORE THAN 13 YEARS OF EXPERIENCE AND QUALITY PERFORMING IANA FUNCTIONS*

ICANN is proud of our historical record supporting the IANA Functions since 1998 under the Transition Agreement with the University of Southern California and the subsequent agreements with the Department of Commerce entered in 2000, 2001, 2003, and 2006.

Since September 2006, ICANN has been managing the current IANA Functions with renewals on each anniversary through the term of five years. ICANN has performed the IANA Functions since 1998 on a no-fee basis. In recognition of ICANN's success in this endeavor, more than 70 responses to the NOI and FNOI supported ICANN's IANA Functions Contract renewal. ICANN will bring this accumulated wealth of experience, long-standing relationships with the IANA Functions stakeholders, and key expertise in the IANA Functions areas into the new contract and continue to perform this job with excellence. The experience of this seasoned team is shown in more detail in Section 3 Factor 3 Past Performance of this proposal. ICANN provides the best option for a no risk transition by retaining our experts in the relevant SOW areas.

In summary, ICANN eagerly anticipates continuing our partnership with the DoC and NTIA under the IANA Functions Contract. We are confident our technical approach, management plan and past performance—along with experienced, incumbent personnel—will provide value-added expertise to exceed the goals of providing the continuity and stability of the IANA Functions. We will continue to perform in a flexible and responsive manner to implement evolving policies and procedures. ICANN looks forward to bringing our proven capability to support NTIA and the IANA Functions in the future.

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## 1.0 Technical Approach, Factor 1 [L.6; M.8; C.1-8; Appendices 1,2; B.; E.2; F; H.8,9]

### ICANN'S TECHNICAL APPROACH FOR 1.0 EXCEEDS EVALUATION FACTORS

**Quality:** Results from the April 2012 Customer Survey indicates strong satisfaction with how ICANN provides the IANA Functions: 94% are very satisfied/satisfied with how we provide accurate registries, 93% are very satisfied/satisfied with how courteous we are in providing the services, 90% are very satisfied/satisfied with the ease of the registration process, 87% are very satisfied/satisfied with the quality of process documentation, and 84% are very satisfied/satisfied with the speed with which the requests are handled. In 2010, Assistant Secretary for Communication and Information, Larry Strickling, sent a letter of commendation to ICANN for our successful deployment of DNSSEC. In the letter Mr. Strickling said: "The dedicated and methodical approach taken by you and your team in effecting the implementation is commendable and a testament to the success of the deployment. Congratulations for seeing this effort through so effectively."

**Completeness:** ICANN carefully analyzed the programmatic and technical requirements of the IANA Functions effort. Accordingly, we addressed in this proposal all requisite areas of the SOW and Instructions. Throughout our discussion below, we present our thorough understanding of the tasks and offer a comprehensive complete approach and response to meeting or exceeding all evaluation criteria.

**Responsiveness:** ICANN's responsiveness during the term of the 2006 contract has shown continuous improvement, and ICANN will continue to bring high-quality and courteous delivery of the IANA Functions. ICANN has reported monthly on the delivery of the IANA Functions to the NTIA since 2006 and will continue to report on its performance of the IANA Functions. ICANN has delivered on its Service Level Agreements with the IETF as defined in the MoU between ICANN and the IETF.

**Relevance:** The IANA Functions are integral to maintaining a stable and interoperable Internet. ICANN initiated a Business Excellence Program for the IANA Department three years ago based on the internationally recognized European Standard EFQM. This program has introduced a systemic and sustainable process for continuous improvement. ICANN has adopted this methodology for the IANA Functions operations and will continue to follow this methodology for quality management.

**Credibility:** ICANN has demonstrated its reputation for effectiveness in building consensus for new programs. Examples of areas where ICANN has built consensus and was effective in the implementation are the Fast Track IDN Program and the Signing of the Root Zone (DNSSEC). The IDN Fast Track Program was a cooperative activity with the ccNSO and the GAC to introduce Top-Level Domain names in non-Latin scripts. The deployment of DNSSEC was the result of cooperation between ICANN, IETF, NTIA, and Verisign. ICANN is recognized for our technical expertise and has been selected to chair IETF working groups. Being chosen as a Working Group Chair (WGC) demonstrates the respect shown by the technical community to ICANN. ICANN has been invited to speak at GOIPv6, RSA conferences, Regional Internet Registry meetings, Network Operator meetings such as NANOG and MENOG, and as technical advisors at ITU IPv6 and IDN meetings. A partial list of ICANN's employees who have been invited speakers at the various events include: Elise Gerich, Jeff Moss, Whit Diffie, Joe Abley, Kim Davies, Leo Vegoda, Michelle Cotton, Naela Sarras, and Mehmet Ackin.

The Internet Corporation for Assigned Names and Numbers (ICANN) offers the National Telecommunications and Information Administration (NTIA) and the multistakeholder community the demonstrated capabilities to successfully maintain continuity and stability of the Internet Assigned Numbers Authority (IANA) Functions. We are the only organization that fully understands the unique operational characteristics of IANA Functions.

ICANN has served as the Prime Contractor on the current IANA Functions contract since September 2006. The Department of Commerce (DoC) and NTIA have demonstrated their full

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confidence in ICANN with renewals on each anniversary through the term of five years. Additionally, the DoC granted two extensions to ICANN in 2011 and 2012 as the current solicitation process was underway. Including the 2006 contract, ICANN has provided continuous and stable technical and management support for the IANA Functions since 1998 on a no-fee basis. In recognition of ICANN's success, more than 70 positive responses from international governments and other organizations to the Notice of Inquiry (NOI) and Further Notice of Inquiry (FNOI) urging ICANN's continued performance of the IANA Functions Contract. ICANN will bring this accumulated wealth of experience and long-standing relationships with the IANA Functions customers and stakeholders and key expertise in the IANA Functions areas into the new contract and continue to perform this job with excellence.

We are also the only organization with the experience and knowledge necessary to ensure continuity of service with no disruption. Our past performance demonstrates a strong emphasis on stakeholder satisfaction. ICANN remains prepared to provide the highest quality support by continuing our constructive working relationships with all interested and affected parties. ICANN is proficient in implementing policies, operational doctrine, techniques, and procedures related to the IANA Functions. ICANN is well positioned to continue providing NTIA the technical support specified in the SOW, is intimately familiar with these requirements and demonstrates a success record executing all requirements under the current contract. We are prepared to continue our successful record of compliance with all the general requirements of the contract.

Per Section M.8, Factor 1, ICANN will comply with the instructions to maintain the current services and not to expand the scope of the IANA Functions.

The following sections of the proposal describe in detail (step-by-step) ICANN's ability to understand and perform all the SOW requirements (SOW C.1 through C.8) and achieve the objects of the IANA Functions contract.

## 1.1 Background [L.6; M.8; C.1]

ICANN was incorporated in September 1998 as the not-for-profit organization responsible for coordinating, at the overall level, the global Internet's systems of unique identifiers and ensuring the stable and secure operation of the Internet's unique identifier systems. ICANN has two primary functions: The first is to coordinate, at the top level, the global Internet's systems of unique identifiers (names, numbers and protocol parameters). The second is to operate as the private sector-led, multistakeholder organization responsible for bottom-up policy development reasonably and appropriately related to these technical functions. For a detailed discussion of ICANN's history, please see Section 2.3 of this proposal.

ICANN's Bylaws limit activities to those matters within ICANN's mission requiring or significantly benefiting from global coordination and, to the extent feasible and appropriate, delegating coordination functions to or recognizing the policy role of other responsible entities that reflect the interests of affected parties. The Bylaws also direct ICANN to seek and support broad, informed participation reflecting the functional, geographic and cultural diversity of the Internet at all levels of policy development and decision-making.

Two important indicators of satisfaction with ICANN's performance are our follow-on work and commendations to the organization. NTIA has demonstrated full confidence in our performance by entrusting the IANA Functions to ICANN through four contracts and 20 amendments. We work hard to develop trusted and lasting relationships with our many stakeholders. ICANN regularly receives kudos from customers and stakeholders:

*"We congratulate ICANN on the very impressive performance of the IANA function, the steady progress on DNSSec and the overall improvements to the ICANN process especially the better organization of meetings and associated preparatory papers."*

– Richard Currey, CEO of InternetNZ, in a letter to Rod Beckstrom, October 2009

*"The [IETF IANA WG] monthly calls were once quite important and had a lot to do. Nowadays, there are any fewer issues, and the calls are shorter and often have few participants. I view that as a sign of goodness. People presumably feel like things are generally in good shape and there isn't a need to discuss such. In short, the IETF is largely happy with the reports and the information they contain. And more importantly, with the overall quality of IANA service to the IETF."*

– Thomas Narten, IETF Liaison to the ICANN Board,  
in e-mail to the Board IANA Committee, December 2009

*"The IAOC [IETF Administrative Oversight Committee] extends its thanks and appreciation for the exceptional performance of IANA on behalf of the IETF over the last few years. This performance has been marked by its professionalism, cooperation, open communications and can-do spirit. Your capable staff and ongoing investment in improving the robustness of your infrastructure have contributed to our successful partnership."*

– Ray Pelletier in e-mail to Elise Gerich and Rod Beckstrom, November 2010

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*"I am taking this opportunity to place on record my sincere gratitude for an excellent experience in the handling by your Root Management Team of our recent request for nameserver changes for .DM [...] The first acknowledgement of our submission and all communications thereafter were professional, clearly instructional and most remarkably, expeditiously handled."*

– H.E. Jennifer M. Aird in e-mail to Kim Davies, August 2011

### **1.1.1 Collaboration with Interested and Affected Parties [C.1.3]**

No one person, organization or government controls the Internet. Like an ecosystem, the Internet has many different interested and affected parties and multi-layered interdependencies. ICANN will continue to play a high-level, important but limited role in how the Internet is organized. ICANN will continue to coordinate its efforts with several other independent entities or groups that also play important roles in the Internet ecosystem and are dependent on satisfactory performance of the IANA Functions. These independent entities are as follows:

- **Internet Architecture Board (IAB):** The IAB is a committee of the Internet Engineering Task Force (see definition below). Its responsibilities include oversight of the architecture for protocols and procedures used by the Internet. IAB's major role is long-range planning and coordination between different areas of IETF activity.
- **Internet Engineering Steering Group (IESG):** A management committee of the Internet Engineering Task Force (see definition below).
- **Internet Engineering Task Force (IETF):** The IETF develops and designs standards for the Internet system. It is international and decentralized and has many different working groups on various technical issues.
- **Internet Research Steering Group (IRSG):** A management committee of the Internet Research Task Force.
- **Internet Research Task Force (IRTF):** An unincorporated association overseen by the Internet Architecture Board.
- **Internet Service Providers (ISPs):** ISPs are companies that provide subscribers with access to the Internet.
- **Internet Society (ISOC):** ISOC operates the .org top-level domain registry and does Internet capacity development in developing countries. It supports the IETF.
- **Number Resources Organization (NRO):** The Regional Internet Registries (see definition below) formed the NRO to protect the unallocated Number Resource pool, to promote and protect the bottom-up policy development process and to act as a focal point for Internet community input into the RIR system.
- **Regional Internet Registries (RIRs):** These non-profit organizations distribute Internet Number Resources regionally to Internet service providers and local Internet registries. There are currently five RIRs: African Network Information Centre (AfriNIC), Asia Pacific Network Information Centre (APNIC), American Registry for Internet Numbers (ARIN), Latin American and Caribbean Internet Addresses Registry (LACNIC), and Réseaux IP Européens Network Coordination Centre (RIPE NCC).

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- **Registrars:** Companies that assist individuals and organizations in registering a new domain name within higher-level domain spaces. Registrars sell domain name registrations for the registries.
- **Registries:** Each registry has a listing of each domain name registered in that registry. There are two types: generic top-level domain registries (such as .COM or .INFO) and country code top-level domain registries (such as .DE for Germany or .JO for Jordan).
- **Root Server Operators:** The root server operators publish the list of all top-level domains and respond to queries of what the proper network address is for each name. ICANN operates the L-root server, one of 13 domain name system root servers in the world.

As manager of Internet names and addresses, ICANN will continue to support and encourage broad representation from industry, governments, registries, registrars, commercial users, non-commercial users, and individual Internet users into its policy-making processes. This “multistakeholder model,” allows issues to develop from the “bottom-up” and resolve through consensus.

### ***Understanding the Requirement***

ICANN fully understands that close, constructive working relationships with all interested and affected parties is and will continue to be critical to the successful implementation of the IANA Functions and the continued evolution of the Domain Name System toward the goals of ensuring stability, competition, private bottom-up coordination and representation. ICANN will leverage and continue to grow strong, collaborative relationships with the IANA Functions stakeholders.

### ***Technical Approach***

Broadly stated, ICANN collaborates with these interested and affected parties as listed above—sometimes called the Internet community—in two key ways.

First, ICANN will continue to work with other Internet organizations, such as IETF, IAB and the RIRs as well as regional TLD operators’ groups, like the Council of European National Top-Level Domain Registries (CENTR). ICANN will also continue to implement the policies and standards developed by those groups. In some cases, a Memorandum of Understanding (MoU) details the parameters of the relationship. For example, ICANN has an MoU with the IETF that specifies that ICANN will assign and register Internet protocol parameters only as directed by the criteria and procedures specified in the Requests for Comments (RFCs), including proposed, draft and full Internet Standards and Best Current Practice documents and any other RFC that calls for ICANN assignment. The MoU between ICANN and IETF also specifies that ICANN will work with the IETF to develop any missing criteria or procedures over time and that ICANN will adopt these when approved by the IESG.

The second way ICANN will continue to collaborate with interested and affected parties is in facilitating the development of policies regarding matters within the scope of our mission. Following the bottom-up, consensus-driven policy development process, ICANN will remain a forum for all who share an interest in the IANA functions and the domain name system, including top-level domain operators and managers, governments and the Internet user community.

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ICANN's decentralized governance model will continue to place citizens, industry and governments on an equal level. Unlike more traditional top-down governance models, the multistakeholder model mimics the structure of the Internet itself—borderless and open to all. This ensures that everyone who uses the Internet has a voice in how it is governed.

**Close Constructive Working Relationship.** Part of the broader Internet ecosystem, ICANN as the IANA Functions provider will have a limited but important role in ensuring the stability and security of the Internet's domain name system. It is critical that the IANA Functions provider has close and constructive relationships with all affected and interested parties. ICANN, as the incumbent, has established and will maintain these relationships in performance of the IANA Functions. ICANN will implement policy developed by other organizations, such as employing technical protocol parameters policy developed by the IETF or policies for the operation of .ARPA developed by the IAB. ICANN will also facilitate the development of pertinent policy as it relates to our own mission through a bottom-up, consensus-driven process with interested and affected parties.

Working Groups will form around an issue and consider it from all angles, making decisions by consensus wherever possible. As in the past, these Working Groups will be open to everyone in ICANN's volunteer community. All Working Group discussions will be recorded and transcribed so that the public has full access to discussions and debate. Major documents and executive summaries will typically be translated into the five non-English United Nations languages.

Public comments will be sought at several stages in the policy development process to let interested community members provide their views on policy proposals and to ensure policy recommendations reflect the concerns and perspectives of the broader Internet community. Working Groups' decisions or recommendations will be considered first by each relevant Supporting Organization and then by the ICANN Board of Directors. The ICANN Board will have ultimate authority to approve or reject policy recommendations.

**ICANN Liaisons.** In addition to the strong working relationships already in existence between ICANN and the relevant groups, ICANN will appoint liaisons to the IETF, IAB, RIRs, and top-level domain operators and managers. Relationships will be fostered through face-to-face meetings, Working Groups and various forms of online collaboration. For example, ICANN has established and will continue to support an IETF-IANA Working Group that meets monthly to review service-level agreements and Requests for Comments that impact ICANN's performance of the IANA Functions. ICANN will continue to employ an integrated, multi-threaded approach towards maintaining constructive working relationships, taking time to hear each group's needs for operational support and other assistance they need in relation to effectively accessing the IANA Functions.

The IANA Functions stakeholders, broadly understood, include everyone who uses the Internet. In addition to the Internet stakeholders who are part of the ICANN structure, ICANN also maintains a strong working relationship with ISOC. In cooperation, ICANN and ISOC provide workshops to less developed regions, engage with government representatives to address key Internet governance issues, and coordinate announcements on key Internet milestones of importance to everyday users of the Internet. Many ISOC chapters have joined ICANN's At-

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Large community as At-Large Structures, further supporting the relationship between the two organizations.

ICANN will continue to attend operator meetings, such as African Network Operators Group (AfNOG) and South Asian Network Operators Group (SANOG), to liaise with ISPs and promote discussions of technical implementation issues that require community cooperation.

#### **1.1.1.1 ICANN model**

ICANN's consensus-driven, bottom-up, policy-making governance model is built on transparency, accountability, openness, inclusion, trust, and collaboration. It serves the global public interest. When all voices are heard, no single voice can dominate an organization. We will continue to support the multistakeholder model as the best means for engaging with the many parties both interested and affected by the performance of the IANA Functions.

The ICANN model comprises Supporting Organizations and Advisory Committees, which encompass communities directly benefiting from ICANN's management of the IANA Functions:

- ccTLD managers
- gTLD managers
- Internet engineers engaged in standards development
- Regional Internet Registries
- Root server operators
- Hardware, software, and routing engineers who rely on the unique identifiers in their day-to-day work
- ISP operators
- End users through At-Large and ALAC

Each of these groups will have a place in ICANN's policy development process—either through their own standards development organization that has agreements with ICANN or in one of ICANN's Supporting Organizations or Advisory Committees.

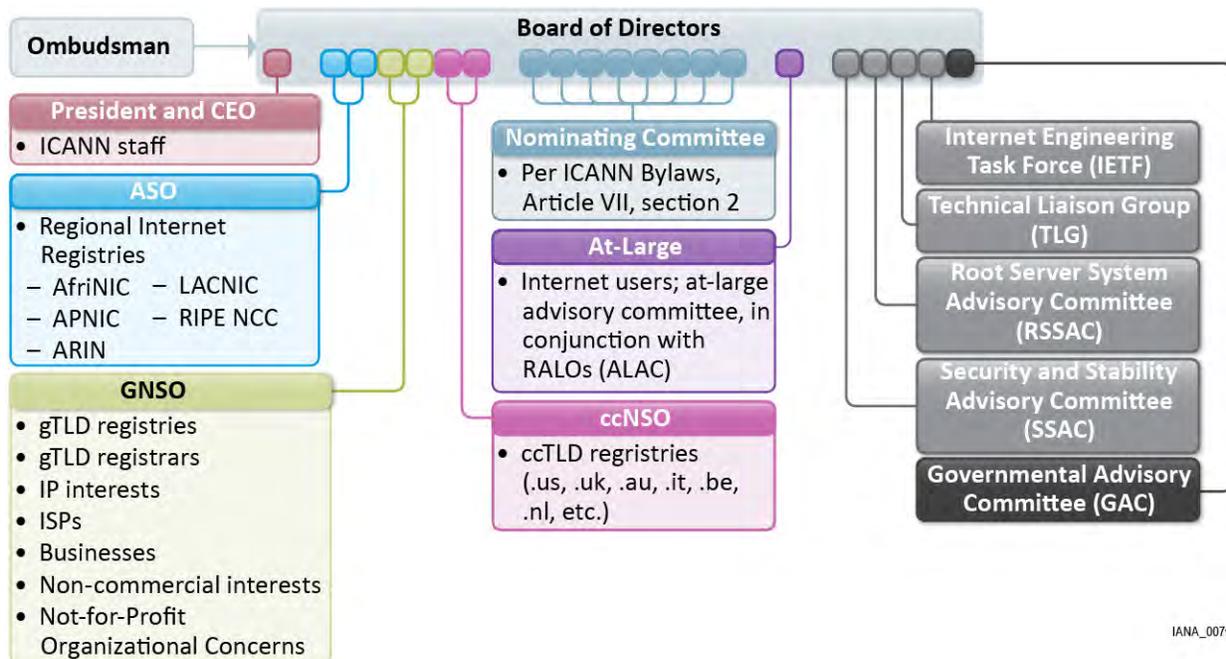
A key component of the model is the Ombudsman, an independent, impartial and neutral officer of ICANN. As an alternative dispute resolution practitioner for the ICANN community, the Ombudsman is available to help in disputes about fairness and process. This person has jurisdiction over problems or complaints about decisions, actions or inactions by ICANN, the Board of Directors or unfair treatment of a community member by ICANN, the Board or a constituency body.

Illustrating the importance of full participant involvement, ICANN's Board of Directors consists of 21 members, many drawn from the community directly. In addition to the voting role of ICANN's President and CEO, this includes seven voting members selected by the following ICANN Supporting Organizations and Advisory Committees:

- Two voting Board members are selected by the Address Supporting Organization (ASO), which comprises members of the Regional Internet Registries.

- Two voting Board members are selected by the Country Code Names Supporting Organization (ccNSO), which comprises those members representing country code top-level domain operators.
- Two voting members are selected by the Generic Names Supporting Organization (GNSO), which includes those members representing stakeholder groups and constituencies with business and policy interests in generic top-level domains.
- One voting member is selected by the At-Large, the primary organizational home within ICANN for individual Internet users.

Eight voting members of ICANN’s Board are selected by ICANN’s Nominating Committee, which comprises members of each of the ICANN stakeholder communities. See **Figure 1.1-1**.



**Figure 1.1-1. ICANN’s Multistakeholder Model**

The Board also has one non-voting Liaison from each of the following:

- Internet Engineering Task Force represents the engineers and developers engaged in protocol-parameter standards development.
- ICANN’s Governmental Advisory Committee (GAC) represents governments and economies as recognized by the UN ISO 3166 Maintenance Agency.
- ICANN’s Root Server System Advisory Committee (RSSAC) represents the root server operators.
- ICANN’s Security and Stability Advisory Committee (SSAC) is a group of DNS experts who provide guidance to ICANN on issues that may threaten the stability or security of the DNS system.
- The Technical Liaison Group (TLG) consists of four organizations: the European Telecommunications Standards Institute (ETSI), the International Telecommunications

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Union’s Telecommunication Standardization Sector (ITU-T), the World Wide Web Consortium (W3C), and the Internet Architecture Board (IAB). Annually, in rotation, one TLG organization appoints one non-voting liaison to the Board and one non-voting member to the Nominating Committee. (The IAB does not take a role in this rotation due to the participation of an IETF liaison.)

ICANN will work with each of these groups to facilitate their participation in the ICANN processes and to meet their IANA Functions requirements.

Certain issues regarding management of the IANA Functions are covered by formal agreements with the IETF or NRO or by an RFC (like the management guidelines and operational requirements for .ARPA as detailed in RFC 3172). For issues outside of those agreements and RFCs, ICANN-specific policy recommendations will be formed and refined through ICANN’s Supporting Organizations (SOs) and influenced by Advisory Committees (ACs)—all composed of volunteers from over 130 countries and territories—in a bottom-up, open and transparent process. Members of any SO and AC as well as the ICANN Board may raise an issue they believe requires policy development.

#### **1.1.1.2 Internet Engineering Task Force (IETF) and Internet Architecture Board (IAB)**

ICANN will continue to operate under the existing MoU with the IETF. This MoU sets out technical requirements for use in performance of the IANA function in assigning and registering Internet protocol parameters only as directed by the criteria and procedures specified in Requests for Comments (RFCs), including Proposed, draft and full Internet Standards and Best Current Practice documents and any other RFC that calls for IANA Actions. If there is no documentation for an existing registry, then ICANN will continue to assign and register Internet protocol parameters that have traditionally been registered, following past and current practice for such assignments, unless otherwise directed by the IESG. If in doubt or in case of a technical dispute, ICANN will seek and follow technical guidance exclusively from the IESG. Where appropriate the IESG will appoint an expert to advise ICANN. ICANN will work with the IETF to develop any missing criteria or procedures over time, which ICANN will adopt when so instructed by the IESG. In the event of a technical dispute between the ICANN and the IESG, both will seek guidance from the IAB, whose decision will be final.

Regarding Internet Number Resources policies, ICANN will continue to operate under the existing MoU with the Numbers Resource Organization (NRO), a group comprising five Regional Internet Registries. The MoU defines the NRO’s role in global policy development, providing recognition of other registries. The MoU also establishes that the NRO will fulfill the role, responsibilities and functions of the Address Supporting Organization (ASO) in advising the ICANN Board on Internet number resource allocation policy. This agreement ensures that the RIRs, an affected and interested party, have a voice in shaping relevant policy.

The IETF will continue to appoint a representative as a non-voting liaison to the ICANN Board of Directors. Thomas Narten has served as the IETF’s liaison to the ICANN Board for several years and actively participates in the IETF community as well as with the RIR communities.

As ICANN’s IANA Functions Liaison for Technical Protocol Parameters Assignment, Michelle Cotton will continue to lead the development of the excellent relationship ICANN maintains

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with the IETF. Ms. Cotton will continue as the IANA Liaison to the IESG and, as such, will participate in the IESG's fortnightly telechats and facilitate the relationship between ICANN and the IETF. Ms. Cotton will continue to build the trust she has developed over time with the IETF community by ensuring ICANN performs its protocol-parameter and Internet Draft (ID) review tasks ably, by making ICANN's IANA functions staff available at IETF meetings for consultation on open issues, and by working directly with the Request for Comment (RFC) Editor to provide introductory guidance to those who are new to writing RFCs.

ICANN's IANA Functions Program Manager and IANA Function Liaison to the IESG will discuss issues of common interest during regular meetings with the IAB chair, the IETF chair and the IETF Liaison to the ICANN Board, usually taking place during the three annual IETF meetings. The relationship between ICANN and the IETF is and will continue to be governed by a formal MoU from June 2000, published as RFC 2860. It is supplemented with an ICANN-IETF MoU Supplemental Agreement and includes a Service Level Agreement (SLA), which ICANN has met or exceeded 51 of the last 54 months, reviewed each year by the IETF's Administrative Oversight Committee. Finally, ICANN will continue to participate in the annual "I\*" (I-star) meeting of the senior leaders from the IAB, IETF, Internet Society (ISOC), NRO, RIRs, and W3C at which shared strategic issues are discussed.

#### **1.1.1.3 Regional Internet Registries (RIRs)**

In 2007, the five RIRs formed the NRO to conserve the unallocated Number Resource pool, promote and protect the bottom-up policy development process and act as a focal point for Internet community input into the Regional Internet Registries system. Each RIR conducts regional meetings where the participants develop number resource policy. ICANN's ASO brings the global number policy to the ICANN Board and community. Kuo-Wei Wu and Ray Plzak are the current ICANN Directors selected by the ASO.

Kuo-Wei Wu served on Asia-Pacific Network Information Center's executive council for 11 years and now chairs ICANN'S Board IANA Committee, which will continue to provide oversight of ICANN's performance of the IANA functions. Ray Plzak was President and CEO for nine years of the ARIN and the RIR for the United States, Canada and parts of the Caribbean and has served on ICANN's Board IANA Committee.

As ICANN's IANA Functions Liaison for Internet Number Resource Allocation, Leo Vegoda will maintain the excellent relationship ICANN maintains with the RIRs and NRO. He and other ICANN staff members will attend RIRs' open policy development meetings; attend the ASO Address Council's monthly meetings as observers; provide staff implementation impact analyses of global policy proposals on request; and engage in joint technical development work of interest to the RIRs, domain registries and others, such as the IETF WHOIS-based Extensible Internet Registration Data Service (WEIRDS) work towards developing a more versatile registration information system than the current WHOIS protocol. Being present at these meetings will allow ICANN to fully recognize the needs of the number resource community regarding the IANA Functions.

The relationship between ICANN and the NRO was formalized in November 2007 with an exchange of letters in which both parties reaffirmed their commitment to each other. This

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exchange of letters has been renewed and the strength of the relationship is evident in the statement of support the NRO offered on the 2007 Midterm Review of the United States Department of Commerce and the Internet Corporation for Assigned Names and Numbers Joint Project Agreement in which it described ICANN as “a stable and trustworthy organization.” In the 2009 NOI on the Assessment of the Transition of the Technical Coordination and Management of the Internet’s Domains Name and Addressing System, the NRO stated its “commitment to continue to work closely with ICANN through the ASO MoU and other agreements, to ensure and safeguard the bottom-up policy development process that has proven highly successful as the foundation of an open and transparent management of Internet numbering resources.” Finally, the March 2011 letter from the NRO to ICANN expresses the strongest possible faith in both ICANN and the model multistakeholder model ICANN implements.

These statements of support arise from the strong sense of satisfaction at the way in which the allocation of Internet Protocol (IP) address space and Autonomous System (AS) numbers has been handled over the period of the current IANA Functions contract. Clear request templates have been agreed to by RIRs and turnaround times are typically very fast and far exceed the RIRs’ operational needs.

#### **1.1.1.4 TLD Operators/Managers**

Two ICANN Supporting Organizations represent Top Level Domain (TLD) operators and those with a business or policy interest in TLDs within ICANN policy development: the Country Code Names Supporting Organization (ccNSO) for country code top-level domains and the Generic Names Supporting Organization (GNSO) for generic top-level domains.

The GNSO consists of four stakeholder groups, each with an interest in gTLD activities and policy.

- Registries Stakeholder Group representing all gTLD registries under contract to ICANN.
- Registrars Stakeholder Group representing all registrars accredited by and under contract to ICANN.
- Commercial Stakeholder Group representing the full range of large and small commercial entities of the Internet.
- Non-Commercial Stakeholder Group representing the full range of non-commercial entities of the Internet.

The ccNSO and GNSO are the ICANN Supporting Organizations that will continue to be responsible for, among other things, initiating development of the policies governing the management of top-level domain names. This includes the policies governing their delegation and redelegation, as well as the policies governing registration within the TLD space.

As ICANN’s IANA Functions Liaison for Root Zone Management, Kim Davies will continue to lead the work that has seen the strengthening of the relationship between ICANN and the TLD operators. This is partly a result of the way processing times for Root Zone Management requests have improved over the period of the current contract through implementing new

documentation, systems and methods. This has been done while demand for services has doubled.

On behalf of ICANN and as the IANA Functions Liaison for Root Zone Management, Mr. Davies has participated in technical capacity development work that is meant to spread the technical knowledge of the root zone and DNS to the broader Internet community. Mr. Davies will participate in this outreach to the TLD community both through attending regional TLD operators' groups, like CENTR and APTLD, and through teaching at DNS workshops. Workshops that are held in less developed regions are often done in cooperation with the Network Startup Resource Center (NSRC) as well as the African Network Operators Group (AfNOG). Collaboration with NSRC and AfNOG is another example of how ICANN has and will continue to work with other interested parties in fulfilling ICANN's purpose to improve the management of Internet names and numbers.

While gTLD operators have a contractual relationship with ICANN, no contractual relationship is or will be required for the operation of ccTLDs, which currently form the overwhelming majority of TLDs. Many ccTLD operators have voluntarily entered into accountability frameworks, exchanges of letters and other formal agreements with ICANN. As of May 15, 2012, 130 ccTLD operators have joined the ccNSO, the ICANN Supporting Organization for ccTLDs. In March 2011, in response to NTIA's Notice of Inquiry on the IANA Functions, the ccNSO wrote the following:

*IANA's work in managing the root zone is an essential part of ICANN. It is key to the interests and engagement of a large number of ccTLDs and is equally significant to many governments and stakeholders in the gTLD space. As such, ICANN's multistakeholder model and processes could be significantly undermined if the IANA functions were to be removed and managed by an entirely unrelated entity.*

Members, like auDA, supported the ccNSO's comments:

*auDA has been closely involved in the formulation of the ccNSO's response to the NTIA's call for comments on the IANA functions and fully supports the observations and recommendations contained within that submission.*

Similarly, the European Telecommunications Network Operators Association (ETNO), wrote the following:

*ETNO believes that management of the Internet Assigned Numbers Authority (IANA) functions should transition from a Government oversight contractual responsibility to that of the Internet Corporation for Assigned Names and Numbers (ICANN), as an independent organization, such transition taking place with the understanding that ICANN complies with the obligations set out under the Affirmation of Commitments.*

*ETNO believes that ICANN is the best placed body to oversee these functions, assuming that ICANN continues to comply with the obligations set out in the Affirmation of Commitments.*

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*ETNO agrees with the NTIA that policies and procedures developed by technical Internet communities, such as the Regional Internet Registries and the country code top-level domain (ccTLD) operators, have an impact on the performance of the IANA functions. These technical communities are fully represented within ICANN through the appropriate bodies (such as the Country Code Names Supporting Organisation). This representation demonstrates that the IANA function is an integral part of ICANN and that the necessary co-operation and co-ordination of a variety of technical groups is already in place.*

Bill Graham and Bruce Tonkin are the serving ICANN Board Directors selected by the GNSO; Chris Disspain and Mike Silber are those selected by the ccNSO. Bruce Tonkin is currently Chief Strategy Officer for Melbourne IT Limited, which was the first commercial administrator for the COM.AU namespace and one of the first five test-bed registrars when ICANN established registrar competition for the existing .COM/.NET/.ORG registry. Director Chris Disspain has been the Chief Executive Officer of .AU Domain Administration Ltd (auDA), a non-profit company that is the independent governing body/manager of the Australian Internet domain name space (.AU) and the policy body governing the DNS in Australia since October 2000. Director Mike Silber is from the .ZA Domain Name Authority and has served as Director of the Authority since its formation in 2004.

#### **1.1.1.5 Governments**

ICANN will continue to interact with governments in a variety of ways. Three key approaches include involving governments in ICANN through the Governmental Advisory Committee (GAC), reaching out to governments in various inter-governmental organizations and one-on-one meetings with governments. ICANN will continue to regularly provide briefings on various aspects of ICANN's execution of the IANA Functions.

Under ICANN's Bylaws, the GAC considers and provides advice on Internet policy matters as they relate to the concerns of governments, particularly where there may be an interaction between ICANN's policies and various laws and international agreements or where they may affect public policy issues. In Article XI, section 2.1.j, it states:

"The advice of the Governmental Advisory Committee on public policy matters shall be duly taken into account, both in the formulation and adoption of policies. In the event that the ICANN Board determines to take an action that is not consistent with the Governmental Advisory Committee advice, it shall so inform the Committee and state the reasons why it decided not to follow that advice. The Governmental Advisory Committee and the ICANN Board will then try, in good faith and in a timely and efficient manner, to find a mutually acceptable solution."

The GAC has engaged in dialogue—and will continue to do so—with ICANN's Board on issues such as the New gTLD Program. The New gTLD Program Applicant Guidebook reflects a number of revisions resulting from the intensive collaboration between the GAC and the Board, including the development of procedures for the review of sensitive strings and the strengthening of many trademark and consumer protections. To engage with the larger ICANN community, the GAC holds face-to-face meetings with ICANN's Supporting Organizations and Advisory Committees about issues of mutual concern.

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The GAC selected Heather Dryden to serve as Interim Chair at the ICANN Brussels meeting in June 2010 until the conclusion of the first GAC meeting of 2011. Subsequently, she was elected to a two-year term (ending in 2013) as Chair of the GAC. Ms. Dryden currently serves as Senior Policy Advisor at the International Telecommunications Policy and Coordination Directorate at the Canadian Department of Industry (Industry Canada) and has worked for the Department since 2002. She also serves as a non-voting liaison to the ICANN Board.

ICANN will continue to work with governments through inter-governmental organizations, such as the International Telecommunication Union (ITU). The ITU's Telecommunication Standardization Sector is a member of ICANN's Technical Liaison Group (TLG) where it shares a non-voting Liaison seat on the ICANN Board in rotation with the other TLG members. ICANN participates as an invited expert in ITU meetings on key issues including IPv6 and Internationalized Domain Names (IDNs).

ICANN will continue to participate in the Organization for Economic Co-Development (OECD) as another means for interacting with governments. ICANN is a founding member of the OECD's Internet Technical Advisory Committee (ITAC), which assists the OECD's work on issues such as measuring IPv6 deployment. ICANN has been a key participant on these issues and will continue to participate in discussions.

ICANN Board members are closely involved in working with governments. For instance, both Chris Disspain and Bill Graham have been members of the Internet Governance Forum's Multistakeholder Advisory Group since its formation in 2006.

Finally, ICANN will continue to engage directly with individual governments around the world on a variety of matters related to ICANN's mission and the multistakeholder model.

#### **1.1.1.6 Internet Community**

Individual Internet users who participate in the policy development work of ICANN are part of ICANN's "At-Large" community. Currently, about 140 groups, or At-Large Structures, representing the views of individual Internet users are active in approximately 100 countries. ICANN will continue to expand the number of organizations certified as At-Large Structures to bring in more voices from the individual Internet user community. The At-Large Advisory Committee (ALAC) maintains a website, <http://www.atlarge.icann.org>, with information on how individual Internet users can join and participate in building the future of the global domain name system and other unique identifiers on which every Internet user relies every time they go online. The ALAC is selected from within these regional entities.

Sébastien Bachollet was the first Board member selected by the At-Large community. Mr. Bachollet has been a member of the Internet Society French Chapter since 2001, served on its Board since 2003 and was declared its Honorary President in 2009.

The Internet user community is broad, so ICANN will continue to use a number of approaches to develop and maintain close and constructive working relationships with this community. Primary among these strategies is encouraging membership in the At-Large community through Regional At-Large Organizations (RALOs). These are locally developed communities of Internet



users who have an interest in Internet governance and ICANN activities. ICANN often sees a large contingent of local At-Large participants in our regional meetings.

ICANN will continue to provide technical briefings for the ALAC and At-Large community on topical issues, when requested, such as IPv6 address allocation.

### **1.1.2 Confidential Information [C.1.4]**

ICANN acknowledges and agrees that we will inform the U.S. Government if we have been advised that data submitted in association with the IANA Functions is confidential.

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## **1.2 Contractor Requirements [L.6; M.8; C.2; E.2]**

ICANN reviewed the Contractor Requirements detailed in Request For Proposal (RFP) Section C.2 and we are confident that we can meet or exceed every requirement in the fulfillment of the IANA Functions. The global coordination of the domain name system root and Internet protocol addressing has remained an essential part of ICANN's responsibilities, since our formation in 1998.

### **1.2.1 Prime Contractor [M.8; C.2.1; E.2; H.1.f]**

ICANN has and will continue to perform the required services for this contract as a Prime Contractor, not as an agent or subcontractor. ICANN is incorporated and organized under the laws of the State of California and the United States. ICANN has no parent corporation, is wholly U.S. owned, and will directly perform the primary IANA Functions of the contract within the United States. ICANN is currently headquartered in Marina del Rey, Los Angeles, California. As of June 18, 2012, ICANN's corporate headquarters will be relocated a few miles away within the City and County of Los Angeles, California. The primary IANA Functions will be performed in the Los Angeles area headquarters.

#### ***Understanding the Requirement***

ICANN fully understands the requirement to perform all requisite services as a Prime Contractor incorporated and located within the United States. ICANN will be the Prime Contractor and will continue to perform the primary IANA Functions within the United States.

#### ***Technical Approach***

Since 1998, ICANN has performed the IANA functions. We will carry out the required services for this contract as a Prime Contractor, not as an agent or subcontractor. ICANN is a private sector, multistakeholder organization currently entrusted with the operation of the IANA Functions. ICANN's first MoU with the Department of Commerce's National Telecommunications and Information Administration (NTIA) contained provisions governing ICANN's performance of the IANA Functions. Shortly thereafter, ICANN and NTIA executed the first IANA Functions contract. As the only experienced and qualified contractor, ICANN has provided the IANA Functions efficiently and effectively, building trust and confidence among ICANN's many stakeholders.

In September 2009, the DoC and ICANN signed the Affirmation of Commitments (AoC), expressing the Government's support for the multistakeholder, private-sector, bottom-up policy development model for DNS technical coordination that acts for the benefit of global Internet users.

ICANN has affirmed to the Government via the AoC that it will remain a private, non-profit organization headquartered in the United States. Also, ICANN has affirmed it is independent and is not controlled by any one entity. The AoC commits ICANN to reviews performed by the global community. All of these facts are still true and are hereby reaffirmed.

### **1.2.1.1 ICANN and Subcontracts**

ICANN hereby affirms that it will not enter into any subcontracts for the performance of the services or assign or transfer any of its rights or obligations under the resultant contract, without the Government's prior written consent.

### **1.2.1.2 ICANN Profile**

ICANN is formally organized as a non-profit public benefit corporation under the Laws of the State of California. ICANN's mission is to coordinate, at the overall level, the global Internet's systems of unique identifiers and to ensure the stable and secure operation of the Internet's unique identifier systems.

### **1.2.1.3 ICANN Primary Operations and Systems**

At the time of this filing, ICANN's main office is located at 4676 Admiralty Way, Suite 330, Marina del Rey, California, 90292. As of June 18, 2012, ICANN's new main office will be 12025 Waterfront Drive, Suite 300, Los Angeles, California, 90094. Additional U.S. offices are located at 325 Lytton Avenue, Suite 300, Palo Alto, California, 94301 and 1101 New York Avenue NW, Suite 930, Washington, DC, 20005. ICANN also has data centers located in California and Virginia. ICANN has performed the primary IANA Functions within the United States since 1998 and will continue to do so in the future.

### **1.2.1.4 Contractor and Government Inspections [E.2; H.1.f]**

ICANN acknowledges the Government's right to inspect the premises, systems and processes of all security and operational components used for the performance of all contract requirements and obligations. In addition, ICANN will make available at its office at all reasonable times the records, materials and other evidence specified in Solicitation Section H.1 (Audit and Records) for examination, audit or reproduction until three years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. If the contract is completely or partially terminated, ICANN will make available the records relating to the work terminated until three years after any resulting final termination settlement. ICANN will make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation or claims are finally resolved.

In addition, ICANN will provide and maintain an inspection system acceptable to the Government covering the material, fabricating methods, work, and services under this contract. ICANN will maintain complete records of all inspection work it performs and make these available to the Government during contract performance and for as long afterwards as the contract requires.

If the Government performs inspection or tests on ICANN's premises, ICANN will furnish and require any subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

ICANN will disclose any corrective action taken to replace materials and services we have given to the U.S. Government. ICANN will comply with E.2.k when applicable.

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## **1.2.2 Personnel, Material, Equipment, Services, Facilities [M.8; C.2.2]**

ICANN has firsthand knowledge of the technical needs and more than a decade of experience in recruiting, staffing and retaining the appropriate personnel, material, equipment, services, and facilities for execution of the IANA Functions. Our current contract demonstrates that we have consistently maintained the appropriate personnel, material, equipment, services, and facilities to perform the IANA Functions, and we will continue to meet these resource requirements in our provision of these Functions. ICANN has and will continue to conduct due diligence in hiring, including full background checks. ICANN will furnish the necessary personnel, material, equipment, services, and facilities to perform the IANA Functions requirements without any cost to the Government. Both the Technical Approach in Section 1 and the Management Approach in Section 2 of this proposal describe in greater detail ICANN's established practices and procedures for ensuring the IANA Functions are well-resourced with personnel, materials, equipment, services, and facilities.

### ***Understanding the Requirement***

As the incumbent contractor for the IANA Functions, ICANN fully understands the requirement to furnish all necessary personnel, material, equipment, services, and facilities to perform the IANA Functions without any cost to the Government. As we have in the past and do currently, ICANN will continue to meet this requirement to full customer satisfaction.

### ***Technical Approach***

ICANN developed its IANA Functions capabilities to meet current and future operational needs efficiently and effectively. Today, ICANN's IANA Functions department includes 11 staff assigned to IANA Functions under the contract. The processes and procedures and a redundant systems infrastructure is designed to ensure continuation of the IANA Functions in the event of cyber or physical attacks, emergencies or natural disasters. ICANN affirms that it will continue to maintain that functional capability as well as the appropriate personnel, materials, equipment, services, and facilities.

As a division within ICANN, the IANA Functions department draws upon ICANN's organizational resources such as human resources and information technology for specialized expertise in recruiting, staffing, facility management, security, and network connectivity. As new generic top-level domains (gTLDs) are added to the root zone, ICANN will continue to evaluate the number of requests for root zone changes and delegation or redelegation and invest in the IANA Functions infrastructure as needed without cost to the Government. Security is of the utmost importance, and ICANN conducts full background checks on all new hires. ICANN affirms that it will continue to maintain any additional appropriate personnel, materials, equipment, services, and facilities that are required to perform the IANA Functions.

#### ***1.2.2.1 Personnel, Material, Equipment, Services, and Facilities at No Cost***

As the incumbent, ICANN has in place the necessary personnel, material, equipment, services, and facilities to perform the IANA Functions. Current personnel assigned to the IANA Functions are all located within the United States. Four are assigned to handling approximately 12,400 root zone change requests and PEN/Office of Foreign Assets Control (OFAC) requests per year, and one handles approximately 40 delegation/redelegation requests annually. In the future and

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as new gTLDs come online, ICANN will continue to evaluate staff requirements based on volume of requests and the time to process them, as well as the time needed to maintain registries. As part of ongoing efforts to improve efficiency and maintain optimal staffing levels, ICANN management conducts ongoing evaluations of existing resources, processes and tools and forecasts future needs. This ensures ICANN will continue to adapt to any changes in workload volume or deadlines quickly and nimbly. ICANN commits and affirms that it will obtain whatever additional personnel, material, equipment, services, and facilities necessary to perform the IANA Functions.

As stated above, ICANN will furnish the necessary personnel, material, equipment, services, and facilities in order to perform the IANA Functions at no cost to the Government. ICANN describes its project funding strategy and recent financial statements within Volume II of this proposal.

#### **1.2.2.2 Due Diligence in Hiring**

ICANN has a professional human resources department that manages recruitment, background screening, hiring, and retention of a sophisticated, highly educated workforce that shares a legally compliant and global point of view. Please see Section 2 Management Approach of this proposal for a detailed discussion of our recruiting and retention plan.

New employees are guided through an “on-boarding process” that provides an introduction to ICANN, orientation to its policies and procedures, enrollment in benefits, and job training. As part of this process, each employee will continue to be required to read and agree to comply with company policies on such topics as Confidentiality, Conflicts of Interest and Disclosure of Outside Business Activities. Each employee working in the United States is and will continue to be required to provide proof of the right to work in this country.

ICANN will continue to perform background checks on individuals at the time of hire. Some countries restrict certain types of specific checks; however, to the extent laws allow, ICANN will continue to check identity (e.g., Social Security Number verification), driver record and criminal records. For individuals who have “bank account access” (i.e., prepare checks, release wires, etc.), ICANN also performs a credit check. ICANN will also continue to conduct reference checks on new hires, including those in management or in positions of confidence or security, contacting prior employers to both verify employment and obtain a subjective evaluation of the individual’s performance. For positions requiring a college degree ICANN verifies receipt of a college degree.

Regarding staff who have access to the L-Root, ICANN will continue to perform each of the checks above in accordance with the job type as described above. We will continue to check identity, driver record and criminal records on all, education for those positions requiring a degree, a credit check if the individual has access to bank accounts, and reference checks as appropriate.

#### **1.2.3 Contractor Fees [M.8; C.2.3]**

ICANN has operated the IANA Functions without charging a fee to the United States Government since 1998. ICANN’s mission is to ensure the stable and secure operations of the Internet’s unique identifier systems. To that end, it has for more than 13 years offered the IANA Functions at no charge to the Government or to the users of the IANA Functions. ICANN has

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demonstrated with its continuous delivery of the IANA Functions since 1998 its support for the stability and security of the global Internet. ICANN's no cost support of the IANA Functions has served the identified interested parties defined in section 1.3 of this document by providing the underlying infrastructure for a stable Internet. ICANN will provide at no cost to the Government the delivery of the requirements to maintain the root zone, to administer the protocol parameter registries, manage the .ARPA and .INT domains, and allocate the Internet Numbers in a stable and secure way as we have done over many years. ICANN will collaborate with the interested parties by meeting with them in the regularly scheduled meetings hosted by IETF, RIRs, regional TLDs and ICANN. This approach for collaboration has proven effective in building a strong relationship with the interested and affected parties.

### ***Understanding the Requirement***

ICANN will not charge the United States Government for the performance of the requirements of the contract. Because ICANN has been performing the IANA Functions since 1998, we have a unique understanding of the associated costs to operate the IANA Functions, an understanding no other contractor possesses. As in the previous contracts with NTIA, ICANN will not charge the U.S. Government or third parties for the services and will not seek to make a profit from offering the services. The costs associated with performing the IANA Functions and developing tools to support the Functions are all borne by ICANN. Please refer to the financial section of Volume II for supporting detail on ICANN's funding strategy; our revenue and our assets that have successfully supported the operation of these services for more than 13 years.

### ***Technical Approach***

ICANN describes our technical approach to meeting the requirement below.

#### ***1.2.3.1 ICANN Will Not Charge the Government***

ICANN will not charge the United States Government for performance of the IANA Functions.

#### ***1.2.3.2 ICANN Will Not Charge Fees in First Year***

ICANN will not collect fees from the users of the IANA Functions services in the first year. ICANN understands that we are permitted to propose an interim fee for the first year, and we will not exercise that right.

#### ***1.2.3.3 Fees Beyond the First Year***

ICANN will not establish nor collect fees for any of the years of the contract; neither the first year nor subsequent years.

#### ***1.2.3.4 Submission of Proposed Fees***

ICANN will not charge fees in the first nor subsequent years of the contract.

### **1.2.4 Contractor Performance [M.8; C.2.4]**

ICANN has been performing the IANA Functions in a stable and secure manner for over 13 years, and we are committed to continuing the accurate and timely execution of the IANA Functions. ICANN will continue to seek feedback from the communities that the IANA Functions serve and will revise processes and procedures that incorporate this input. As ICANN has demonstrated over the preceding years of delivering the IANA Functions, ICANN will continue

to update and improve methods for streamlining the delivery of the service to maintain the stability and security of the Internet's core infrastructure.

ICANN will continue to be open to new technologies and new approaches that increase the stable and secure performance of the IANA Functions. ICANN demonstrated that willingness to deploy new technologies in our collaboration with the Root Zone Maintainer (Verisign) and NTIA in 2010 when the three parties deployed DNSSEC for the root zone.

### ***Understanding the Requirement***

ICANN understands the importance of maintaining accurate and timely information in the root zone, the protocol parameter registries, the Internet number allocation records, and the ARPA and INT domains. The maintenance of timely and accurate information is important to the security and stability of the global Internet.

The root zone is at the apex of the Domain Name System (DNS), and the information stored in the root zone file is used by almost all Internet applications. The role of the IANA Functions operator is to maintain and validate the information that is accepted into the root zone is in keeping with the established policies and technical criteria. ICANN has and will continue to provide the expertise necessary to evaluate potential change requests and ensure the integrity of the information that is approved for the root zone.

The technical protocol parameters and ARPA administration provides the technical standards and protocol registries which form the basis for creating products, applications and the core infrastructure of the Internet. ICANN has a proven track record in working closely with the Internet Engineering Task Force (IETF) to administer and maintain these important registries and domains, as documented in the monthly reports published on our website. ICANN will continue to meet the service level agreements documented in the MoU with the IETF for maintenance and administration of the technical protocol parameters and ARPA. We will continue to publish the monthly reports supporting our performance of the Technical Protocol Parameters IANA Function.

The allocation of Internet numbers such as IPv4, IPv6 and Autonomous System numbers are governed by the Global Policies that are defined and adopted by all five Regional Internet Registries and ICANN. These unique identifiers, like the root zone, are fundamental components of a smoothly working Internet. ICANN will continue to work in close collaboration with the Regional Internet Registries to administer the allocation of Internet numbers promptly and efficiently and will report on performance of the IANA Functions.

### ***Technical Approach***

ICANN describes our technical approach to meeting this requirement below.

#### ***1.2.4.1 ICANN Will Treat Each of the IANA Functions with Equal Priority Promptly and Efficiently***

The non-discriminatory procedure that ICANN will use to process requests related to the IANA Functions has been well-tested and refined over the more than 13 years that ICANN has been performing the IANA Functions. All requests for actions related to the IANA Functions will be logged in the IANA Functions' trouble ticket system in the order in which they were received

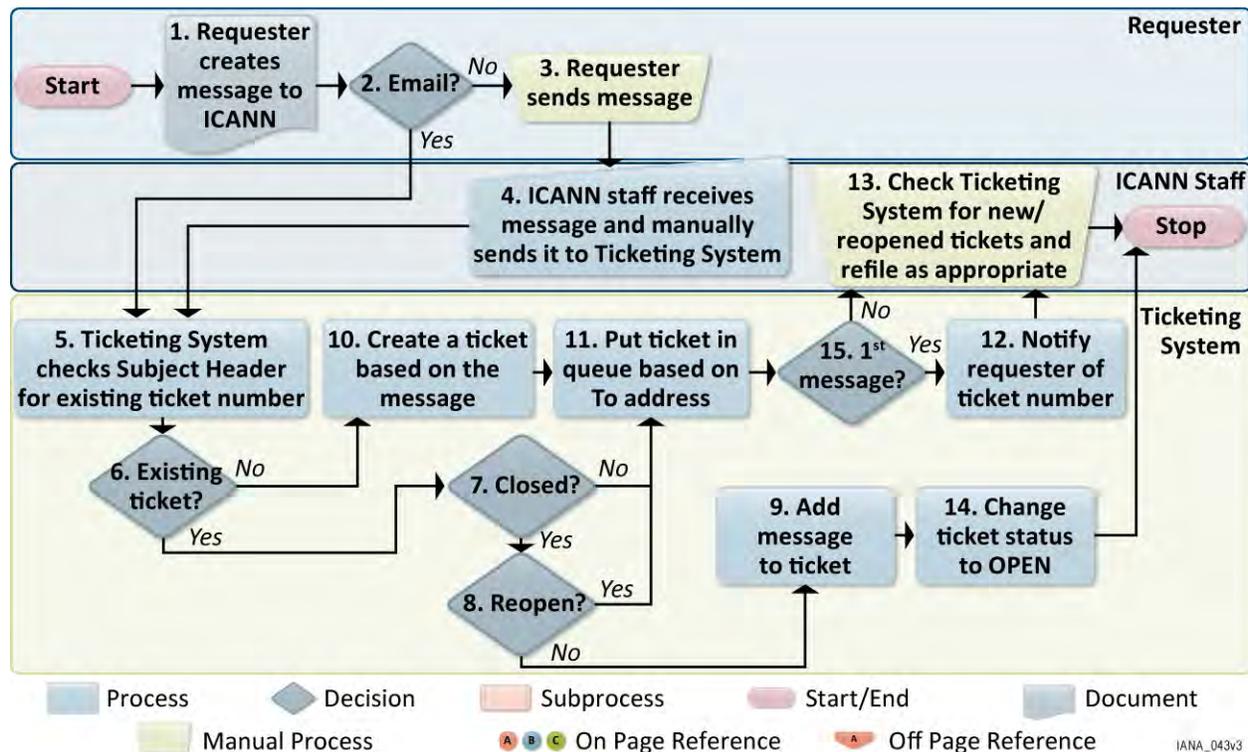
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and automatically sorted by the system into queues. The rules for sorting the incoming requests are based on the subject line of the request. ICANN will review the queues daily to confirm the system has correctly classified the incoming requests (Step 13 of the Trouble Ticketing Process Flow). Individual staff members will be assigned responsibility for handling the tickets in the various queues. ICANN will have weekly meetings to review the ticket queue and the volume and progress of open tickets. It is at the weekly meetings that ICANN will make adjustments in staffing assignments to address queue management. All tickets will be handled on a first come, first served basis. ICANN’s experience in performing the IANA Functions has taught us that sorting the tickets by functional area and assigning specific ticket queues to individual staff members is the most efficient way of processing the tickets in a fair and equal way. ICANN will strive to continuously evaluate the best way to process all requests in a timely and efficient way and will enhance the processes to reflect improved techniques for delivering the IANA Functions.

Figure 1.2-1 describes what the steps will be used for receiving IANA Functions requests and treating them with equal priority.



**Figure 1.2-1. Process for Treating IANA Functions Requests**

ICANN will follow well-defined processes to administer the IANA Functions for a consistent execution of policies and procedures. Adhering to a consistent execution of the defined policies will ensure a stable performance of the IANA Functions.

Below you will find the documented processes that ICANN will use to administer IANA Functions:

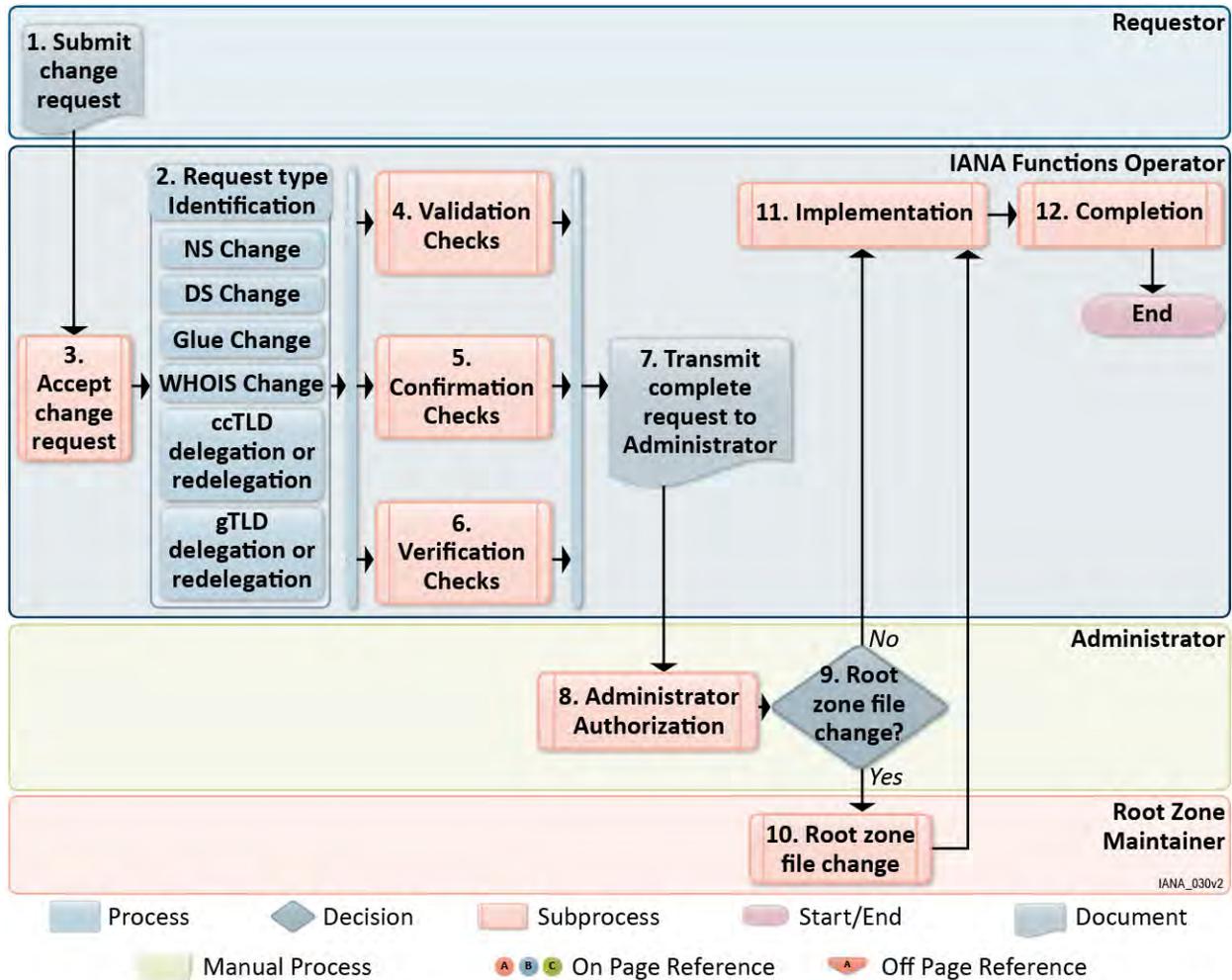
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- Root Zone Change Requests (important to the integrity and stability of the root zone)
- Autonomous System Number Allocation Process (associated with the Internet Number Function)
- IPv6 Number Allocation Process (associated with the Internet Number Function)
- Root Key Management Process (associated with DNSSEC for the root zone)
- Internet Draft Review Process (associated with the Technical Protocol Parameters function)
- Private Enterprise Number (PEN) New Application Process (associated with the Technical Protocol Parameters function)
- Expert Review Process (associated with the Technical Protocol Parameters function)
- Register New ARPA Domain Process (associated with the Technical Protocol Parameters function)

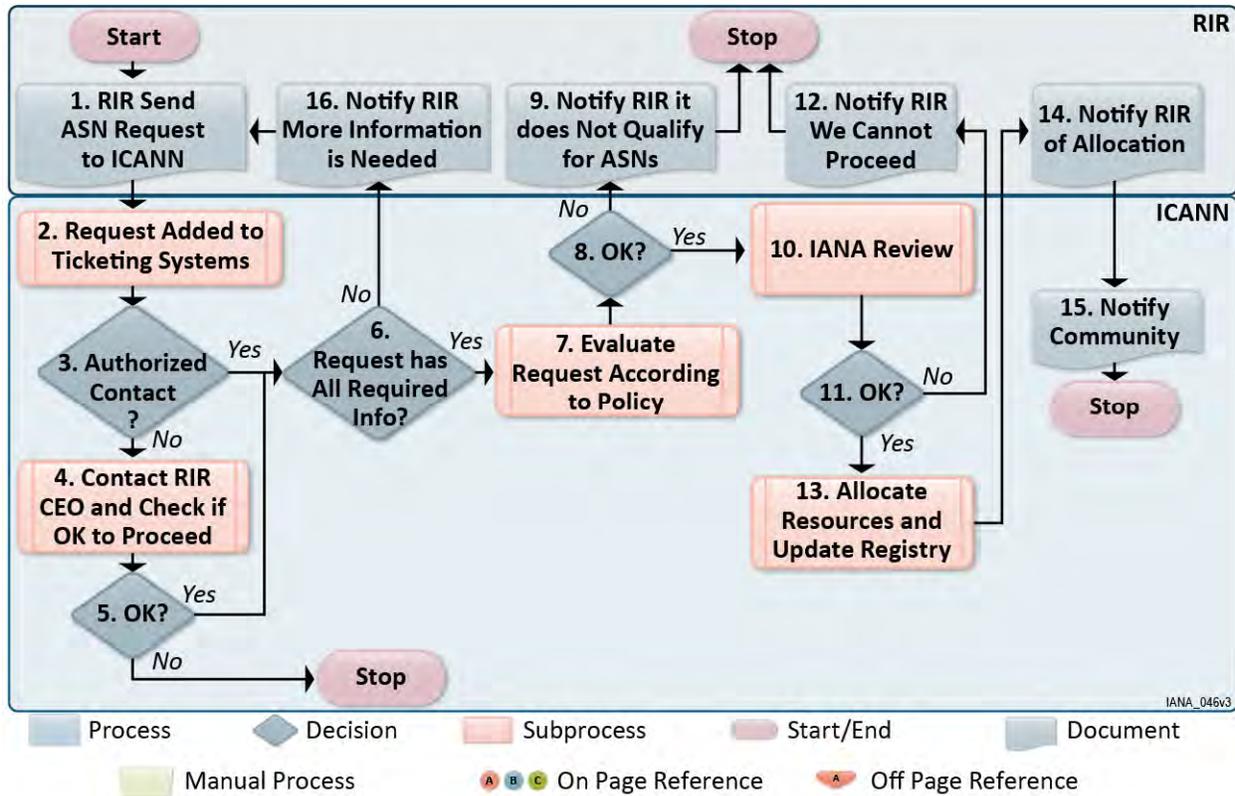
Recently a Policy for Allocation of IPv4 Addresses Post-Exhaustion has been adopted. Once the community agrees on an implementation plan for the policy, ICANN will define a process to execute the impemenation plan for this new Internet Number policy.

The Root Zone Change Requests Process will include evaluating a change request for eligibility, for compliance with technical criteria and confirming accuracy of information. ICANN will follow this process to ensure the integrity of the information in a stable and consistent manner. See **Figure 1.2-2.**



**Figure 1.2-2. Root Zone Change Request Process**

Autonomous System (AS) Number Allocation Process defines the process that ICANN will follow to allocate AS numbers to the Regional Internet Registries. The process is an implementation of the Global Policy for allocation of AS numbers that was adopted by the five RIRs and ICANN. See **Figure 1.2-3**.

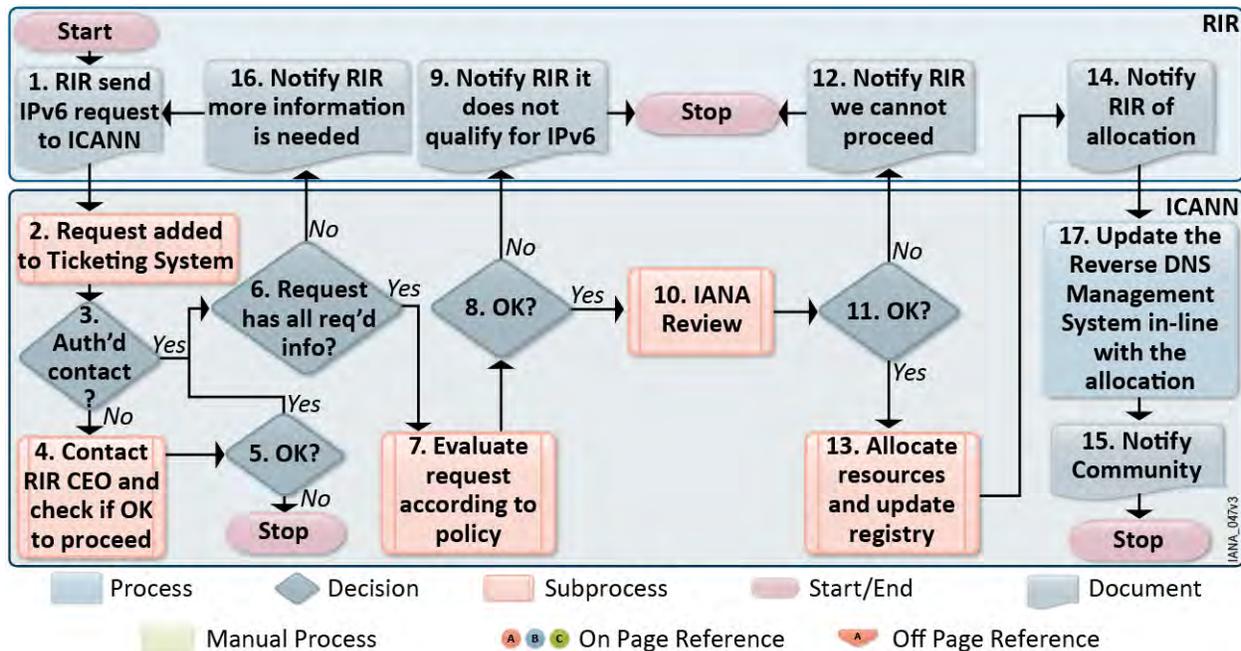


**Figure 1.2-3. Autonomous System (AS) Number Allocation Process**

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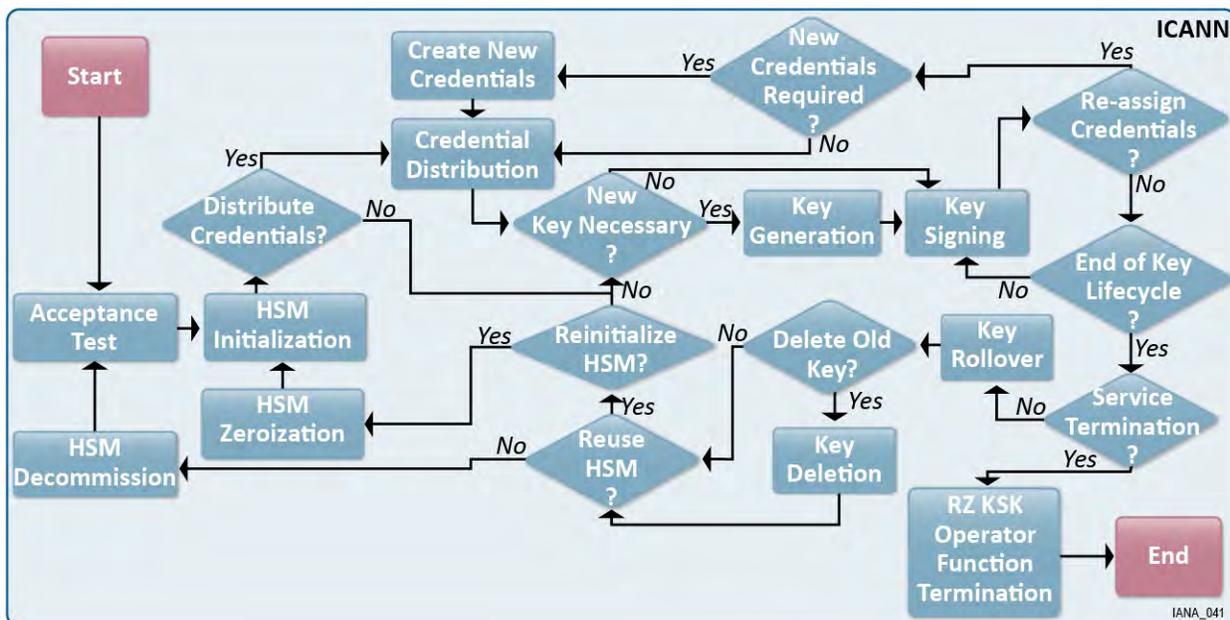
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The IPv6 Number Allocation Process implements the Global Policy for allocation of IPv6 addresses that was adopted by the five RIRs and ICANN. ICANN will follow this process to allocate IPv6 Addresses in a consistent and stable way. See **Figure 1.2-4**.



**Figure 1.2-4. IPv6 Number Allocation Process**

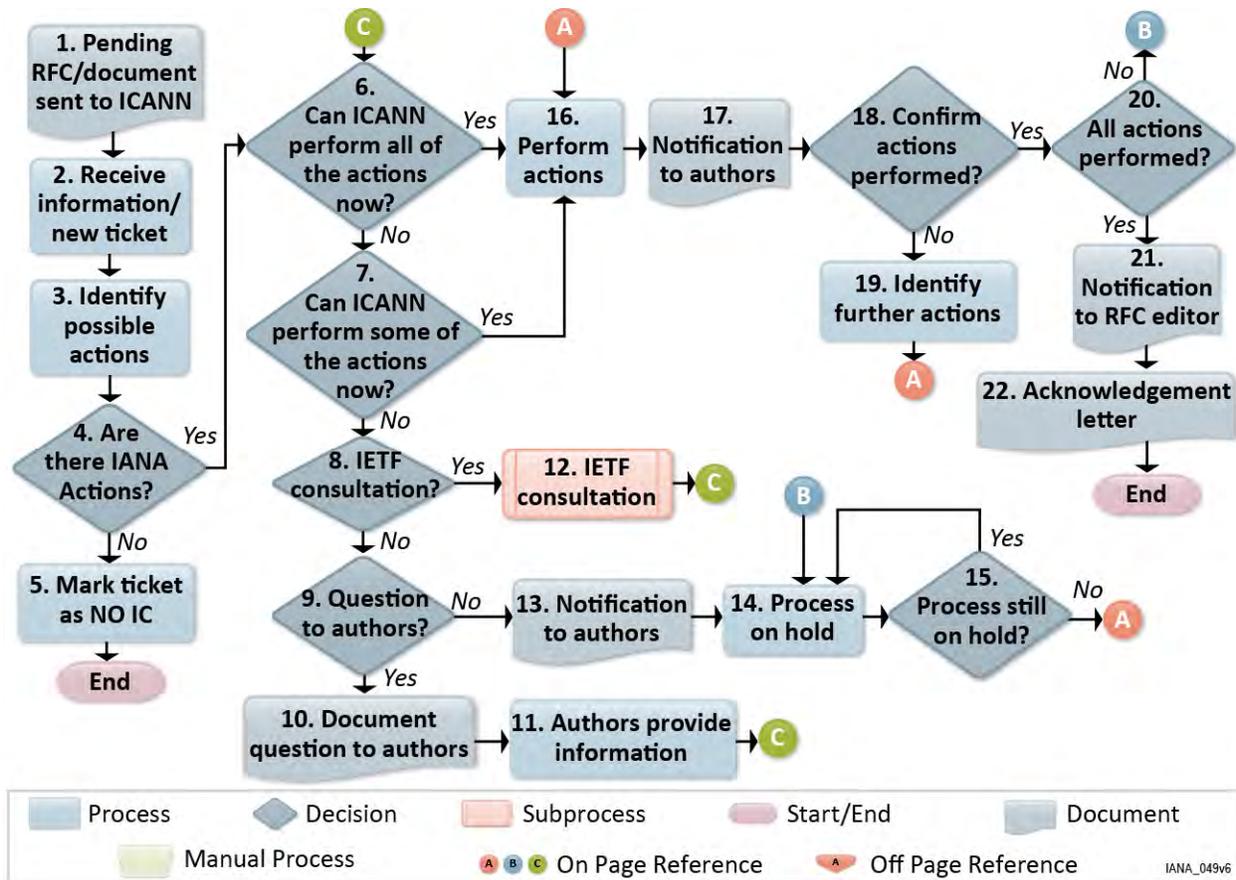
The process for maintaining a secure and stable DNSSEC deployment of the root is defined in the Root Key Management Process. ICANN will follow this process to ensure the integrity of the root key management in a consistent and stable way. See **Figure 1.2-5**. The DNSSEC Key Ceremony Script can be found in **Appendix A**.



**Figure 1.2-5. Root Key Management Process**

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The Internet Draft Review Process is defined in collaboration with the IETF and is in support of the Technical Protocol Parameters function. ICANN will follow this process in executing the responsibilities for the Technical Protocol Parameters function. See **Figure 1.2-6**.

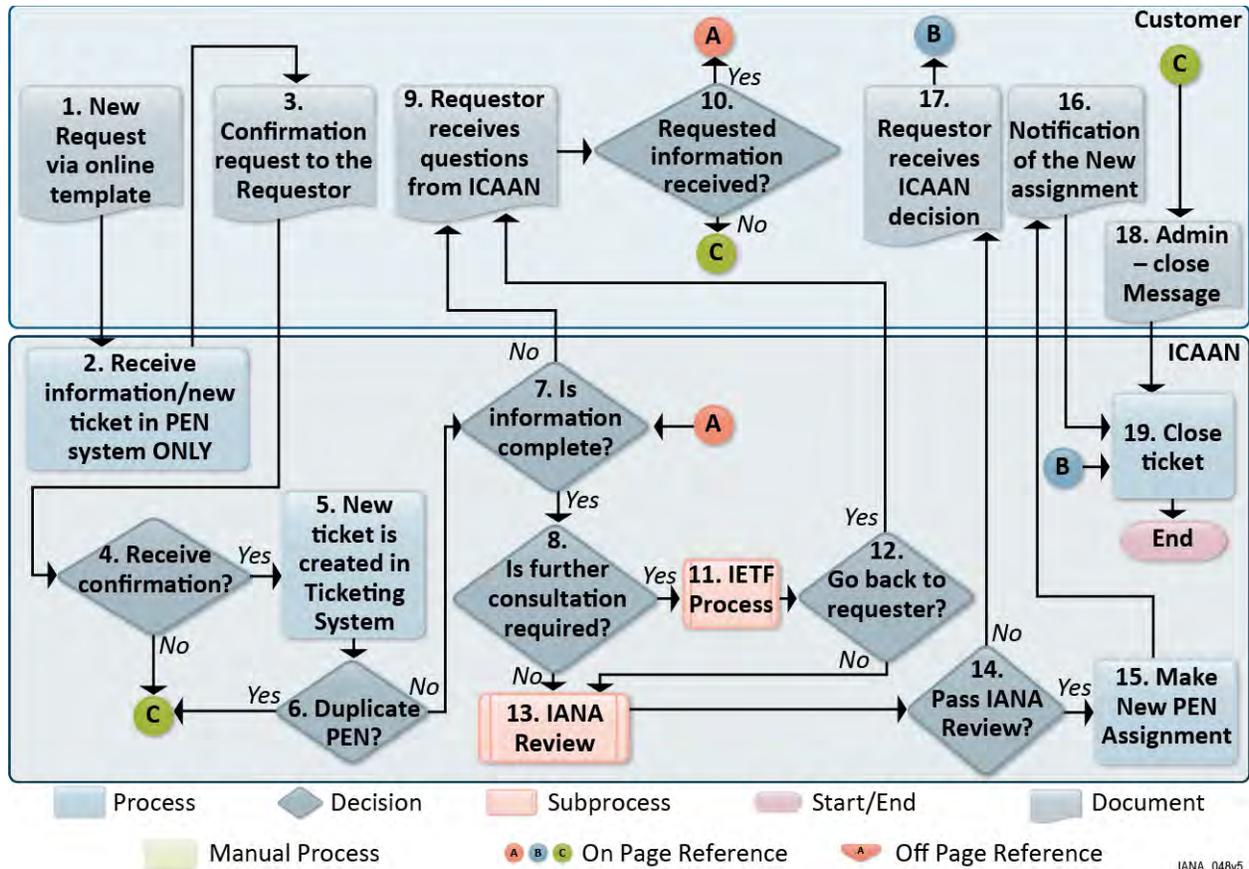


**Figure 1.2-6. Internet Draft Review Process**

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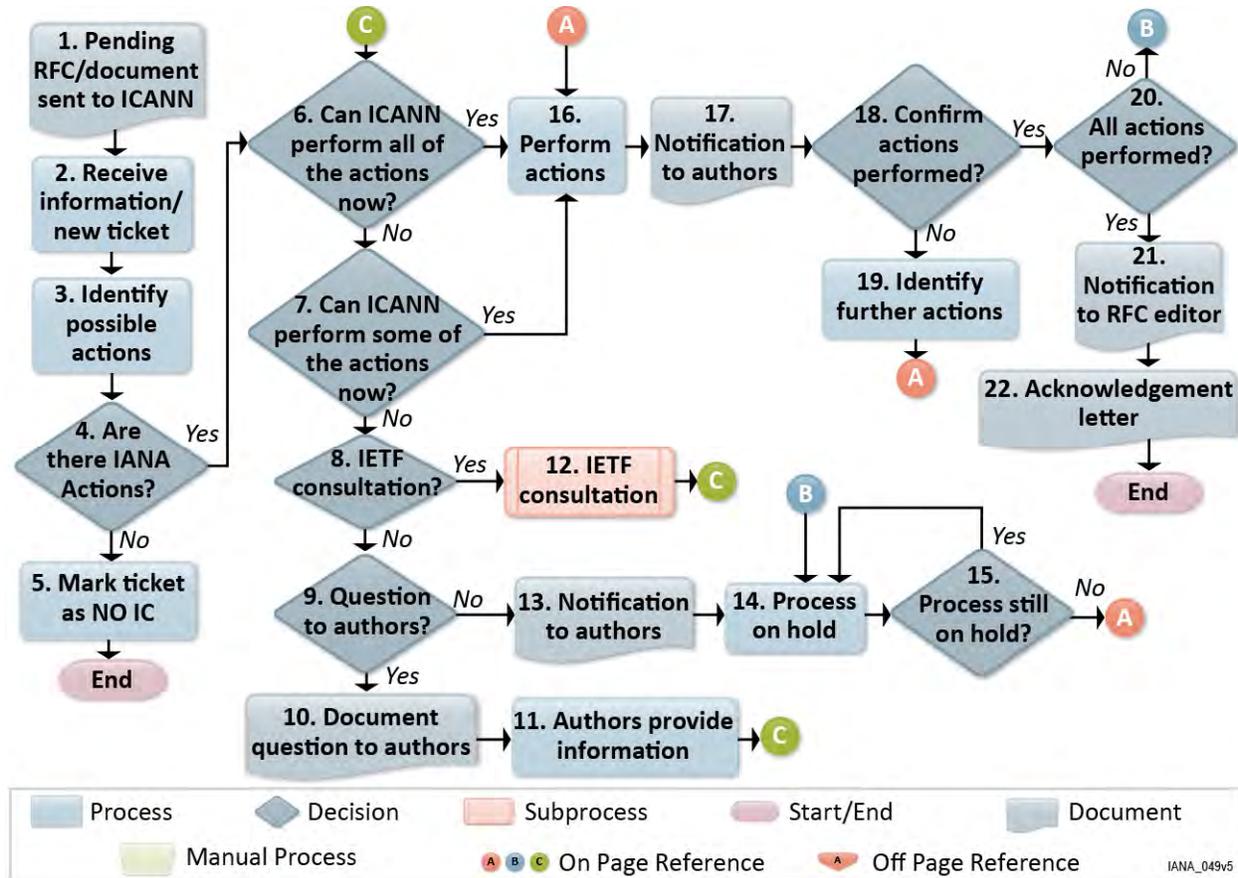
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The Private Enterprise Number (PEN) New Application Process is defined in collaboration with the IETF and is in support of the Technical Protocol Parameters function. ICANN will follow this process in executing the responsibilities for the Technical Protocol Parameters function. See **Figure 1.2-7**. The templates for requesting a new PEN or modifying an existing one can be found in **Appendix A**.



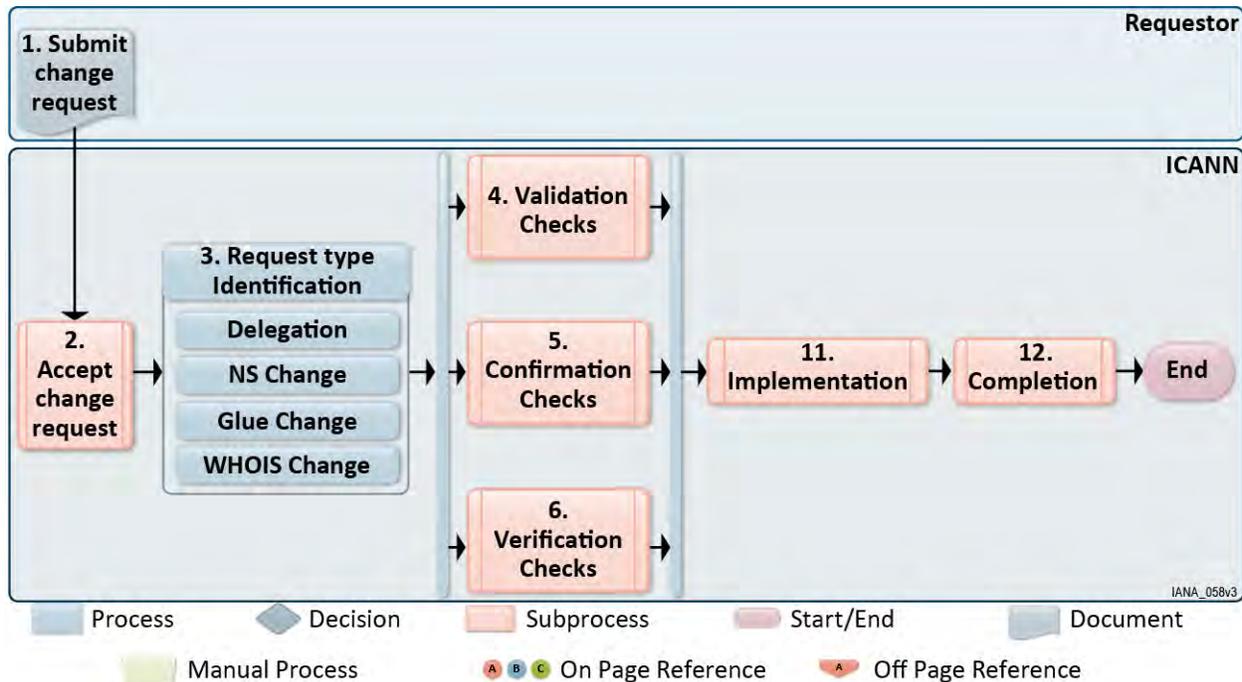
**Figure 1.2-7. PEN New Application Process**

The Expert Review Process is defined in collaboration with the IETF and is in support of the Technical Protocol Parameters function. ICANN will follow this process in executing the responsibilities for the Technical Protocol Parameters function. See **Figure 1.2-8**.



**Figure 1.2-8. Expert Review Process**

The Register New ARPA Domain Process is defined in collaboration with the IETF and is in support of the Technical Protocol Parameters function. ICANN will follow this process in executing the responsibilities for the Technical Protocol Parameters function. See **Figure 1.2-9**.



**Figure 1.2-9. Register New ARPA Domain Process**

ICANN will implement methods to secure communications with relevant parties and secure the integrity of data required to perform the IANA functions. ICANN will follow the documented processes to demonstrate the stable and consistent performance of the IANA Functions.

### **1.2.5 Separation of Policy Development and Operational Roles [M.8; C.1.3; C.2.5]**

ICANN has an established track record of successfully managing IANA Functions while providing relevant information to the various policy bodies in the community to inform their work in developing relevant policy. We have done this while being careful to ensure staff performing IANA Functions are not engaged in initiating, advancing, or promoting any policy development relating to IANA Functions. ICANN will continue to strike this balance by focusing on performance of IANA Functions while providing appropriate support at the request of the policy development community.

A good example of this form of measured collaboration is our work over the last few years on the delegation and redelegation of country-code top-level domains (ccTLDs) within the Country-Code Names Supporting Organization (ccNSO) and the Governmental Advisory Committee (GAC). This collaborative work will conclude with refinements to the implementation of the policy with respect to the processing of ccTLD delegation and redelegation requests. ICANN’s IANA Functions staff members have participated in the

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community development work by providing expertise on how the current policy has been enacted and implemented, but has not been involved in initiating, advancing, promoting, voting on, or otherwise deciding upon specific proposals for new policies or to alter existing policies. Similarly, staff members have been involved in forums of Regional Internet Registries, the Internet Engineering Task Force, and other Internet Governance forums conveying experience on how existing IANA Functions are performed, in order to better inform policy makers' work.

Throughout ICANN's performance of the IANA Functions, countless RFC standards have been published through the IETF with "IANA Considerations" that prescribe how ICANN, in performing the IANA Functions, must conduct the ongoing operation of specific registries. In these cases, the IESG has communicated with ICANN to identify practical considerations concerning the proposed policy implementations. These consultations have resulted in timely and implementable policy directives that govern the IANA Functions' operations.

### ***Understanding the Requirement***

ICANN recognizes that central to the IANA Functions is the neutral execution of a set of agreed policies that have been developed by the multistakeholder community. These policies include those that are developed within the ICANN policy development processes, such as those developed within the Generic Names Supporting Organisation (GNSO) and the Country Code Names Supporting Organisation (ccNSO), and ratified by the ICANN Board of Directors. They also include addressing policies developed through the Regional Internet Registry (RIR) communities, and the various requirements of Internet Protocols published in technical specifications originating through the Internet Engineering Task Force.

ICANN recognizes that core to the IANA Functions is executing against these various established policies that are developed by relevant communities. In order to be trusted in neutrally executing against the policies, it will be inappropriate for IANA Functions staff to be simultaneously generating the policy that we will implement and under which we will operate.

While this is clear, the multistakeholder community also recognizes the value of leveraging the expertise and experience that rests within the IANA Functions staff to help inform ongoing policy work. Experience has shown that ICANN staff members have played important informational roles in the working groups that lead to policy development within ICANN. ICANN's IANA Functions staff members are uniquely placed to share expertise in how the IANA Functions have been performed on behalf of the multistakeholder community. This transparent sharing of information allows for interested and affected parties to be well informed when developing policy. Without this feedback into the process, there is a risk the community will develop policy that cannot be properly implemented due to the lack of understanding of the practical implications on how the IANA Functions will be executed. ICANN will work to ensure the process avoids these unintended consequences.

### ***Technical Approach***

ICANN will continue to maintain a clear separation between policy development and operational roles. ICANN staff involved in the IANA Functions will be trained to be fully aware of the limitations on their involvement. Such staff members will be counseled to refer items

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where the nature of staff participation is unclear to the IANA Functional Liaisons or IANA Functions Program Manager for review before participation.

Importantly, ICANN staff performing IANA Functions will continue to have no role on the ICANN Board of Directors — whose role is to ratify policy proposals for many of the IANA Functions — and no role on any of the councils that develop and vote on policy within the ICANN framework (i.e., the GNSO, CCNSO, ASO, etc.). Any roles for the IANA staff in bodies that develop policy will be either clearly in an advisory capacity — acting as subject matter experts conveying their experience — or relate to operations-level communication separate from policy development.

#### **1.2.5.1 Ensuring staff will not initiate, advance, or advocate policy**

To ensure that staff will not initiate, advance, or advocate policy, ICANN will adopt policies in its employee handbook and train IANA Functions staff that no IANA Functions staff may participate in any policy development work related to the IANA Functions. In the event that a request for staff participation may violate the separation requirement, ICANN will consult with NTIA to obtain a determination on whether staff shall participate, and on what basis. IANA Functions staff that violate these policies will be subject to sanctions, up to and including termination.

#### **1.2.5.2 Responding to requests for information from interested and affected parties**

In the ordinary course of business, ICANN will respond to enquiries relating to how IANA Functions are performed. This includes requests from interested and affected parties asking what the procedures are for certain aspects of the IANA Functions, and answering questions relating to how certain aspects of the Functions operate.

ICANN will track all requests for information through a tracking system when they are lodged through ICANN's advertised methods of communication (such as through the established email addresses for the various functions). The tracking system will lodge the entire history of the request, including all communications that occur and the precise timestamps when they occur.

Upon receipt of a request, staff managing the appropriate request queue in the ticketing system will review its particulars. Once identified as a request for information from an interested and affected party, it will be assigned in the ticketing system to the relevant Subject Matter Expert for a response.

The ticketing system will generate regular internal reports, and will form the basis for weekly meetings within the IANA Functions staff. At these meetings, staff will review all outstanding requests and ensure all such requests have received a response or have an appropriate path to timely resolution. A key metric that is and will be used by ICANN is the amount of time that has elapsed since there has been activity on the request. Requests that have not had progress within the prior business week will be escalated for discussion to ensure any impediments to their timely resolution will be identified and ameliorated.

The ICANN Board also has a standing Board IANA Committee that will review at a high level IANA Functions staff participation in a variety of forums. Issues that warrant consideration by ICANN's Board will be escalated to this committee for review.

### **1.2.5.3 Requesting guidance or clarification from interested and affected parties**

In executing IANA Functions policies and procedures, staff members who encounter issues in implementing policies that are not adequately covered in existing documentation will refer the issue to the IANA Functional Liaison as the subject matter expert. This expert will be responsible for evaluating the issue to identify if guidance or clarification on the policies or procedures may be required from interested and affected parties.

In the event it is deemed that external clarification will be required from interested and affected parties, the IANA Functional Liaison will coordinate with the IANA Functions Program Manager to develop a plan to request the necessary guidance or clarification. Where possible, existing channels for communication with relevant interested and affected parties will be used. The IANA Functions Program Manager will also communicate the issue to the Contracting Officer's Representative.

### **1.2.6 Transparency and Accountability [M.8; C.1.3; C.2.6]**

Developing and sharing user instructions for each IANA Function is essential to developing trust with the community regarding how IANA Functions are performed, and aids in the constructive review of policies that govern the Functions. During the term of the current contract, ICANN developed drafts on an increased range of user documentation related to IANA Functions. ICANN looks forward to the publication of these drafts for community review, and the opportunity to work with interested and affected parties in developing and publishing such documentation under the terms of the new contract.

An illustration of ICANN's accomplishments in thoroughly detailing ICANN's methods of operation is the work that has gone into the management of the Root Zone Key Signing Key. Documentation of these processes is provided as comprehensive documentation on how the processes will be conducted. This documentation is augmented by comprehensive audit materials that are posted afterward, including archival documentation, video, and audio that allow for later scrutiny.

#### ***Understanding the Requirement***

ICANN knows that transparency of the IANA Functions is foundational to the successful and credible operation of the Functions. Community confidence that the IANA Functions are being executed in a correct and accountable way is key to meeting the needs of the interested and affected stakeholders. ICANN will live up to its commitments to transparency and accountability by sharing clear documentation on the procedures and processes used for executing the IANA Functions. Such information will allow interested and affected parties to become fully informed about the performance of the Functions, which in turn will enable them to evaluate ICANN's performance. The accessible information will help in the community's future work on policy development, and will also help in the day-to-day performance of the IANA Functions. The absence of clear user documentation can lead to confusion with respect to how requests will be processed and what information is required. Availability of complete user documentation will allow for critical analysis on the suitability of the various requirements of the existing processes, including relevant technical requirements.

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ICANN will enhance its documentation with input from the relevant stakeholders and will strive to improve customer satisfaction. Currently, a customer may not be aware how a process is conducted when ICANN informs them of a defect in a particular request. These defects are typically resolved after various back-and-forth communications with the applicant. The delay resulting from the time taken to explain the various requirements reduces customer satisfaction and introduces additional costs for all of the parties. Having complete, accessible, and up-to-date documentation readily available will reduce such problems.

### ***Technical Approach***

ICANN describes our technical approach to meeting this requirement below.

#### ***1.2.6.1 Developing user instructions***

ICANN will review all of the various services provided in connection with this contract and, based on the existing corpus of both documentation and procedural descriptions, will define a complete list of operational procedures for which user documentation should be published.

ICANN will then develop user instructions for each identified item, including any technical requirements associated with specific procedures, based on existing operational procedures. Much of this documentation is already developed, and some is already published on ICANN's IANA website. For example, the technical requirements for authoritative name servers — used in evaluating changes to the DNS Root Zone and for .INT domain registrations — are posted online after consultative development with the affected community.

ICANN's goal in developing user instructions will be to make the documentation as clear as possible, reducing the risk that procedures are not communicated in an easy to understand fashion. While much of the work of ICANN is highly technical and necessarily involves conveying complex technical concepts, ICANN will seek to make the descriptions as easy to understand as possible without sacrificing technical accuracy. ICANN recognizes many of the users of the IANA Functions are not technically-minded, and also come from countries where English is not the primary language. We will therefore develop documents that consider this wide range of potential readers.

ICANN will post this documentation, clearly marked as draft, and solicit input from interested and affected parties. The primary mechanism to solicit feedback will be ICANN's own institutional mechanism for conducting public comment periods. ICANN regularly employs this process to review most aspects of our operation including draft policy changes, and it is well suited for reviewing the draft IANA documentation. Once posted, the availability of the documentation for review will be posted via ICANN's standard communication channels by posting a notice on ICANN's IANA website, and notifying others in the user community through presentations given by ICANN at conferences.

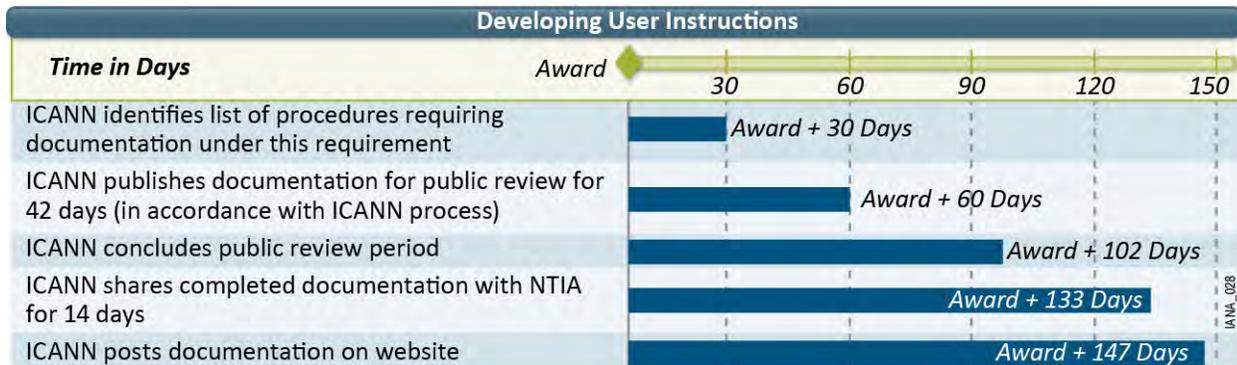
During this process, it will be clearly noted that the goal is not to alter the policies upon which the procedures are based, but rather to solicit feedback on making the documentation as clear and as useful as possible. It would not be appropriate to alter procedures based on community feedback as a mechanism of altering the underlying policy.

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Following this review process, ICANN will then appropriately revise the draft documentation and ready it for ultimate publication. ICANN will share this revised documentation with NTIA prior to general publication. Please see timeline in **Figure 1.2-10**.



**Figure 1.2-10. Timeline for Developing User Instructions**

ICANN’s timeline will meet the requirement that the process be concluded within six months of the date of contract award. The specific milestones within the timeline may be modified by the scheduling of events such as ICANN, IGF and other Internet Governance meetings. It is important that considered review of these documents is conducted by the community of interested and affected parties, and they have a meaningful opportunity to review these documents. Therefore, this timeline may be altered slightly to properly provide adequate time for consideration while not conflicting with these other commitments. The timeline leaves enough additional time to accommodate any such changes and unexpected contingencies, while still adhering to the requirement that the process be concluded within six months of the date of award. ICANN will consult with NTIA on any such revisions.

**1.2.6.2 Posting on a website**

Following the development of user instructions in accordance with Section 1.2.6.1, and approval by the COR, ICANN will post the procedures on ICANN’s IANA website, the primary website on which ICANN maintains information relevant to IANA Functions. These procedures will be hyperlinked from the relevant focus areas for individual functions, which will make them easy to identify and find for those interested in a particular topic.

As described in Section 1.2.6.1, ICANN anticipates posting will occur approximately 148 days after award. While this is subject to change to ensure maximum input from the community, ICANN will post the documentation within six months of the date of award.

**1.2.6.3 Collaboration with Stakeholders**

As described in Section 1.2.6.1, ICANN’s approach to developing user instructions is focused on public review using ICANN’s public comment process. The review process involves collaboration with the various stakeholders identified in C.1.3. This review will assist in developing user instructions that best suit the needs of these parties.

## **1.2.7 Responsibility and Respect for Stakeholders [M.8; C.1.3; C.2.7]**

ICANN is well placed to work with the community on identifying the source of the policy and procedures used in executing the IANA Functions. ICANN has historically sought review by interested and affected parties for material changes to the IANA Functions' operational procedures. As the operator of the IANA Functions for over 13 years, ICANN has accumulated significant experience in performing the current operational processes.

Through the years, ICANN has worked with the community to refine implementation guidance, providing explanations of historical contexts and other factors that have resulted in the IANA operational environment. ICANN's experience in this area has facilitated informed review by the interested and affected parties in the community.

### ***Understanding the Requirement***

Much of the policy that defines much of ICANN's performance of the IANA Functions is documented in technical standards documents published by the Internet Engineering Task Force (IETF) known as "Request for Comments" (RFCs). Today, ICANN already publishes a tabular index of the hundreds of registries it maintains and references the relevant RFCs that are the determinants of the policies and procedures that govern each specific registry. In 2010, ICANN concluded a complete audit of over 4,000 RFCs to ensure accurate implementation of the procedures contained within.

For the Root Zone Management function, the history is complex, and a process will need to be developed that is careful to consider this history. ICANN's ccNSO and GAC have been grappling to identify much of this work, and this work continues after over three years of intensive discussion.

Those who have performed the IANA Functions have a long history of publishing updated operational practices as circumstances have evolved. In 1984, the then IANA Functions staff at the University of Southern California published RFC 920, which documented the structure of the root zone and its operational practices. In 1994, this was revised and published as RFC 1591. In 1997, IANA Functions staff published the first in a series of "ccTLD Memos" providing further clarification on how operational practices had evolved. In 1999, the IANA Functions staff again updated the documentation to reflect contemporary practices and published it as Internet Coordination Policy (ICP)-1. None of these documents is considered to be definitive descriptions of the current policies and procedures that are applicable today, but they represent an evolution of the processes over time. They will act as important input into the review processes to be developed.

ICANN recognizes that certain issues may be more complex and necessitate more dialogue or multiple rounds of iteration. For changes relating to stewardship of the Protocol Parameter Registries, ICANN recognizes that the community of interested and affected parties already has in-place mechanisms for reaching consensus on how the registries should be maintained. These mechanisms are the product of the IETF, and ICANN implements the registries in accordance to guidance from the IESG.

### **Technical Approach**

ICANN understands that the scope of work in connection with this requirement will involve multiple aspects. It will involve developing an approach to documenting the existing practices as they are in practice today, as well as developing an approach for how future changes to policy will be reflected in updates to the IANA Functions processes and procedures.

ICANN will leverage its extensive network of community members and relationships, as well as its unique knowledge of the history that lead to the current procedures, to develop an appropriate process by which all parties will follow to develop an agreeable process. The process is described in detail below.

#### **1.2.7.1 Developing Processes for Documenting the Source of Policies and How They Are Applied**

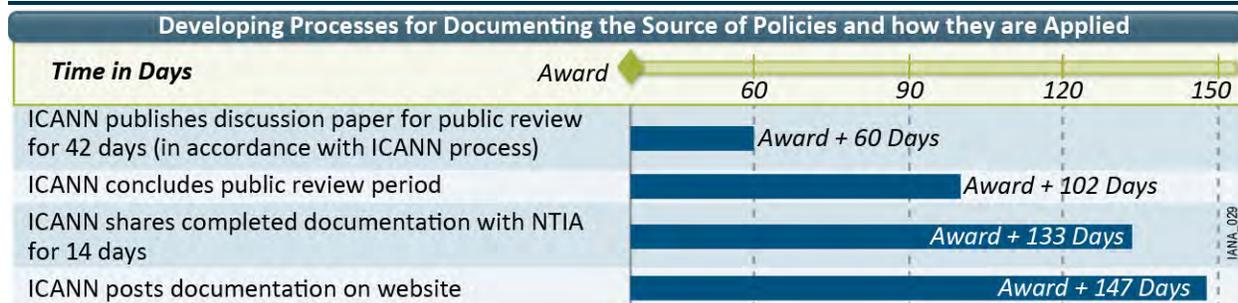
In conjunction with the work to be performed as described in 1.2.6.1, ICANN will use its historical understanding of the evolution of the IANA Functions procedures to document the policies that have informed the various procedures and identify them for each process. We will then develop a draft discussion paper that describes the scope of the policies and procedures for which documentation needs to be produced under this requirement.

ICANN will then post the discussion paper and solicit input from interested and affected parties on what the appropriate process(es) by which the identified procedures should be reviewed and documented in a way that satisfied the requirements of C.2.6. The primary mechanism to solicit feedback on the discussion paper will be ICANN's own institutional mechanism for conducting public review. ICANN regularly engages this process to review most aspects of its operation, including draft policy changes, and is well suited for reviewing the draft IANA documentation. The discussion paper will be available for review and posted via ICANN's standard communication channels, including a notice on ICANN's IANA website. We will notify other members of the user community through presentations given by ICANN at conferences and various events.

During this process, it will be clearly noted that the goal is not to alter the policies upon which the procedures are based, but rather to solicit feedback on what the community recommends as the appropriate process for documenting the source of the policies and procedures and how ICANN will apply the relevant policies and procedures for the corresponding IANA Function.

Following this review process, ICANN will then appropriately revise the draft documentation and ready it for ultimate publication. ICANN will share this revised documentation with NTIA prior to general publication.

Finally, on the basis of the agreed procedures for documenting the source of the policy and procedures and how they will be applied, ICANN will undertake a new effort in conjunction with NTIA to develop a timeline for executing the procedures. How this will be conducted can only be determined once the community has agreed on the relevant approaches and timelines. See timeline in **Figure 1.2-11**.



**Figure 1.2-11. Timeline for Developing Processes for Documenting the Source of Policies and How Applied**

It is important that the community of interested and affected parties conduct a review of these documents. Their availability is often dictated by the timing of significant Internet Governance related events (such as ICANN meetings, IGF meetings, etc.). Therefore, this timeline may be adapted slightly to provide adequate time for consideration while not conflicting with these meetings. The proposed timeline will leave enough additional time to accommodate any such changes, while still adhering to the requirement that the process be concluded within six months of the date of award. ICANN will consult with NTIA on any such adaptations to ensure full concurrence with the final timeline based on the ultimate date of award.

**1.2.7.2 Posting Processes on a Website**

ICANN will produce a proposal for NTIA at the conclusion of the consultation process planned with the interested and affected parties listed above for each of the IANA Functions. Upon acceptance by NTIA, ICANN will publish the document on the *www.iana.org* website in a section dedicated to processes. ICANN will publish the accepted document within a week of NTIA’s notification that it has been accepted. ICANN will notify the interested and affected parties that the document has been published using its established links with each of the key stakeholders. These links include dedicated private mailing lists for announcements and discussions and regularly scheduled meetings.

**1.2.7.3 Post via Website**

Following the development of the processes and procedures in accordance with 1.2.7.1 and 1.2.7.2 and after receiving required approvals from the COR, ICANN will post the procedures on ICANN’s IANA website, the primary website on which ICANN maintains information relevant to the IANA Functions.

**1.2.7.4 Collaboration with Stakeholders**

ICANN will collaborate closely with each of the relevant stakeholder groups to develop a process for documenting the source the policies and procedures ICANN will implement for each of the IANA Functions. ICANN will make sure that the stakeholder will be able to contribute text and comment on drafts prior to seeking approval and publishing the documentation, which will explain how ICANN will apply the relevant policies and procedures for each IANA Function.

## **1.2.8 Performance Standards [M.8; C.1.3; C.2.8; C.2.9]**

ICANN has engaged in a multi-year Business Excellence activity based on the globally recognized EFQM model, which is widely used in Europe, the Middle East and Africa. The EFQM model is structurally similar to the U.S. Baldrige Award and the Japanese Deming Prize models. It is focused on providing systematic, sustainable, continuous improvement, and ICANN has brought this analysis to its delivery of the IANA Functions since 2009. In 2011, ICANN conducted a thorough review of our business processes and documented Key Performance Indicators (KPIs) for our most important core processes. For each KPI, ICANN identified measurements and set internal performance targets. ICANN will use these KPIs and internal performance targets as the starting point for discussions with the interested and affected parties.

### ***Understanding the Requirement***

ICANN understands that within six months of the award, we must develop performance standards for each of the IANA Functions in collaboration with the interested and affected parties for each of those functions. ICANN further understands that the agreed performance standards must be posted on ICANN's IANA website. ICANN understands that the interested and affected parties include the ICANN Supporting Organizations; the IETF community, including the IAB; the RIRs; TLD operators; governments; and the Internet user community. ICANN understands that this offer must include a detailed narrative of how we intend to work with the interested and affected parties to develop the required performance standards.

### ***Technical Approach***

ICANN has established processes for proposing documents, discussing them with key stakeholders and then publicly reviewing them before reaching a final version. ICANN will use these established processes, in the manner described below, to work with the interested and affected parties for each of the IANA Functions to develop performance standards.

ICANN will work with the key stakeholder group for each IANA Function when developing performance standards. ICANN has identified the key stakeholder groups, the interested and affected parties:

- **ccTLDs** – the ccNSO (an ICANN Supporting Organization) and regional ccTLD operator groups, including but not limited to CENTR, Latin American and Caribbean TLD Association (LACTLD) and African Top Level Domain (AfTLD); Verisign, the root zone maintainer; ICANN's Government Advisory Committee; and NTIA.
- **gTLDs** – the GNSO (an ICANN Supporting Organization); Verisign, the root zone maintainer; ICANN management, which is responsible for the contractual relationship with gTLD operators; and NTIA.
- **IP address allocation** – the RIRs, who participate in ICANN as the Address Supporting Organization (ASO), for unicast address allocations, and the IETF, including the IESG and IAB, for special address allocations that includes multicast address space.
- **Protocol Parameter management, including management of .ARPA** – the IETF, including the IESG and IAB. ccTLD operators, gTLD operators and the RIRs all have staff who participate in the IETF.
- **.INT management** – ICANN's Government Advisory Council and NTIA.

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Performance standards for each distinct function will be discussed with the interested and affected parties that use the service.

ICANN already has established relationship with all these organizations. The ICANN Supporting Organizations and Advisory Committees are part of ICANN’s participatory and decision making structure and ICANN management engages with them on a regular basis via mailing lists, telephone calls and face-to-face at ICANN and other meetings. ICANN management also engages with Supporting Organizations on joint projects. An ongoing example is the IDN Variant project, which has involved participants from the ccNSO and the GNSO as well as ICANN. In addition, ICANN has a positive relationship with the IETF, which is formalized in an MoU and involves ICANN providing a Liaison to the IESG, currently Michelle Cotton.

**1.2.8.1 Develop Performance Standards for SOW C.2.9**

ICANN’s proposal for developing performance standards in collaboration with the interested and affected parties is described below in points i–viii.

***i. Develop Performance Standards for SOW C.2.9.1 – Coordinate Assignment of Technical Protocol Parameters***

ICANN has an excellent relationship with the IETF community, which is the principal interested and affected party for protocol parameters management. ICANN entered into a Service Level Agreement (SLA) with the IETF Administrative Support Activity (IASA) in January 2007. It supplements the Memorandum of Understanding (MoU) between the IETF and ICANN concerning the technical work of the IANA Functions, dated March 1, 2000, which was published as RFC 2860 in June 2000. ICANN and IETF Administrative Oversight Committee (IAOC) cooperatively review and revise the SLA's targets every year in a process that involves all interested and affected parties. The most recent update was signed in May 2012. ICANN will continue this annual process. The current SLA can be found on the ICANN website, and the monthly performance reports ICANN produces for the IETF community are published on ICANN's IANA website.

ICANN and the interested and affected parties associated with protocol parameter management, IETF and IAB, have publicly discussed and agreed to a set of performance standards for the Coordination of the Assignment Of Technical Protocol Parameters. The performance standards and public reporting of ICANN's fulfillment of its service level commitment have been in place for five years and are updated every year. ICANN will continue to refine the performance metrics and SLAs for the administration of the technical protocol parameters in consultation with the organizations, the IETF and IAB, responsible for creating Internet standards.

In addition to publishing monthly performance reports on ICANN's IANA website, ICANN's performance reports have regularly been presented in the plenary session of IETF meetings by the IETF Chair, thereby offering an opportunity for the technical community to ask questions and comment on ICANN's performance of this IANA Function. These meetings are shown via webcast and use remote participation technologies, such as audio and video streaming and Jabber instant messaging, for those unable to join onsite. ICANN provides support to the interested and affected parties associated with protocol parameter management, who engage in public discussion of the performance standards for the Coordination of the Assignment Of Technical Protocol Parameters in public email lists. This support is principally in the form of data.

Given the existence of a defined set of SLAs with the interested and affected parties (IETF and IAB), ICANN will schedule a meeting with the COR within 30 days of the contract award to present and discuss the existing protocol parameter function. After this initial meeting, ICANN will schedule a follow-up meeting 30 days later to include representatives from the IETF and IAB to continue the conversation about performance metrics in delivering the service. Assuming the COR is satisfied with the consultation and cooperative working relationship with the relevant parties, the next step will be to request acceptance of the report format by the COR and to publish the reports. ICANN will establish performance standards with the agreement of the relevant parties and publish them within six months of the award. See **Figure 1.2-12a**.

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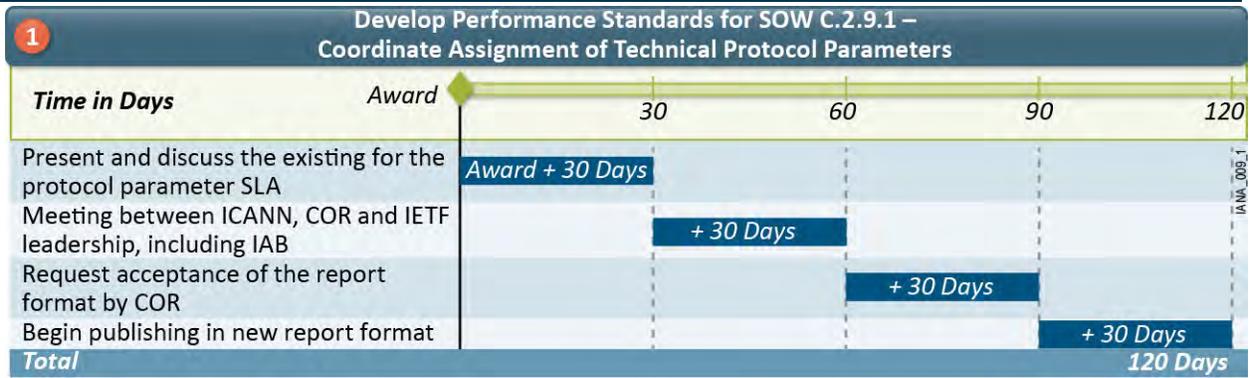


Figure 1.2-12a. Timeline

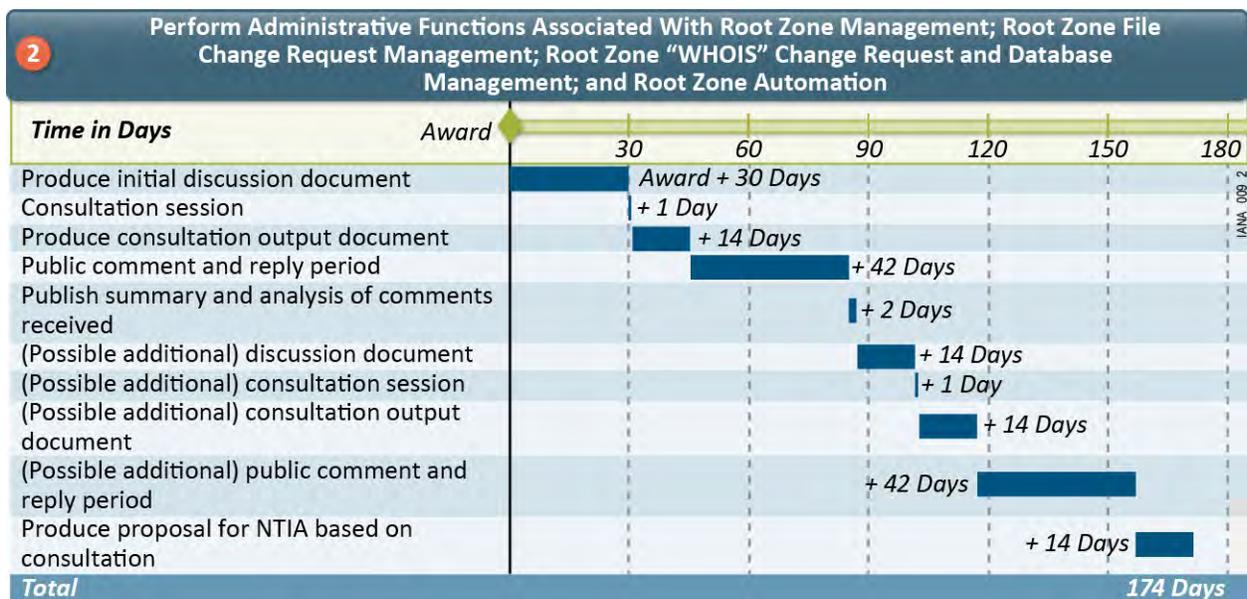
**ii. Perform Administrative Functions Associated with Root Zone Management, Root Zone File Change Request Management, Root Zone “WHOIS” Change Request and Database Management, and Root Zone Automation**

ICANN will consult the ccNSO (the ICANN Supporting Organization for ccTLDs), the GNSO (the ICANN Supporting Organization for gTLDs), the Root Zone Maintainer (currently Verisign), and the COR regarding appropriate performance standards. ICANN will share the data it has collected for the following:

- IANA Timeliness
- IANA Accuracy
- IANA Process Quality
- IANA Transparency
- IANA Reporting

Along with the measurements and internal targets for these Key Performance Indicators (KPIs), ICANN will use these data and goals as a starting point for discussion.

In order to fully consult with all interested and affected parties on appropriate performance standards for these Functions, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe® Connect™. ICANN will hold a public comment and reply period for the documents produced following these sessions. In the event that additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on performance standards. ICANN will then prepare a detailed proposal for NTIA to review and, upon acceptance by NTIA, will publish the performance standards on ICANN’s IANA website. ICANN will implement these performance standards and the reporting, which will demonstrate our fulfillment of that service level commitment within six months of the award. See **Figure 1.2-12b**.



**Figure 1.2-12b. Timeline**

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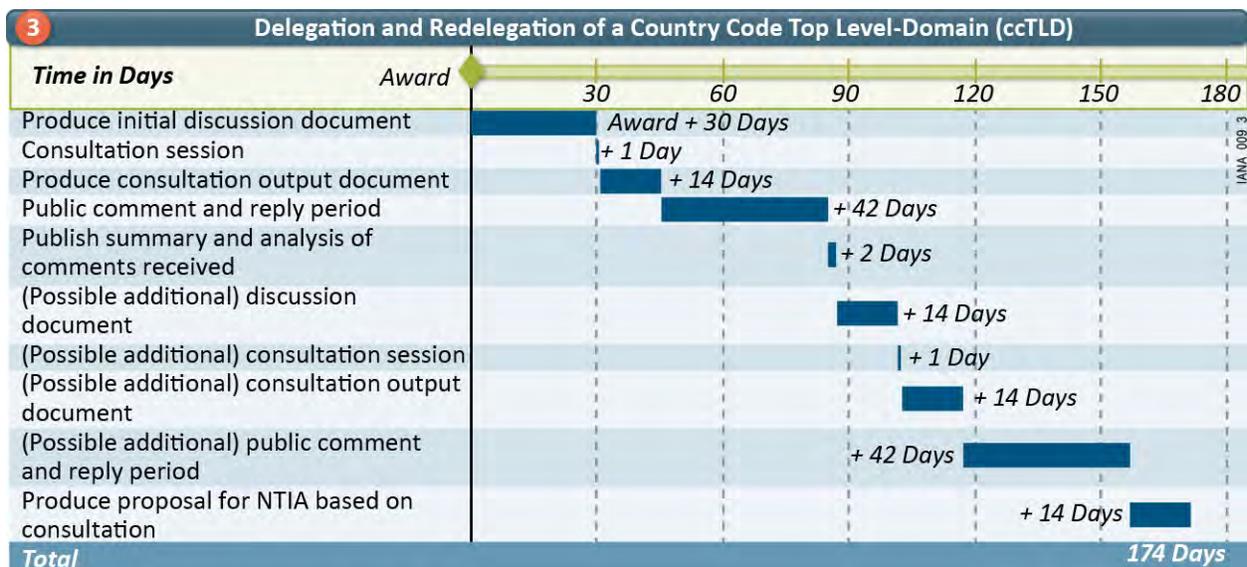
**iii. Delegation and Redelegation of a Country Code Top Level-Domain (ccTLD)**

ICANN will consult with the ccNSO, NTIA, the Root Zone Maintainer (currently Verisign), and the Governmental Advisory Committee (GAC), which provides advice to ICANN on issues of public policy regarding appropriate performance standards. Seeking input from the GAC is especially helpful where there may be an interaction between ICANN’s activities or policies and national laws or international agreements. ICANN will leverage its experience with current KPIs for root management to begin these consultations:

- IANA Timeliness
- IANA Accuracy
- IANA Process Quality
- IANA Transparency
- IANA Reporting

ICANN has developed measurements and internal targets for these KPIs and will use these data and goals as a basis for discussion.

To fully consult with all interested and affected parties on appropriate performance standards for these Functions, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe Connect. ICANN will hold a public comment and reply period for the documents produced following these sessions. In the event that an additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on performance standards. ICANN will then prepare a detailed proposal for NTIA to review and, upon acceptance by NTIA, will publish the performance standards on ICANN’s IANA website. ICANN will implement these performance standards and the reporting, which will demonstrate our fulfillment of that service level commitment. See Figure 1.2-12c.



**Figure 1.2-12c. Timeline**

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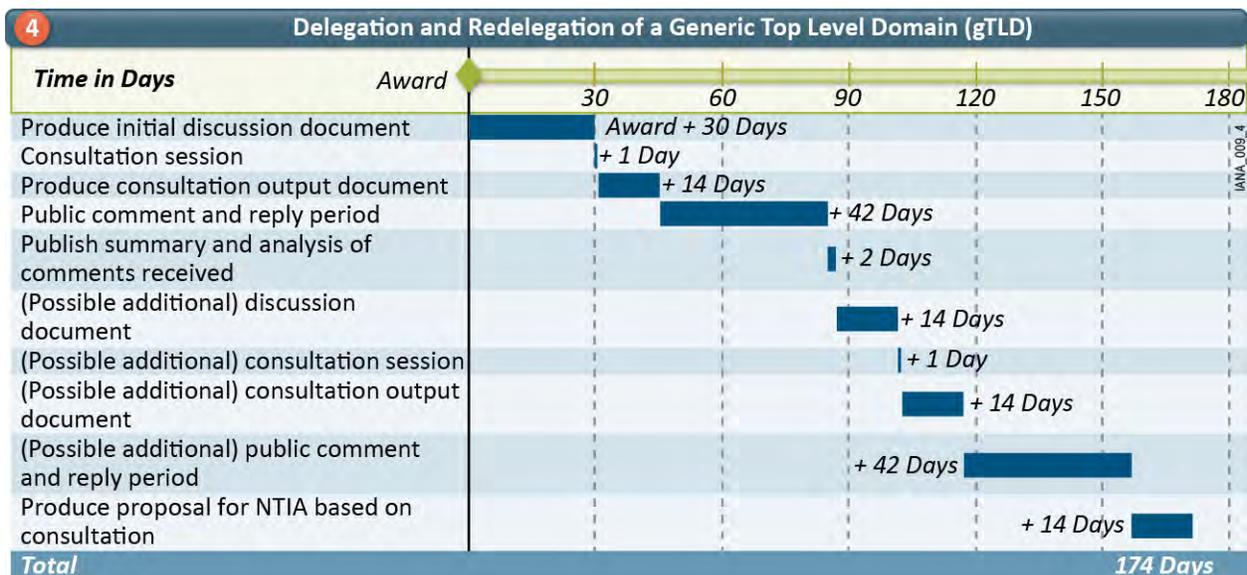
**iv. Delegation and Redelegation of a Generic Top Level Domain (gTLD)**

Staff from ICANN’s IANA and gTLD relationship management departments will consult with the GNSO, along with Verisign (the Root Zone Maintainer), and NTIA regarding appropriate performance standards. ICANN will leverage its experience with current KPIs for root management to begin these consultations:

- IANA Timeliness
- IANA Accuracy
- IANA Process Quality
- IANA Transparency
- IANA Reporting

ICANN has developed measurements and internal targets for these KPIs and will use these data and goals as a basis for discussion.

To fully consult with all interested and affected parties on appropriate performance standards for these Functions, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe Connect. ICANN will hold a public comment and reply period for the documents produced following these sessions. In the event that an additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on performance standards. ICANN will then prepare a detailed proposal for NTIA to review and, upon acceptance by NTIA, will publish the performance standards on ICANN’s IANA website. ICANN will implement these performance standards and the reporting, which will demonstrate our fulfillment of that service level commitment. See **Figure 1.2-12d**.



**Figure 1.2-12d. Timeline**

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**v. Root Domain Name System Security Extensions (DNSSEC) Key Management**

ICANN cooperated with NTIA and Verisign in 2010 on a broad consultation with industry groups regarding DNSSEC Key Management activities. The groups consulted included but were not limited to the following:

- IETF
- ICANN Supporting Organizations, including ccNSO, gNSO, RSSAC, SSAC, and ALAC
- Regional Network Operations Groups, including RIPE, Middle East Network Operations Group (MENOG), AUSNOG, and NANOG
- Government stakeholders, including NIST

ICANN intends to involve all these groups in consultations as interested and affected parties when developing performance standards. ICANN will leverage its experience with current KPIs for root management to begin these consultations:

- IANA Reporting
- IANA Timeliness
- IANA Accuracy
- IANA Transparency

ICANN has developed measurements and internal targets for these KPIs and will use these data and goals as a basis for discussion.

To fully consult with all interested and affected parties on appropriate performance standards for these Functions, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe Connect. ICANN will hold a public comment and reply period for the documents produced following these sessions. In the event that additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on performance standards. ICANN will then prepare a proposal for NTIA to review and, upon acceptance by NTIA, will publish the performance standards on ICANN's IANA website. ICANN will implement these performance standards and the reporting which will demonstrate our fulfillment of that service level commitment. See **Figure 1.2-12e**.

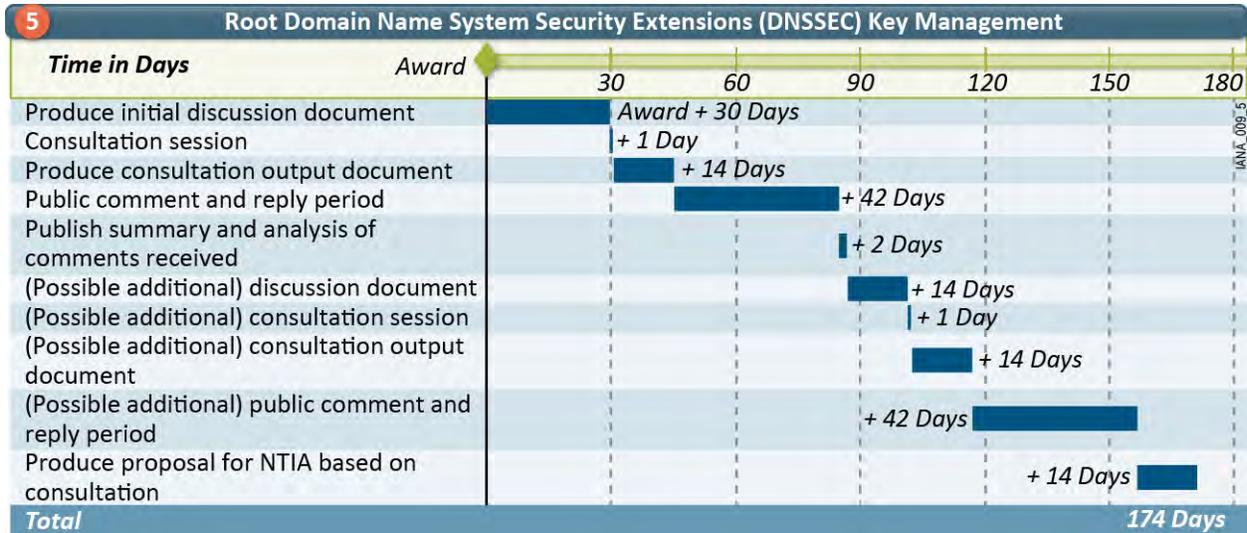


Figure 1.2-12e. Timeline

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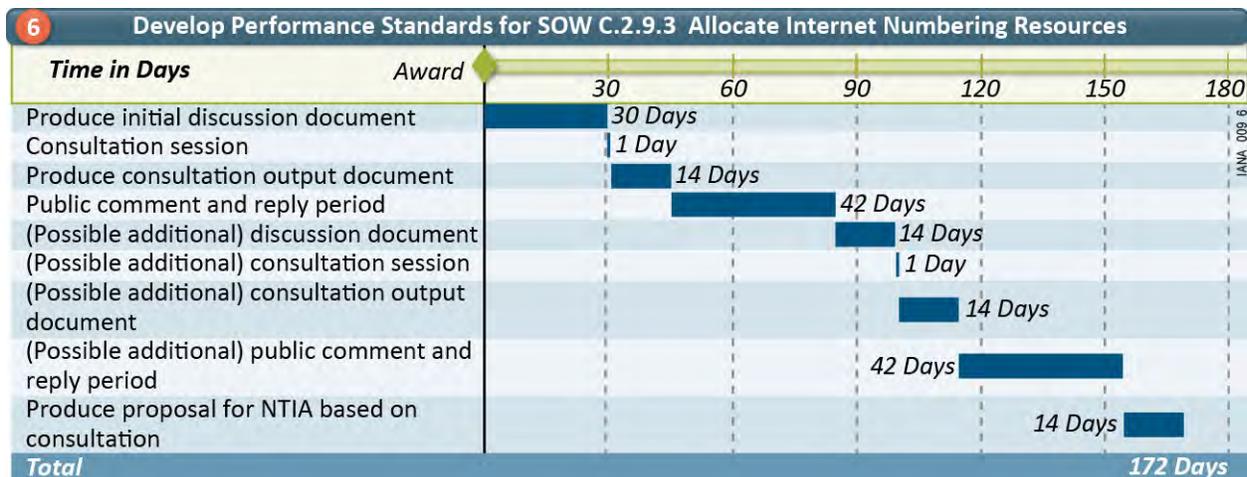
**vi. Develop Performance Standards for SOW C.2.9.3 Allocate Internet Numbering Resources**

ICANN entered into an Exchange of Letters with the Number Resource Organization (NRO) in December 2007. The NRO performs the role of the ICANN Address Supporting Organization (ASO). ICANN’s letter to the NRO included an invitation to the NRO to work with ICANN to document service levels associated with Internet Number Resource (INR) allocation processes. ICANN will renew its invitation to collaborate on service levels and will arrange a meeting at a mutually convenient location, such as an RIR or ICANN meeting or office, so ICANN and the NRO can develop performance standards. ICANN will use its KPIs for INR management, along with historical performance data as a starting point for discussions:

- IANA Accuracy
- IANA Timeliness
- IANA Process Quality
- IANA Transparency

ICANN has developed measurements and internal targets for these KPIs and can supply historical performance data. ICANN will use these data and goals as a basis for discussion.

To fully consult with all interested and affected parties on appropriate performance standards for these Functions, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe Connect. ICANN will hold a public comment and reply period for the documents produced following these sessions. In the event that an additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on performance standards. ICANN will then prepare a detailed proposal for NTIA to review and, upon acceptance by NTIA, will publish the performance standards on ICANN’s IANA website. ICANN will implement these performance standards and the reporting which will demonstrate our fulfillment of that service level commitment. See **Figure 1.2-12f**.



**Figure 1.2-12f. Timeline**

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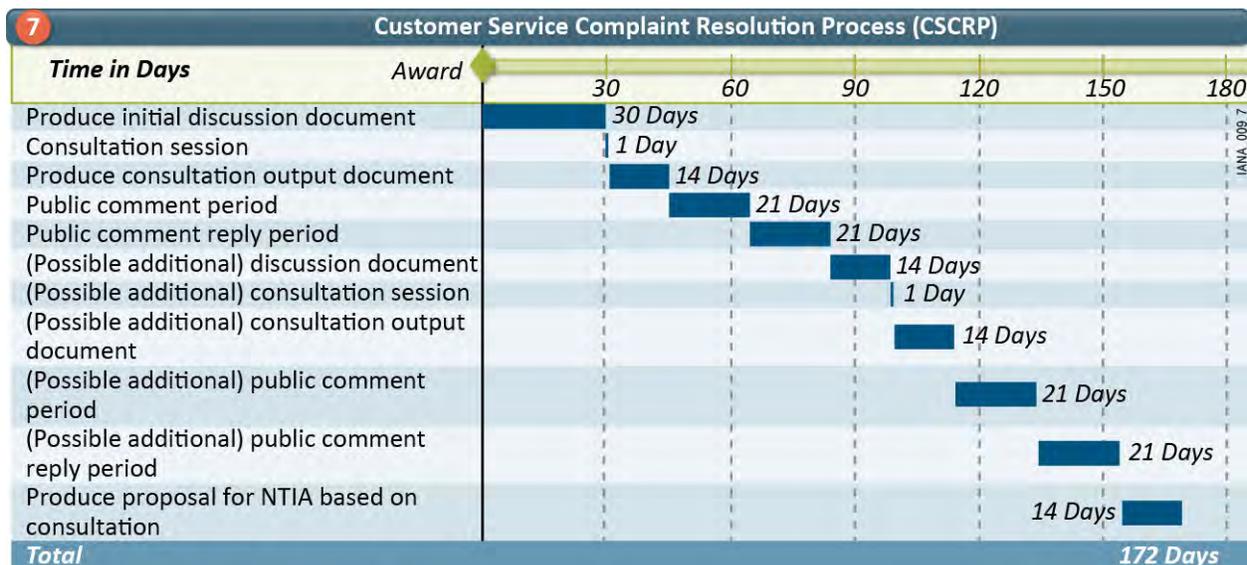
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**vii. Customer Service Complaint Resolution Process (CSCR)**

ICANN worked with the ccNSO and IETF leadership to develop an Escalation Procedure in 2006. This procedure, which has been published on ICANN’s IANA website (<https://www.iana.org/procedures/escalation>), forms a part of the SLA ICANN reviews and updates with the IAOC each year. ICANN will convene a group from all key stakeholder customer organizations: ccNSO, gNSO, NRO, IETF IANA WG, GAC, and NTIA. This group will review the current escalation procedure to see whether it continues to meet the needs of the organizations or if it should be refined. ICANN will publish any updates on ICANN’s IANA website and discuss with the IAOC incorporation of agreed changes into future revisions to the IAOC’s SLA.

To fully consult with all interested and affected parties on an appropriate CSCR, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe Connect. ICANN will hold a public comment and reply period for the documents produced following these sessions. In the event that additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on a CSCR proposal. ICANN will then prepare a detailed proposal for NTIA to review and, upon acceptance by NTIA, will publish the CSCR on ICANN’s IANA website. ICANN will implement the CSCR.

In addition to a current IANA Escalation Procedure, ICANN has an Ombudsman who can be reached thru the ICANN website and who reports directly to ICANN’s Board of Directors. The Ombudsman is available to conduct an independent, impartial and neutral review of facts and can also investigate complaints of unfairness using Alternative Dispute Resolution techniques. See **Figure 1.2-12g**.



**Figure 1.2-12g. Timeline**

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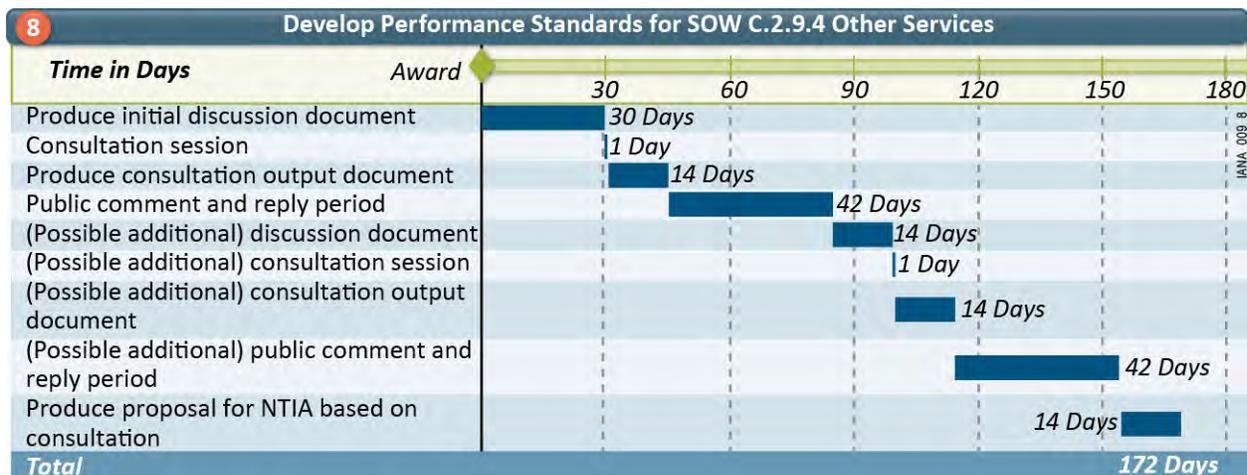
**viii. Develop Performance Standards for SOW C.2.9.4 Other Services**

ICANN will consult with NTIA regarding appropriate performance standards. ICANN will use the KPIs it has developed for root management as a starting point for this discussion:

- IANA Timeliness
- IANA Accuracy
- IANA Process Quality
- IANA Transparency
- IANA Reporting

ICANN has historical performance data and will use these data as a basis for discussion.

To fully consult with all interested and affected parties on appropriate performance standards for these Functions, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe Connect. ICANN plans to hold a public comment and reply period for the documents produced following these sessions. In the event that additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on performance standards. ICANN will then prepare a detailed proposal for NTIA to review and, upon acceptance by NTIA, will publish the performance standards on ICANN’s IANA website. ICANN will implement these performance standards and the reporting, which will demonstrate our fulfillment of that service level commitment. See **Figure 1.2-12h**.



**Figure 1.2-12h. Timeline**

**1.2.8.2 Post Via a Website**

As described above, ICANN will produce a proposal for NTIA at the conclusion of the consultation process planned with the interested and affected parties listed above for each of the IANA Functions. The plan is to complete the performance requirements phase of the consultation within three months of the award. Eight weeks will be reserved for discussions and iterations on the format of the web pages where the performance metrics will be published. The plan is to receive approval to publish from the COR on or before five and one half months after the award. Upon acceptance by NTIA, ICANN will publish within six months of the award

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the document on ICANN's IANA website in a section dedicated to performance standards. ICANN will publish the accepted document within a week of NTIA's notification that it has been accepted. ICANN will notify the interested and affected parties that the document has been published using its established links with each of the key stakeholders. These links include dedicated private mailing lists for announcements and discussions and regularly scheduled meetings.

### **1.2.8.3 Collaboration with Stakeholders**

To develop the performance standards, ICANN will work with each of the IANA Functions. ICANN will collaborate closely with each of the relevant stakeholder groups. ICANN will make sure that the stakeholders will be able to contribute text and comment on drafts prior to seeking approval and publishing the performance standards for each IANA Function.

## **1.2.9 Internet Assigned Numbers Authority (IANA) Functions [M.8; C.2.9]**

ICANN will provide support for requisite IANA Functions including the following: (1) the coordination of the assignment of technical Internet protocol parameters, (2) the administration of certain responsibilities associated with the Internet DNS root zone management, (3) the allocation of Internet numbering resources, and (4) other services related to the management of the ARPA and INT top-level domains (TLDs). The following section discusses in detail our understanding and technical approach to each SOW requirement.

### **1.2.9.1 Coordinate the Assignment of Technical Protocol Parameters Including the Management of the Address and Routing Parameter Area (ARPA) TLD [M.8; C.2.9.1]**

ICANN recognizes the Assignment of Technical Protocol Parameters and the management of the Address and Routing Parameter Area (ARPA) TLD as an essential component for successfully operating the IANA Functions. Assigning unique operation codes, port numbers, object identifiers (such as private enterprise numbers), protocol numbers, and other technical protocol parameters are vital parts of how the Internet works.

The process of managing the protocol parameter registries depends on a close working relationship with the IESG as well as the trust and confidence of the IETF community that the registries will remain accurate and available. ICANN has built this relationship over a long period of time and enjoys the trust and confidence of the IETF, IESG and IAB in the management of the protocol parameter registries.

In parallel with this, ICANN entered into an MoU with the IETF in 2000 (RFC 2860, Memorandum of Understanding Concerning the Technical Work of the Internet Assigned Numbers Authority). Subsequent yearly SLAs—which define the service time commitment goals, escalation procedures and projects for the IETF related work—will be reviewed annually and agreed to by both ICANN and the IETF. ICANN will continue to meet the deliverables of the SLA defined in the supplemental agreements. Over the last three years, ICANN has consistently met or exceeded the cumulative SLA goal for IANA Department processing times for IETF related requests.

Following guidance from the IAB and under the terms of the MoU (RFC2860), ICANN will continue to administer the .ARPA domain used exclusively for Internet-infrastructure purposes.

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ICANN will continue to follow the management guidelines and operational requirements defined in RFC3172 for the management of the .ARPA domain. ICANN will continue to observe the interim arrangement for DNSSEC for .ARPA and will work with integral parties to deploy a long-term architecture for DNSSEC in .ARPA to replace the interim arrangement.

### ***Understanding the Requirement***

ICANN understands that upon award of the contract, its responsibility for the assignment of technical protocol parameters, including the management of the Address and Routing Parameter Area (ARPA) TLD, will continue. In fulfilling this requirement, ICANN will assign unique values to various protocol parameters and maintain the list of existing and future registries created by the approved documents becoming Request for Comments (RFCs). There are currently more than 1,500 protocol parameter registries that have been created through what starts as an Internet-Draft (I-D), mostly initiated within the IETF, ultimately becoming a published RFC. Dozens of registries are added each year as more I-Ds that request new protocol registries become published RFCs. ICANN will continue to support the IETF and the RFC process by reviewing I-Ds before they are approved for publication to ensure that the request for actions complies with existing registration policies.

The relationship between ICANN and the IETF in coordinating the assignment of technical protocol parameters is described in a Memorandum of Understanding (MoU), published as RFC 2860 (See Appendix B). Since 2007, ICANN and the IETF have signed supplemental annual agreements which are integral to protocol parameter work. Under the new contract, ICANN will continue to develop these agreements together with the IETF leadership as their input helps guide the deliverables related to the protocol parameter work for the IETF.

ICANN will continue to manage the technical protocol parameters according to the instructions contained in the RFCs definition documents published through the IETF process. These documents define the creation of the protocol parameter registries and their registration policies. The strong working relationship ICANN has developed with these two groups ensures that any concerns about how requests are being processed are quickly communicated to ICANN and can be addressed rapidly. Similarly, any clarification ICANN needs for registration policies can be quickly provided.

ICANN understands the importance and responsibility of the management of .ARPA, including the addition of new second-level domains and updates to existing names and the implementation of DNSSEC in the .ARPA TLD. Through direction of the IAB, working with NTIA and Verisign, ICANN understands the deployment of a replacement for the current interim agreement for DNSSEC in .ARPA will fulfill the requirement as described in this contract.

### ***Technical Approach***

ICANN will have experienced staff assigned to support the technical protocol parameter assignments and the .ARPA management. ICANN will continue to use the processes in place utilizing the registration policies and procedures that have been developed by the IETF, IAB and ICANN for protocol parameter registries and .ARPA management. With over 13 years of experience, ICANN has created and will maintain productive working relationships with the

IETF, IESG and IAB and knows how to perform the protocol parameter and .ARPA work, delivering at service levels requested by these stakeholder groups.

ICANN will follow the established formal process review process, which is designed to improve processes in response to environmental changes, deployment experience and customer feedback. ICANN will remain responsive and flexible with receiving instructions from the IETF regarding requests for changes in processes while working collaboratively to continually improve processes for protocol parameter requests and document reviews. Process managers formally will review each step-by-step process every year in a change management process. Changes to processes will be the result of new definitions in RFCs providing instructions regarding registration policies to ICANN or instructions from IESG members and designated experts regarding registration procedures.

#### **1.2.9.1.1 Review and Assign Unique Values**

ICANN will responsibly review and assign unique values for protocol parameters in the registries currently maintained and for those future registries created through the RFC process. Protocol parameters (e.g., operation codes, port numbers, object identifiers, and protocol numbers) are an essential part of what makes the Internet work. ICANN will continue to process protocol parameter requests according to the established guidelines and policies defined in RFCs and will work together with the IETF leadership to determine appropriate service level goals.

There will be two ways in which ICANN will continue to receive requests for the assignment and registration of protocol parameters. The first will be through approved I-Ds becoming RFCs. Second will be through requests submitted directly to ICANN (not through the IETF document process). For approved Internet-Drafts becoming RFCs, the request for the protocol parameter assignments will be found in the IANA Considerations section of the document. The document will describe the specific actions to be taken by ICANN. This may include setting up a new registry with initial assignments, adding new assignments to existing registries or making modifications to existing registries. The Internet community will be able to submit requests directly to ICANN through online webforms or via email to request assignment of protocol parameters. Examples of webforms that will be used for requesting protocol parameter assignments can be found in **Appendix B**.

Together with the IETF, ICANN will continue to develop SLAs for the protocol parameter registry maintenance and document reviews. These agreements will include goal times for processing all types of requests for protocol parameters, specifically how much time is spent with ICANN. These agreements will be integral to the IANA Functions related to technical protocol parameters and they will define what ICANN delivers.

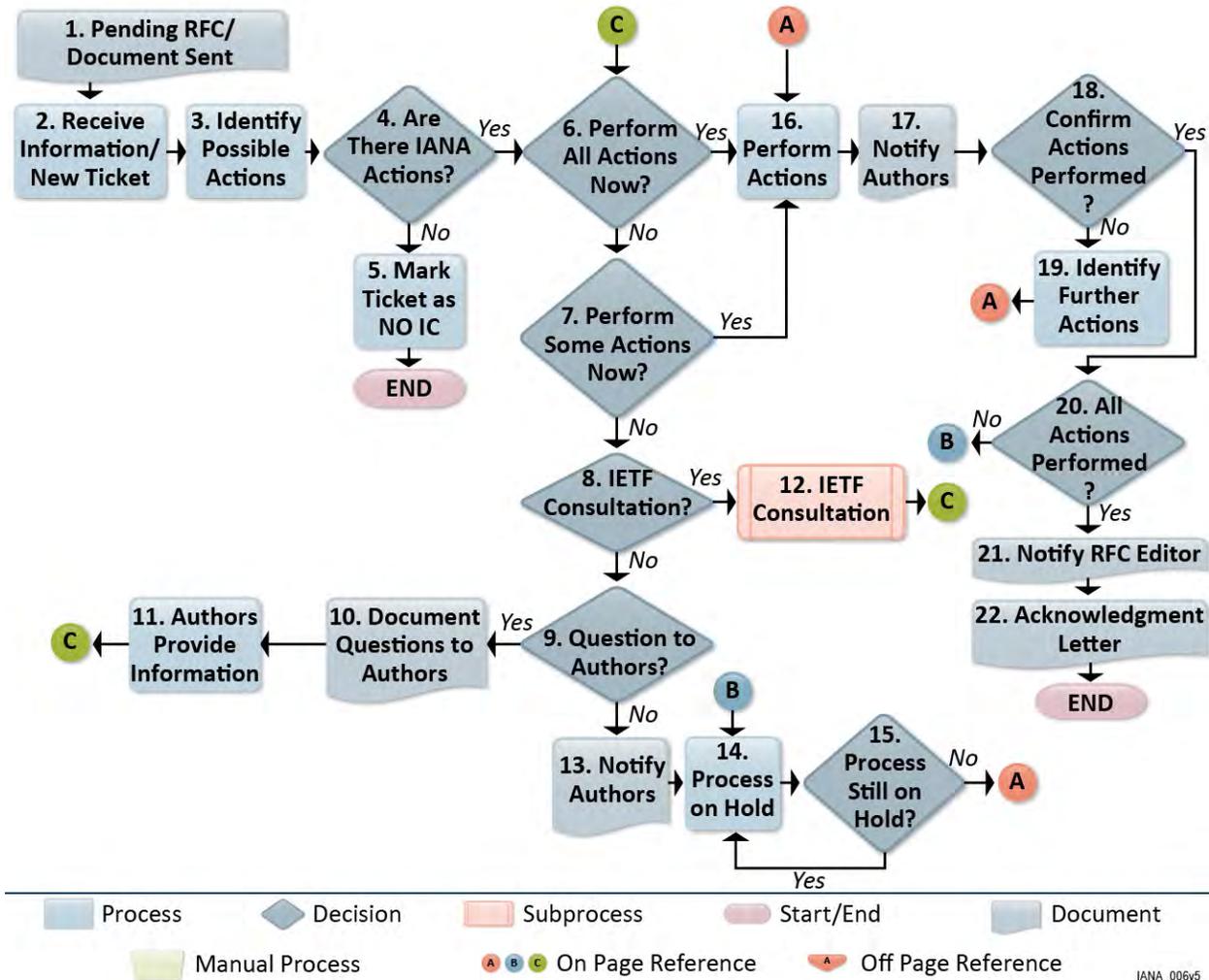
**Figure 1.2-13** lists the process flowcharts that will be used to review and assign unique values for protocol parameters.

**Figure 1.2-13. List of Process Flowcharts**

| <b>FIGURE #</b> | <b>CHART TITLE</b>   | <b>DESCRIPTION</b>   |
|-----------------|--|--|
| 1.2-14          | Internet-Draft Approval Process                                | This process will be used for documents approved to become RFCs, which may contain actions for ICANN to perform (new protocol parameter registries or assignments in existing registries). |
| 1.2-16          | First Come First Served (FCFS) Process                         | This process will be used for requests that are in registries with a First Come First Served registration policy per RFC 5226.   |
| 1.2-18          | Private Enterprise Number (PEN) – New Request Process          | This process will be used for new PEN requests that are in registries with a FCFS registration policy per RFC 5226.  |
| 1.2-20          | Private Enterprise Number (PEN) – Modification Request Process | This process will be used for PEN modification requests that are in registries with a FCFS registration policy per RFC 5226.   |
| 1.2-22          | Private Enterprise Number (PEN) – Removal Request Process      | This process will be used for PEN deletion requests that are in registries with a FCFS registration policy per RFC 5226.   |
| 1.2-24          | Expert Review Process  | This process will be used for requests that are in registries with a Expert Review registration policy per RFC 5226.   |
| 1.2-26          | IESG Approval Process  | This process will be used for requests that are in registries with a IESG Approval registration policy per RFC 5226.   |

**Top Level Approvals Review of Internet-Drafts**

Figure 1.2-14 depicts the top-level, step-by-step process that will be used for I-Ds that begins with a document approval (to become an RFC) and ends with ICANN’s completion of the actions requested in the IANA Considerations section of the document.



**Figure 1.2-14. Internet-Draft (I-D) Approval Process**

Figure 1.2-15 shows the step-by-step process.

**Definitions**

- **AUTO** – Automatically through Ticketing System
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist

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- **PPM** – Protocol Parameter Manager
- **Authors** – the authors for the I-D that has been approved for publication as an RFC

**Figure 1.2-15. Internet-Draft Approval Process Step-by-Step Description**

| 1                  | PENDING RFC/DOCUMENT SENT TO ICANN  |
|--------------------|---|
| <b>Description</b> | An approval or intent to publish for an I-D is sent to ICANN.   |
| <b>Actor</b>       | IETF Secretariat or RFC Editor  |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• A message is sent to the ticketing system.</li> <li>• A message is sent to the ticketing system.</li> <li>• Message from Secretariat comes in a specified format.</li> <li>• Go to Action box 2.</li> </ul>  |
| 2                  | RECEIVE INFORMATION/NEW TICKET  |
| <b>Description</b> | A new ticket is created and either ticketing system automatically adds the ticket to the correct queue, or the ticket is manually placed in the right queue.  |
| <b>Actor</b>       | AUTO and/or IPS   |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• E-mail sent directly to the queue is automatically added to the appropriate ticket queue.</li> <li>• Tickets that arrive elsewhere are manually moved to the appropriate Ticketing System queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Action box 3.</li> </ul> |
| 3                  | IDENTIFY POSSIBLE ACTIONS   |
| <b>Description</b> | Gather all information needed to determine if there are actions to be performed by ICANN. This step also includes filling in custom fields for the ticket.  |
| <b>Actor</b>       | IPS   |
| <b>Documents</b>   | n/a   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Review the most recent version of the document.</li> <li>• Check the Last Call ticket (if applicable).</li> <li>• Check the Evaluation ticket.</li> <li>• Check for any other related tickets.</li> <li>• Go to Decision box 4.</li> </ul>   |
| 4                  | ANY IANA ACTIONS TO PERFORM?  |
| <b>Description</b> | Staff checks all the information identified to see if there are any actions for ICANN to perform.   |
| <b>Actor</b>       | IPS   |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Input to making decision based on the review of the Last Call, Evaluation and other related tickets, are there actions to perform?</li> <li>• If yes, go to Decision box 6.</li> <li>• If no, go to Action box 5.</li> </ul>   |
| 5                  | MARK TICKET AS NO IC  |
| <b>Description</b> | The ticket needs to be marked as having “NO IC” or No IANA Considerations. This means the Internet-Draft has no IANA Actions to perform.  |
| <b>Actor</b>       | IPS   |

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|                    |   |
|--------------------|---|
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• When the Internet-Draft does not contain any IANA Actions the ticket can be resolved.</li> <li>• Go to END.</li> </ul>   |
| <b>6</b>           | <b>CAN ICANN PERFORM ALL OF THE ACTIONS NOW?</b>  |
| <b>Description</b> | Can ICANN perform ALL the actions right now? This means the document is not dependent on another document getting approved and actions performed.   |
| <b>Actor</b>       | IPS   |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Verify that all the actions can be performed immediately (not having to wait for a registry to be created by a dependant document).</li> <li>• If yes, go to Action box 16.</li> <li>• If no, go to Decision box 7.</li> </ul>   |
| <b>7</b>           | <b>CAN ICANN PERFORM SOME OF THE ACTIONS NOW?</b>   |
| <b>Description</b> | Can ICANN perform SOME of the actions now? This means that some of the actions can be performed now and some will require waiting until later.  |
| <b>Actor</b>       | IPS   |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Identify which actions, if any, can be performed immediately.</li> <li>• Identify which actions need to be performed later and what document is required to be processed before the actions can be completed.</li> <li>• If yes, go to Action box 16.</li> <li>• If no, go to Decision box 8.</li> </ul> |
| <b>8</b>           | <b>IS IETF CONSULTATION NEEDED?</b>   |
| <b>Description</b> | Does the IETF (IESG, Area Directors, WG Chairs, and/or experts) need to be consulted regarding the pending actions?   |
| <b>Actor</b>       | PPM or IPS  |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Determine if further consultation is needed.</li> <li>• If yes, go to Sub Process box 12.</li> <li>• If no, go to Decision box 9.</li> </ul>   |
| <b>9</b>           | <b>DOES ICANN NEED TO SEND QUESTIONS TO AUTHORS?</b>  |
| <b>Description</b> | Do questions or requests for clarification need to be sent to the authors of the document?  |
| <b>Actor</b>       | IPS   |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Determine if further questions need to be asked of the authors to clarify the actions.</li> <li>• Identify what questions need to be asked or what needs clarified.</li> <li>• If yes, go to Action box 10.</li> <li>• If no, go to Action box 13.</li> </ul>  |
| <b>10</b>          | <b>SEND QUESTIONS TO AUTHORS</b>  |
| <b>Description</b> | Send an email to the authors with questions regarding actions.  |
| <b>Actor</b>       | IPS   |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Send email to authors.</li> </ul>  |

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|                    |  |
|--------------------|--|
|                    | <ul style="list-style-type: none"> <li>This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days.</li> <li>Go to Action box 11.</li> </ul>   |
| <b>11</b>          | <b>AUTHORS PROVIDE INFORMATION</b>   |
| <b>Description</b> | Authors send back information to help clarify the requested actions.   |
| <b>Actor</b>       | Authors  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>ICANN receives an email from the authors with answers to questions and/or clarification.</li> <li>Go to Decision box 6.</li> </ul>  |
| <b>12</b>          | <b>PERFORM IETF CONSULTATION – SUB PROCESS</b>   |
| <b>Description</b> | Perform the IETF Consultation by using the defined sub process.  |
| <b>Actor</b>       | PPM or IPS   |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>Follow the steps in the IETF Consultation Sub Process.</li> <li>Go to Decision box 6.</li> </ul>  |
| <b>13</b>          | <b>NOTIFICATION TO AUTHORS</b>   |
| <b>Description</b> | Inform the authors that we cannot proceed with the actions for the document, as it will need to be put on hold. (This could be ALL the actions or only SOME actions.)  |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>Send email to Authors.</li> <li>Go to Decision box 14.</li> </ul>   |
| <b>14</b>          | <b>PROCESS ON HOLD</b>   |
| <b>Description</b> | In order to perform all the actions for the approved Internet-Draft, another document must be approved and actions performed for it first.   |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>This ticket will stay in this Action box until the dependent actions are performed. A weekly check to see if the dependent document has been approved is performed where the next decision is asked again.</li> <li>Go to Decision box 15.</li> </ul> |
| <b>15</b>          | <b>PROCESS STILL ON HOLD?</b>  |
| <b>Description</b> | Weekly check to see if the document holding up the approved Internet-Draft is approved yet.  |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | n/a  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>Check against relevant queues to see if the dependent document has been approved and the actions completed.</li> <li>If yes, go to Action box 14.</li> <li>If no, go to Action box 16.</li> </ul>   |
| <b>16</b>          | <b>PERFORM ACTIONS</b>   |
| <b>Description</b> | Perform the actions in the IANA registries.  |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | N/A  |

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|                    |  |
|--------------------|--|
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Create new registries and/or add/modify/delete registrations from existing registries.</li> <li>• Change references to show the RFC-to-be.</li> <li>• Update the matrix to include new registries, registration procedures and references.</li> <li>• Go to Action box 17.</li> </ul>   |
| <b>17</b>          | <b>NOTIFICATION TO THE AUTHORS</b>   |
| <b>Description</b> | Inform the Internet-Draft authors (cc'ing WG chairs and ADs) that the actions for the document have been completed.  |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Confirm the actions are visible in the IANA Registries.</li> <li>• Write to the authors (cc'ing the WG chairs and ADs) and send them details of the actions completed.</li> <li>• This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days.</li> <li>• Go to Decision box 18.</li> </ul> |
| <b>18</b>          | <b>CONFIRM IANA ACTIONS PERFORMED</b>  |
| <b>Description</b> | Receive response from the authors indicating the actions taken are correct.  |
| <b>Actor</b>       | Authors and IPS  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Check response from authors to see if all actions taken are correct.</li> <li>• If yes, go to Decision box 20.</li> <li>• If no, go to Action box 19.</li> </ul>  |
| <b>19</b>          | <b>FURTHER ACTIONS</b>   |
| <b>Description</b> | The authors may have provided feedback to ICANN regarding changes to the actions performed.  |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Identify if there are any corrections and/or additions to be made in the registries and/or matrix.</li> <li>• Identify if there are any questions to answer.</li> <li>• Go to Action box 16.</li> </ul>   |
| <b>20</b>          | <b>ALL IANA ACTIONS PERFORMED?</b>   |
| <b>Description</b> | Have ALL the Actions been performed and confirmed? (Some actions may have been completed at different times if there was a dependency.)  |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Confirm the actions are visible in the IANA Registries.</li> <li>• Confirm there are no additional actions that are waiting on other documents.</li> <li>• If yes, go to Action box 21.</li> <li>• If no, go to Action box 14.</li> </ul>   |
| <b>21</b>          | <b>NOTIFICATION TO THE RFC-EDITOR</b>  |
| <b>Description</b> | Inform RFC-Editor that the IANA Actions have been completed and identify which actions were performed.   |
| <b>Actor</b>       | IPS  |

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|                    |   |
|--------------------|---|
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"><li>• Send message to RFC-Editor.</li><li>• This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days.</li><li>• Go to Action box 22.</li></ul> |
| <b>22</b>          | <b>ACKNOWLEDGMENT LETTER</b>  |
| <b>Description</b> | The RFC-Editor informs ICANN that they have received (acknowledged) receipt of confirmation of IANA Actions completed.  |
| <b>Actor</b>       | RFC Editor/IPS  |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"><li>• Receive message from RFC-Editor indicating acknowledgment.</li><li>• Go to END.</li></ul>   |

The status of documents that have been approved for publication will be publicly available on ICANN'S IANA website.

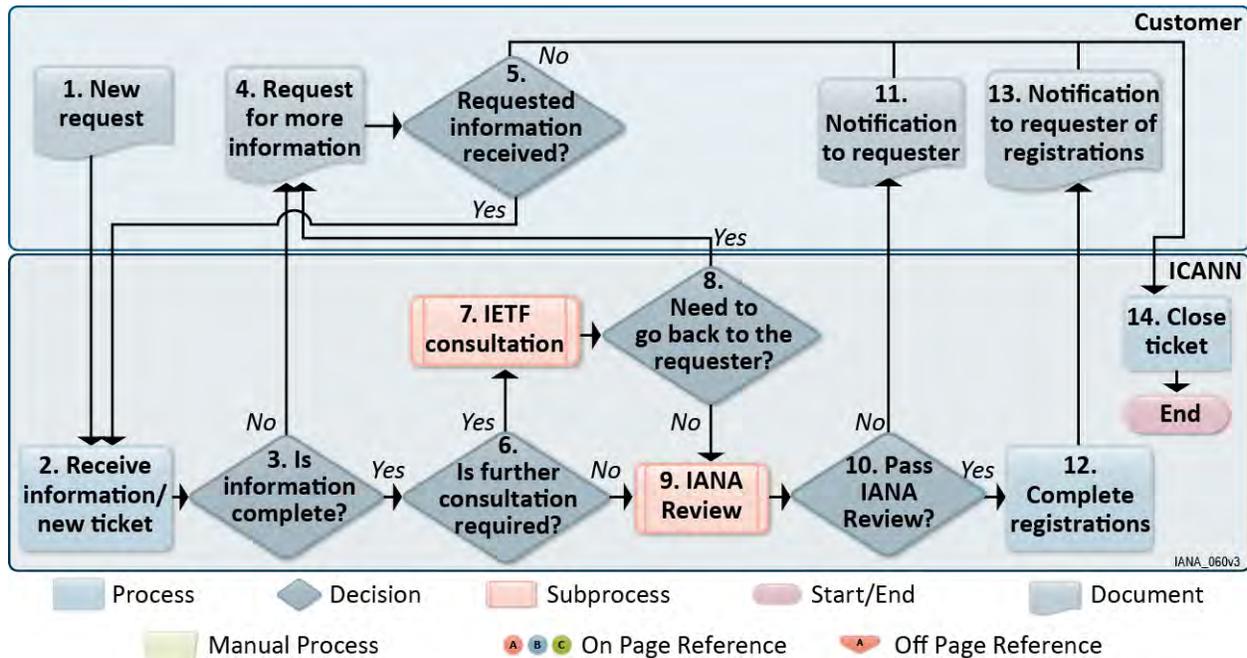
Protocol parameters will be submitted either using the forms available on ICANN'S IANA website or via email. Requests will be made on behalf of individuals or organizations/companies. Upon receipt of a request, ICANN will verify what the requester is seeking to register and what the registration procedures are for that parameter type. The registration procedures for each registry will be established by the RFC authors and will be in most cases reviewed by the IETF community including Working Groups, IESG and IAB. The definitions of the registration procedures can be found in RFC 5226. If clarification is required, ICANN will work with subject matter experts and the IESG to answer any questions.

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**First Come First Served Protocol Parameter Request Process**

Figure 1.2-16 shows the top-level, step-by-step process that will be used for requests for protocol parameters that follow the FCFS registration procedures. Examples of FCFS requests are TRIP ITAD numbers and Vendor Specific Application IDs. These requests do not require additional review by experts or do not require additional documentation. They will be reviewed to make sure the minimal information requested has been submitted and then are processed.



**Figure 1.2-16. First Come First Served (FCFS) Process**

Note: The PEN registry will also use the FCFS process; however, because of the volume of requests, they use a separate processing system.

Figure 1.2-17 shows the top-level, step-by-step process used for requests for protocol parameters.

**Definitions**

- **AUTO** – Automatically through ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Requesters** – The requester who submitted the request.
- **IETF** – Internet Engineering Task Force

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- **IESG** – Internet Engineering Steering Group
- **AD** – Area Director
- **WGC** – Working Group Chair

**Figure 1.2-17. FCFS Process Step-by-Step Description**

| <b>1</b>    | <b>NEW REQUEST SENT TO ICANN</b>   |
|-------------|--|
| Description | A request for a new registration in IANA maintained registries is sent to ICANN.   |
| Actor       | Requester  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• A message is sent to <i>iana@iana.org</i> or to a specific queue via email or through an online template.</li> <li>• Go to Action box 2.</li> </ul>   |
| <b>2</b>    | <b>RECEIVE INFORMATION/NEW TICKET</b>  |
| Description | If this is the initial information being received, a new ticket is created. Ticketing system automatically puts the ticket in the correct queue or the ticket is manually placed in the appropriate queue. If this is additional information being received, it will either directly go to the existing ticket, or a new ticket will be created and will be merged with the existing ticket.   |
| Actor       | AUTO and/or IPS  |
| Documents   | Tools needed: Ticketing system   |
| Steps       | <ul style="list-style-type: none"> <li>• Tickets that arrive in <i>iana@iana.org</i> are manually moved to the appropriate ticketing system queue.</li> <li>• Some tickets will automatically arrive in the appropriate queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Decision box 3.</li> </ul>   |
| <b>3</b>    | <b>IS INFORMATION COMPLETE?</b>  |
| Description | Review the information in the ticket. Check to make sure all required information for the registration requested is included.  |
| Actor       | IPS  |
| Documents   | <i>www.iana.org/protocols</i> (to verify which registry and registration procedures)<br><i>www.rfc-editor.org</i> (to verify any information in the guiding RFC)   |
| Steps       | <ul style="list-style-type: none"> <li>• Review the ticket information.</li> <li>• Check which registry they are requesting a parameter in.</li> <li>• Add the registry information if applicable to a custom field.</li> <li>• Are all criteria met according to the governing RFC? Check the RFC that created the registry and established the registration procedures. Are there any specific criteria that need to be met to submit a fully formed request? Are only specific characters allowed in the name being registered? Are there any other rules to be followed for the registry the applicant is seeking registration in? Check to see if there is already a registration with the same name/number (duplicates).</li> <li>• If yes, go to Decision box 6.</li> <li>• If no, go to Action box 4.</li> </ul> |
| <b>4</b>    | <b>REQUEST FOR MORE INFORMATION</b>  |
| Description | A message is sent to the requester asking for more information regarding the requested parameter registration.   |
| Actor       | IPS  |

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|             |   |
|-------------|---|
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Send message to requester.</li> <li>• Ask clarifying questions as needed.</li> <li>• This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>• Go to Decision box 5.</li> </ul>  |
| <b>5</b>    | <b>REQUESTED INFORMATION RECEIVED?</b>  |
| Description | Has the requested information been sent back to ICANN by the requester?   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Information has been sent back to ICANN.</li> <li>• If yes, go to Action box 2.</li> <li>• If no AND past 30 days, go to Action box 14.</li> </ul>   |
| <b>6</b>    | <b>IS FURTHER CONSULTATION REQUIRED?</b>  |
| Description | Does ICANN need to consult with someone in the IETF community regarding this request?   |
| Actor       | IPS   |
| Documents   | <p>ICANN's Private Network link:<br/> <a href="https://wiki.icann.org/display/icanniana/Designated+Experts+List&amp;nbsp;nbsp;">https://wiki.icann.org/display/icanniana/Designated+Experts+List&amp;nbsp;nbsp;</a> (This page lists all the designated experts/email addresses for registries<br/> <a href="http://datatracker.ietf.org/wg/">http://datatracker.ietf.org/wg/</a> (This page includes all the names/email addresses for Area Directors and WGCs.)</p> |
| Steps       | <ul style="list-style-type: none"> <li>• Are there questions that cannot be answered by the requester or ICANN that require sending a question to the IETF (IESG, AD, WGC and/or Expert)?</li> <li>• If yes, go to Sub Process box 7.</li> <li>• If no, go to Sub Process box 9.</li> </ul>   |
| <b>7</b>    | <b>IETF CONSULTATION SUB PROCESS</b>  |
| Description | IETF Consultation Sub Process   |
| Actor       | PPM or IPS  |
| Documents   | N/A   |
| Steps       | Go to Decision box 8.   |
| <b>8</b>    | <b>NEED TO GO BACK TO THE REQUESTER?</b>  |
| Description | Does ICANN need to go back to the requester with requests for clarification and/or questions?   |
| Actor       | PPM or IPS  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Determine if ICANN needs to go back to the requester with questions/clarification.</li> <li>• If yes, go to Action box 4.</li> <li>• If no, go to Sub Process box 9.</li> </ul>  |
| <b>9</b>    | <b>IANA REVIEW SUB PROCESS</b>  |
| Description | IANA Review Sub Process   |
| Actor       | IPS   |
| Documents   | ICANN's Private Network link: <a href="https://wiki.icann.org/display/icanniana/IANA+Review+Process">https://wiki.icann.org/display/icanniana/IANA+Review+Process</a>   |
| Steps       | <ul style="list-style-type: none"> <li>• Go to Decision box 10.</li> </ul>  |

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| <b>10</b>   | <b>PASS IANA REVIEW?</b>   |
|-------------|--|
| Description | Did the request pass IANA Review?  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• If yes, go to Action box 12.</li> <li>• If no, go to Action box 11.</li> </ul>  |
| <b>11</b>   | <b>NOTIFICATION TO REQUESTER</b>   |
| Description | Notify the requester that the request can not be processed.  |
| Actor       | PPM  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Send email to the requester.</li> <li>• Go to Action box 14.</li> </ul>   |
| <b>12</b>   | <b>COMPLETE REGISTRATIONS</b>  |
| Description | Perform the actions in the IANA Registries.  |
| Actor       | IPS  |
| Documents   | Tools needed: Subversion and Oxygen  |
| Steps       | <ul style="list-style-type: none"> <li>• Complete registrations in existing registries.</li> <li>• Go to Action box 13.</li> </ul>   |
| <b>13</b>   | <b>NOTIFICATION TO REQUESTER</b>   |
| Description | Inform the requester that the registration has been completed.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Confirm the registration is visible in the IANA Registries.</li> <li>• Write to the requester and send them details of the registration completed.</li> <li>• Go to Action box 14.</li> </ul> |
| <b>14</b>   | <b>CLOSE TICKET</b>  |
| Description | Final step to close the ticket.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Go to END.</li> </ul>   |

**Private Enterprise Number (PEN) Protocol Parameters**

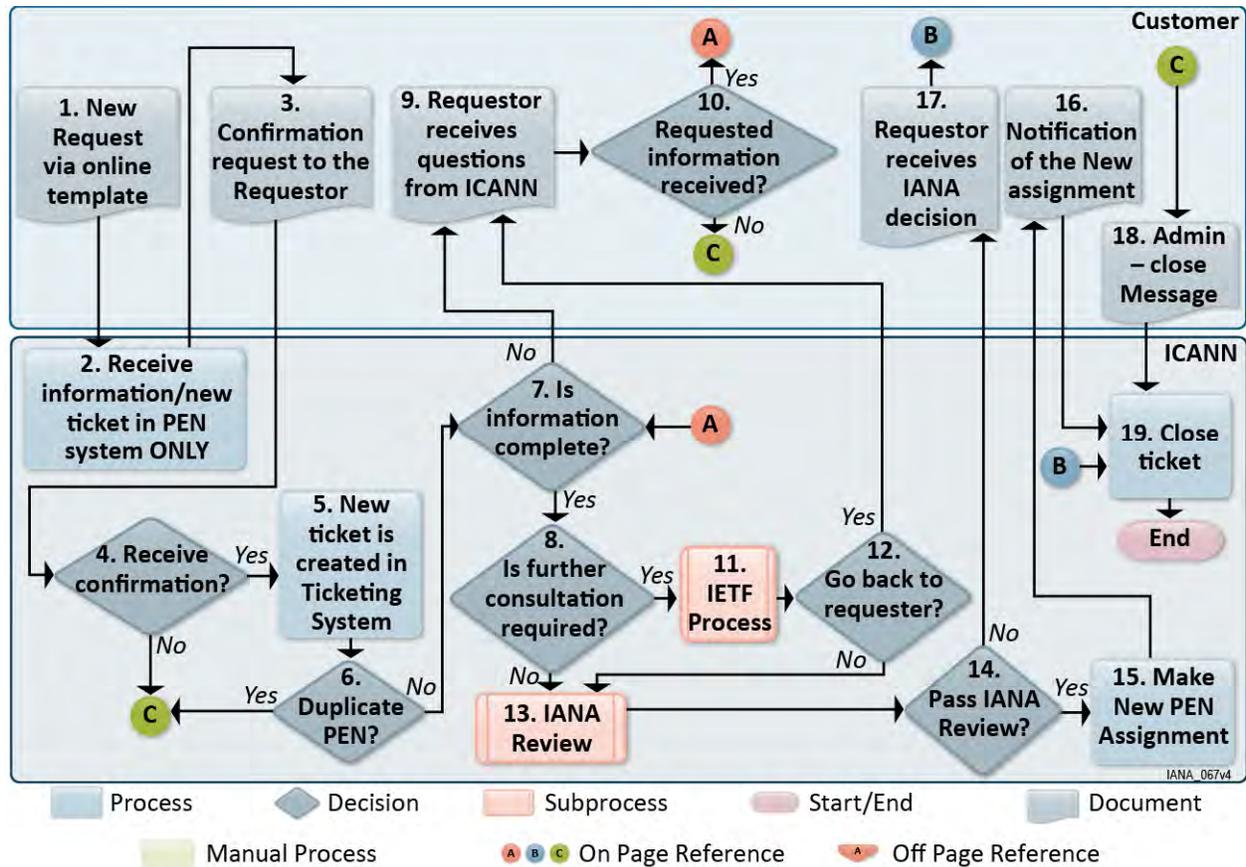
Private Enterprise Numbers (PENs) are a type of object identifier protocol parameter. Because of the large volume of requests, ICANN will use a separate system to process PEN requests. ICANN will automate the current system to allow for more automation and to improve both administrative and user interfaces. ICANN will also produce more statistical information from an automated system. Below are the step-by-step processes ICANN will use to handle requests for new PENs, modifications of existing PENs and the removal of PENs.

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**New Private Enterprise Numbers (PENs)**

Figure 1.2-18 shows the top-level, step-by-step process that will be used for requests for New Private Enterprise Numbers that follow the first come first served registration procedures.



**Figure 1.2-18. Private Enterprise Number (PEN) – New Request Process**

Figure 1.2-19 describes the top-level, step-by-step process that will be used for requests for new Private Enterprise Numbers that follow the first come first served registration procedures.

**Definitions**

- **AUTO** – Automatically through PEN system and/or ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Requesters** – The requester who submitted the request
- **IETF** – Internet Engineering Task Force

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- IESG – Internet Engineering Steering Group
- AD – Area Director
- WGC – Working Group Chair

**Figure 1.2-19. Private Enterprise Number (PEN) – New Request Process Step-by-Step Description**

| 1           | NEW REQUEST SENT TO ICANN  |
|-------------|--|
| Description | A request for a new registration in IANA PEN registry is sent to ICANN. See <b>Appendix A</b> .  |
| Actor       | Requester  |
| Documents   | N/A  |
| Steps       | Go to Action box 2   |
| 2           | RECEIVE INFORMATION/NEW TICKET (IN PEN SYSTEM ONLY)  |
| Description | A new ticket is created in the IANA PEN system ONLY. The request will NOT be created in the ticket system at this time.  |
| Actor       | AUTO   |
| Documents   | Online template  |
| Steps       | Go to Action box 3   |
| 3           | CONFIRMATION REQUEST TO THE REQUESTOR  |
| Description | The IANA PEN system automatically generates a “confirmation message” and sends it to the email address specified in the template to request one confirmation. The “confirmation message” contains a secure non-guessable and non-sequential web-based link.  |
| Actor       | AUTO   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• The IANA PEN system               <ul style="list-style-type: none"> <li>– The outgoing message is logged in the system.</li> <li>– 30-days timeout starts.</li> <li>– IPS reviews the ticket information.</li> </ul> </li> <li>• Ticket system: NO Event occurred.</li> <li>• WHEN it is spam, IPS can interfere and manually close the request: Set the Request state to “Admin-close.” No further action and outgoing message are required.</li> <li>• Go to Step 4.</li> </ul>  |
| 4           | RECEIVE CONFIRMATION?  |
| Description | A confirmation is returned via the secure web-based link.  |
| Actor       | Requester  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• IF the requestor confirms the request within the 30 calendar days:               <ul style="list-style-type: none"> <li>– A web-based “Confirmation” message is automatically displayed on the website.</li> </ul> </li> <li>• IF the requestor CANCELS the request:               <ul style="list-style-type: none"> <li>– A web-based “Request has been cancelled” message is automatically displayed on the website.</li> </ul> </li> <li>• This ticket will stay in this Step until a response is received. Automated Pings/Reminders will be sent from the PEN system every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>• If yes, go to Step 5.</li> <li>• If no AND past 30 days, go to Step 18.</li> </ul> |
| 5           | NEW TICKET IS CREATED IN TICKET SYSTEM   |
| Description | The PEN request has been confirmed by the requester. A new request is now created in the   |

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|             |   |
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|             | ticketing system and will be reviewed by ICANN.   |
| Actor       | AUTO  |
| Documents   | An AutoReply message is sent from the system upon the creation of the new ticket. The AutoReply message provides an acknowledgement of receipt of the PEN request and provides the Ticket System URI, so the requestor can check the status of the request in any given time.   |
| Steps       | Go to Action box 6  |
| <b>6</b>    | <b>DUPLICATE PEN?</b>   |
| Description | Review the information in the ticket. Check whether 1) the company already has existing allocations in the registry, 2) there is another new application in the queue and 3) there is a modification request in the queue.  |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• “Duplicate Check” function to allow IPS to check this requirement: <ul style="list-style-type: none"> <li>– Case 1: the company already has existing allocations in the registry: <ul style="list-style-type: none"> <li>• If yes, go to Step 18.</li> <li>• If no, go to Step 7.</li> </ul> </li> <li>– Case 2: there is another new application in the queue: <ul style="list-style-type: none"> <li>• Go to Step 7.</li> </ul> </li> <li>– Case 3: there is a modification request in the queue: (The requester submitted a modification request when the requester realized the company already has an existing PEN after the requester submitted the New request.) <ul style="list-style-type: none"> <li>• If yes, go to Step 18.</li> <li>• If no, go to Step 7.</li> </ul> </li> </ul> </li> </ul> |
| <b>7</b>    | <b>IS INFORMATION COMPLETE?</b>   |
| Description | Review the information in the ticket. Check to make sure all required information for the registration is included.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• IPS reviews the ticket information.</li> <li>• If yes, go to Step 8.</li> <li>• If no, go to Step 9.</li> </ul>  |
| <b>8</b>    | <b>IS FURTHER CONSULTATION REQUIRED?</b>  |
| Description | Does ICANN need to consult with someone in the IETF community regarding this request?   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | If yes, go to Step 11. If no, go to Step 13.  |
| <b>9</b>    | <b>REQUESTOR RECEIVES QUESTIONS FROM ICANN</b>  |
| Description | A message is sent to the requester asking for more information regarding the requested parameter registration.  |
| Actor       | IPS and Requestor   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• The message is logged in the PEN system.</li> <li>• The outgoing message is logged in ticketing system.</li> <li>• Send questions for clarifications to requestor and/or request additional information from requestor.</li> <li>• Go to Step 10.</li> </ul>   |
| <b>10</b>   | <b>REQUESTED INFORMATION RECEIVED?</b>  |
| Description | Has the requested information been sent back to ICANN by the requester?   |
| Actor       | Requestor   |

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| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Information has been sent back to ICANN.</li> <li>The message is logged in the PEN system.</li> <li>The outgoing message is logged in ticketing system.</li> <li>This ticket will stay in this Action box until a response is received. Automated Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>If yes, go to Step 7.</li> <li>If no AND past 30 days, go to Step 18.</li> </ul> |
| <b>11</b>   | <b>IETF CONSULTATION SUB PROCESS</b>   |
| Description | IETF Consultation Sub Process  |
| Actor       | PPM or IPS   |
| Documents   | N/A  |
| Steps       | Go to Step 12.   |
| <b>12</b>   | <b>GO BACK TO THE REQUESTER?</b>   |
| Description | Does ICANN need to go back to the requester with requests for clarification and/or questions?  |
| Actor       | PPM or IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Determine if ICANN needs to go back to the requester with questions/clarification.</li> <li>If yes, go to Step 10.</li> <li>If no, go to Sub Process box 13.</li> </ul>   |
| <b>13</b>   | <b>IANA REVIEW SUB PROCESS</b>   |
| Description | Requests are required to perform an IANA review under the contractual obligation with the instructions from the ICANN Legal Department. A well-defined request will be sent to legal (outside consultant) to perform the IANA Review. The request will be stalled within this state until ICANN receives clearance to continue processing the request.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Go to Step 14.</li> </ul>   |
| <b>14</b>   | <b>PASS IANA REVIEW?</b>   |
| Description | Did the request pass IANA Review?  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>If yes, go to Step 15.</li> <li>If no, go to Step 17.</li> </ul>  |
| <b>15</b>   | <b>COMPLETE ASSIGNMENT</b>   |
| Description | A new allocation is immediately made in the IANA PEN registry.   |
| Actor       | AUTO and IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>ICANN reviews result in the ticket.</li> <li>The PEN system assigns the next available number in the PEN database.</li> <li>Go to Step 16.</li> </ul>   |
| <b>16</b>   | <b>NOTIFICATION OF THE NEW ASSIGNMENT</b>  |
| Description | Inform the requester that the registration has been completed.   |
| Actor       | AUTO and IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The registration will be visible in the IANA PEN registry.</li> <li>Send a "Completion" message including the details of the registration to the requester.</li> </ul>  |

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|             | <ul style="list-style-type: none"> <li>• The PEN system records the outgoing “Completion” message.</li> <li>• The ticketing system records the outgoing “Completion” message.</li> <li>• Go to Step 19.</li> </ul>  |
| <b>17</b>   | <b>REQUESTER RECEIVES ICANN DECISION</b>  |
| Description | Notify the requester that the request cannot be processed.  |
| Actor       | PPM   |
| Documents   | An email message informing the requester that the request cannot be processed at this time.   |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system records the outgoing message.</li> <li>• In the ticketing system send email to the requester.</li> <li>• Go to Step 19.</li> </ul>  |
| <b>18</b>   | <b>“ADMIN-CLOSED” MESSAGE</b>   |
| Description | Inform the requester that the request has been administratively closed due to the following one of the scenario: <ul style="list-style-type: none"> <li>• Past 30 days</li> <li>• An existing PEN</li> <li>• Incomplete Info</li> </ul>   |
| Actor       | AUTO or IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system records the outgoing “Admin-closed” message.</li> <li>• The ticketing system records the outgoing “Admin-closed” message.</li> <li>• Send an “Admin-closed” message including the original template.</li> <li>• Go to Step 19.</li> </ul> |
| <b>19</b>   | <b>CLOSE TICKET</b>   |
| Description | Final step to close the ticket.   |
| Actor       | AUTO and IPS  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Go to END.</li> </ul>  |

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### Modification of Private Enterprise Numbers (PENs)

Figure 1.2-20 is the top-level, step-by-step process that will be used for requests for Modification of existing PENs that follow the first come first served registration procedures.

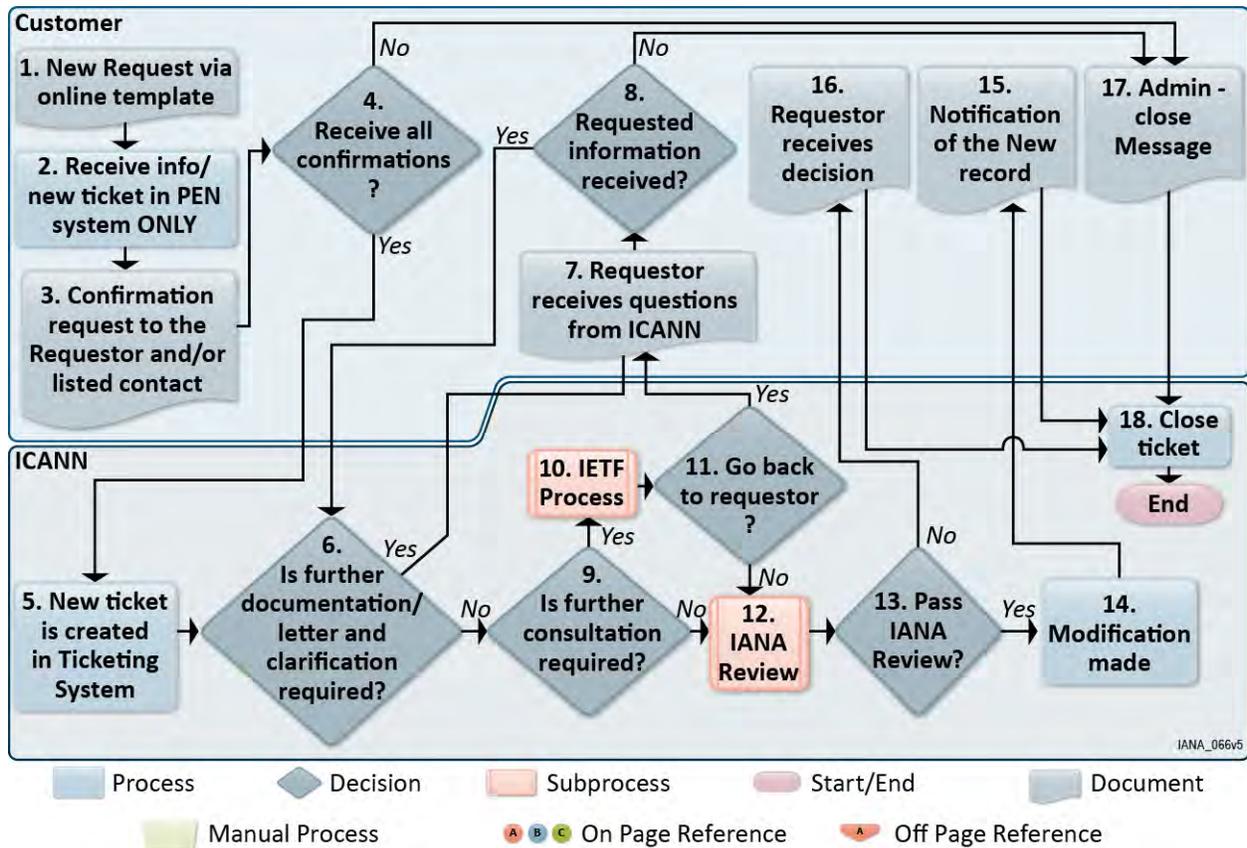


Figure 1.2-20. Private Enterprise Number (PEN) – Modification Request Process

Figure 1.2-21 is the step-by-step process that will be used for requests for Modification of existing Private Enterprise Numbers.

This process will define the PEN modification application workflow.

#### Definitions

- **AUTO** – Automatically through PEN and/or ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Requesters** – The requester who submitted the request.
- **List Contact** – The old contact listed in the PEN registry

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- IETF – Internet Engineering Task Force
- IESG – Internet Engineering Steering Group
- AD – Area Director
- WGC – Working Group Chair

**Figure 1.2-21. Private Enterprise Number (PEN) – Modification Request Process**

| 1           | NEW REQUEST SENT TO ICANN   |
|-------------|---|
| Description | A request to edit an existing registration from IANA PEN registry is sent to ICANN.   |
| Actor       | Requester   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• An online template is submitted via <a href="http://pen.iana.org/pen/ModifyPen.page">http://pen.iana.org/pen/ModifyPen.page</a>. See <b>Appendix A</b> for template.</li> <li>• Only ONE template to update a PEN record is allowed at any given time.</li> <li>• Go to Action box 2.</li> </ul>   |
| 2           | RECEIVE INFORMATION/NEW TICKET IN PEN SYSTEM ONLY   |
| Description | A new ticket is created in the PEN system ONLY. The request will NOT be created in ticketing system at this time.   |
| Actor       | AUTO  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>– Templates will automatically arrive in the PEN system.</li> <li>• Go to Step 3.</li> </ul>   |
| 3           | REQUESTOR RECEIVES MESSAGE TO REQUEST CONFIRMATION(S)   |
| Description | <ul style="list-style-type: none"> <li>• The PEN system automatically generates a “confirmation message” and sends it to relevant addresses to request confirmation(s):               <ul style="list-style-type: none"> <li>– The proposed email address specified in the template</li> <li>– The current email address associated with the requested PEN record in the PEN database</li> </ul> </li> <li>• “Confirmation messages” will contain secure non-guessable and non-sequential web-based links responding to the requests.</li> </ul>  |
| Actor       | AUTO and/or IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system               <ul style="list-style-type: none"> <li>– Request state stays as “PENDING_CONFIRMATION.”</li> <li>– The outgoing messages are logged in the system; two outgoing messages IF the listed email address and proposed email address are different addresses.</li> <li>– Request clock is automatically set to “the requestor” time.</li> <li>– 30-days timeout starts.</li> <li>– IPS reviews the ticket information.</li> </ul> </li> <li>• When it is spam or test ticket, IPS can interfere and close the request:               <ul style="list-style-type: none"> <li>– Set the Request state to “Admin-close.” No further action and outgoing message are required.</li> </ul> </li> <li>• Ticket system: NO Event occurred.</li> <li>• In the PEN system the outgoing messages are logged in the system; two outgoing messages IF the listed email address and proposed email address are different addresses.</li> <li>• Request clock is automatically set to “the requestor” time</li> <li>• 30-days timeout starts.</li> </ul> |

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|             | <ul style="list-style-type: none"> <li>• IPS reviews the ticket information.</li> <li>• When it is spam or test ticket, IPS can interfere and close the request.</li> <li>• Go to Decision box 4.</li> </ul>   |
| <b>4</b>    | <b>IS CONFIRMATION (OR CONFIRMATIONS) RECEIVED?</b>  |
| Description | One or two confirmations are returned via the secure web-based link  |
| Actor       | Requester and/or Listed Contact  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• A web-based “Confirmation” message is automatically displayed on the website when a contact visits a secure web-based link.</li> <li>• IF either the requester or the listed contact returns one confirmation via the secure web-based link:</li> <li>• This ticket will stay in this step until a response is received. Automated Pings/Reminders will be sent from the PEN system every seven calendar days. The request will be closed if there is no response after 30 days. Set Request state to “Expired.”</li> <li>• If no (one confirmation) AND past 30 days, go to Step 17.</li> <li>• IF the requestor or listed contact CANCEL the request: <ul style="list-style-type: none"> <li>– A web-based “Request has been cancelled” message is automatically displayed on the website.</li> <li>– Go to Step 17.</li> </ul> </li> </ul> |
| <b>5</b>    | <b>CREATE NEW TICKET</b>   |
| Description | The PEN request has been confirmed by either the current contact or the proposed contact. A new ticket is now created in the ticketing system.   |
| Actor       | AUTO and/or IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>– Tickets will arrive in a new/appropriate queue <i>iana-pen@iana.org</i>.</li> <li>– Go to Decision box 6.</li> </ul>  |
| <b>6</b>    | <b>IS FURTHER DOCUMENTATION/LETTER AND CLARIFICATIONS REQUIRED?</b>  |
| Description | Review the information in the ticket. Check whether 1) a letter is required and 2) supplemental documents and information is required to verify the requested changes.   |
| Actor       | IPS or AUTO  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system</li> <li>• IPS checks the requested changes and compares with the existing record in the PEN database, determines whether we have received an email confirmation from the listed contact or a bounce from the listed email address, and if additional supplemental documents and/or a letter are required to process the requested changes.</li> <li>• If yes, go to Step 7.</li> <li>• If no, go to Decision box 9.</li> </ul>  |
| <b>7</b>    | <b>REQUEST FOR MORE INFORMATION</b>  |
| Description | A message is sent to the requester asking for more information regarding the requested changes.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system records the outgoing message.</li> <li>• Ticketing system records the outgoing message.</li> <li>• IPS reviews the ticket information and sends a message to requester to request additional information and clarifications to verify the requested changes.</li> </ul>  |

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|             | <ul style="list-style-type: none"> <li>Go to Decision box 8.</li> </ul>  |
| <b>8</b>    | <b>REQUESTED INFORMATION RECEIVED?</b>   |
| Description | Has the requested documentation and/or information been sent back to ICANN by the requester?   |
| Actor       | Requester and/or Listed Contact  |
| Documents   | A signed letter, documentation of sale or acquisition, a copy of the original assignment notification, etc., in pdf or fax   |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system records the returned information</li> <li>Ticketing system records the returned information</li> <li>Information has been sent back to ICANN for further review</li> <li>This ticket will stay in this Step until a response is received. Automated Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>If yes, go to Decision box 6.</li> <li>If no AND past 30 days, go to Step 17.</li> </ul>                                    |
| <b>9</b>    | <b>IS FURTHER CONSULTATION REQUIRED?</b>   |
| Description | Does ICANN need to consult with someone in the IETF community regarding this request?  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system <ul style="list-style-type: none"> <li>IPS changes “Request state” to “PENDING_IESG_REVIEW.”</li> <li>Request clock is automatically set to “Others” time.</li> </ul> </li> <li>Ticketing system <ul style="list-style-type: none"> <li>Are there questions that cannot be answered or determined by the requestor or ICANN that requires sending questions to the IETF (IESG, AD, WGC and/or Expert)?</li> </ul> </li> <li>If yes, go to Sub Process box 10.</li> <li>If no, go to Sub Process box 12.</li> </ul> |
| <b>10</b>   | <b>IETF CONSULTATION SUB PROCESS</b>   |
| Description | IETF Consultation Sub Process  |
| Actor       | PPM or IPS   |
| Documents   | N/A  |
| Steps       | Go to Decision box 11.   |
| <b>11</b>   | <b>NEED TO GO BACK TO THE REQUESTER?</b>   |
| Description | Does ICANN need to go back to the requester with requests for clarification and/or questions?  |
| Actor       | PPM or IPS   |
| Documents   | Additional documentation, if required  |
| Steps       | <ul style="list-style-type: none"> <li>Determine if ICANN needs to go back to the requester with questions/clarification.</li> <li>If yes, go to Step.</li> <li>If no, go to Sub Process box 12.</li> </ul>  |
| <b>12</b>   | <b>IANA REVIEW SUB PROCESS</b>   |
| Description | IANA Review Sub Process  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | Go to Step 13  |
| <b>13</b>   | <b>PASS IANA REVIEW?</b>   |
| Description | Did the request pass IANA Review?  |
| Actor       | IPS  |

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| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The IANA Review result is recorded in the ticketing system.</li> <li>If yes, go to Action box 14.</li> <li>If no, go to Action box 16.</li> </ul>   |
| <b>14</b>   | <b>MODIFICATION COMPLETED</b>  |
| Description | The PEN record has been updated in the IANA PEN registry.  |
| Actor       | AUTO and IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system               <ul style="list-style-type: none"> <li>Change “Request state” to “MODIFIABLE.”</li> <li>Update the registry.</li> </ul> </li> <li>Ticketing system               <ul style="list-style-type: none"> <li>IPS changes ticket state to “open.”</li> <li>IPS changes the IANA_Prot-Param_State to “Modifiable.”</li> <li>IPS logs the IANA Review result in the ticket.</li> </ul> </li> <li>Go to Step 15.</li> </ul> |
| <b>15</b>   | <b>NOTIFICATION TO REQUESTER</b>   |
| Description | Inform the requester that the modification has been completed.   |
| Actor       | AUTO and IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Send a “Completion” message including the details of the new information to the requester (current contact).</li> <li>The PEN system records the outgoing “Completion” message.</li> <li>Ticketing system               <ul style="list-style-type: none"> <li>records the outgoing “Completion” message in RT.</li> </ul> </li> <li>The changes will be visible in the IANA PEN registry.</li> <li>Go to Action box 19.</li> </ul>             |
| <b>16</b>   | <b>NOTIFICATION TO REQUESTER ABOUT THE DECISION (PER OFAC)</b>   |
| Description | Notify the requester that the request cannot be processed.   |
| Actor       | PPM  |
| Documents   | An email message informing the requester that the request can not be processed at this time.   |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system               <ul style="list-style-type: none"> <li>Record the outgoing message.</li> </ul> </li> <li>Send email to the requester.</li> <li>Go to Action box 18.</li> </ul>   |
| <b>17</b>   | <b>“ADMIN-CLOSED” NOTIFICATION TO REQUESTER</b>  |
| Description | <p>Inform the requester that the request has been administratively closed due to the one of the following scenarios:</p> <ul style="list-style-type: none"> <li>Past 30 days</li> <li>Incomplete information or lack of supportive documentation</li> <li>Rejected by the listed contact or other reasons</li> </ul>   |
| Actor       | AUTO or IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system               <ul style="list-style-type: none"> <li>Record the outgoing “Admin-closed” message.</li> </ul> </li> <li>Ticketing system               <ul style="list-style-type: none"> <li>Record the outgoing “Admin-closed” message.</li> </ul> </li> </ul>   |

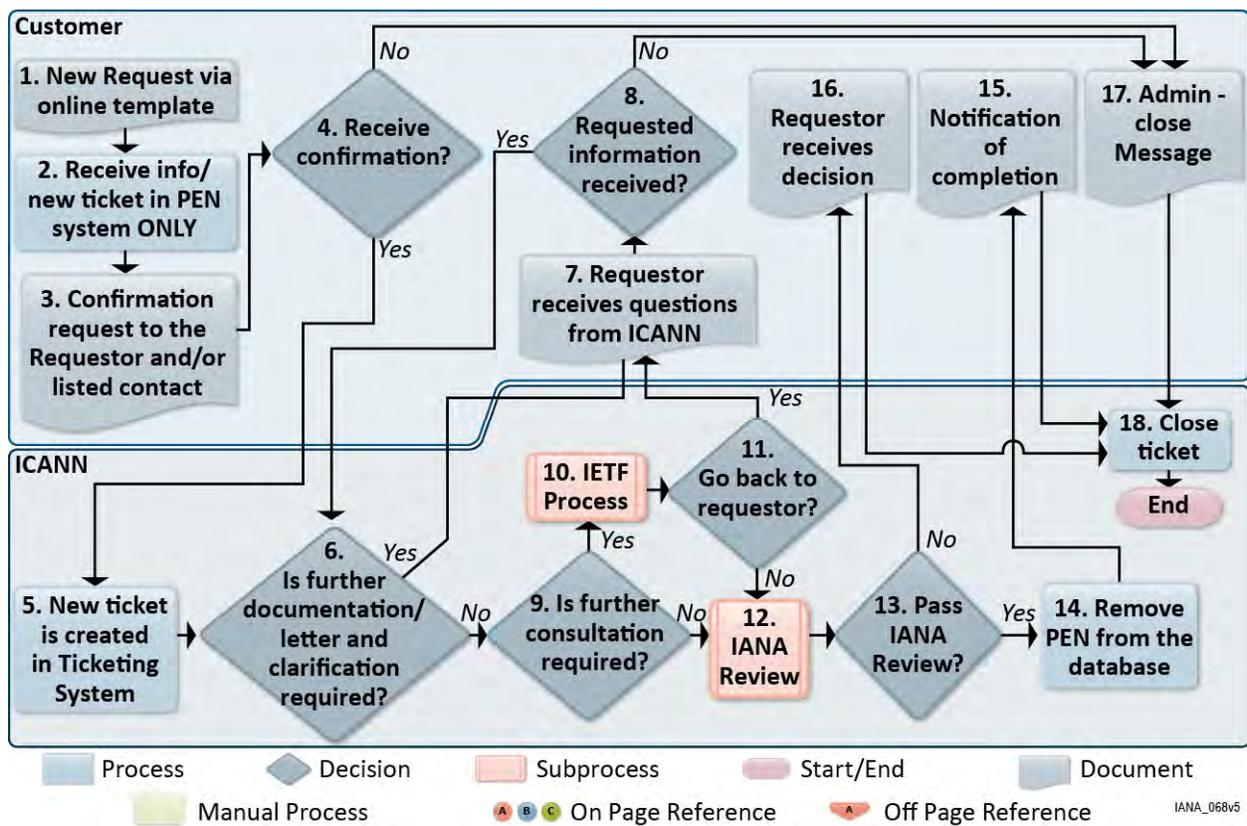
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|-------------|---|
|             | <ul style="list-style-type: none"> <li>Send an “Admin-closed” message including the original template.</li> <li>Go to Action box 18.</li> </ul>   |
| <b>18</b>   | <b>CLOSE TICKET</b>   |
| Description | Final step to close the ticket.   |
| Actor       | AUTO  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system: no action required.</li> <li>Tecketing system                             <ul style="list-style-type: none"> <li>Change ticket state to “Resolved.”</li> </ul> </li> <li>Go to END.</li> </ul> |

**Removal of Private Enterprise Numbers (PENs)**

Figure 1.2-22 shows the top-level, step-by-step process that will be used for requests for Removal of existing Private Enterprise Numbers that follow the first come first served registration procedures.



**Figure 1.2-22. Private Enterprise Number (PEN) – Removal Request Process**

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Figure 1.2-23 presents the top-level, step-by-step process that will be used for requests for Removal of existing PENs that follow the FCFS registration procedures.

**Definitions**

- **AUTO** – Automatically through PEN and/or ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Requesters** – The requester who submitted the request
- **List Contact** – The old contact listed in the PEN registry
- **IETF** – Internet Engineering Task Force
- **IESG** – Internet Engineering Steering Group
- **AD** – Area Director
- **WGC** – Working Group Chair

**Figure 1.2-23. Private Enterprise Number (PEN) – Removal Request Process**

| 1           | NEW REQUEST SENT TO ICANN  |
|-------------|--|
| Description | A request to remove an existing registration from IANA PEN registry is sent to ICANN.  |
| Actor       | Requester  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• An online template is submitted via a template form. Only ONE template to update a PEN record is allowed at any given time.</li> <li>• Go to Action box 2.</li> </ul>   |
| 2           | RECEIVE INFORMATION/NEW TICKET IN PEN SYSTEM ONLY  |
| Description | A new ticket is created in the PEN system ONLY. The request will NOT be created in ticketing system at this time.  |
| Actor       | AUTO   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>– Templates will automatically arrive in the PEN system.</li> <li>–</li> <li>• Go to Step 3.</li> </ul>   |
| 3           | REQUESTOR RECEIVES MESSAGE TO REQUEST CONFIRMATION(S)  |
| Description | <ul style="list-style-type: none"> <li>• The PEN system automatically generates a “confirmation message” and sends it to relevant addresses to request confirmation(s):               <ul style="list-style-type: none"> <li>– 1) the proposed email address specified in the template</li> <li>– 2) the current email address associated with the requested PEN record in the PEN database</li> </ul> </li> <li>• “Confirmation messages” will contain secure non-guessable and non-sequential web-based links responding to the requests.</li> </ul> |
| Actor       | AUTO and/or IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system records the outgoing messages and logs in the system if the listed email</li> </ul>  |

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|             |  |
|-------------|--|
|             | <p>address and proposed email address are different addresses.</p> <ul style="list-style-type: none"> <li>– 30-days timeout starts.</li> <li>– Review the ticket information.</li> </ul> <ul style="list-style-type: none"> <li>• When it is spam or test ticket, IPS can interfere and close the request.</li> <li>• Go to Decision box 4.</li> </ul>   |
| <b>4</b>    | <b>IS CONFIRMATION (OR CONFIRMATIONS) RECEIVED?</b>  |
| Description | One or two confirmations are returned via the secure web-based link.   |
| Actor       | Requester and/or Listed Contact  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• A web-based “Confirmation” message is automatically displayed on the website when a contact visits a secure web-based link.</li> <li>• IF either the requester or the listed contact returns one confirmation via the secure web-based link: <ul style="list-style-type: none"> <li>– The PEN system records the returned confirmation and timestamps.</li> <li>– The PEN system records both returned confirmations and timestamps.</li> <li>– This ticket will stay in this Step until a response is received. Automated Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> </ul> </li> <li>• If yes, go to Decision box 5.</li> <li>• If no AND past 30 days, go to Action box 18.</li> <li>• IF the requestor or listed contact CANCEL the request. <ul style="list-style-type: none"> <li>– A web-based “Request has been cancelled” message is automatically displayed on the website.</li> <li>– Go to Step 17.</li> </ul> </li> </ul> |
| <b>5</b>    | <b>CREATE NEW TICKET</b>   |
| Description | The PEN request has been confirmed by either the current contact or the proposed contact. A new ticket is now created in the IANA ticketing system.  |
| Actor       | AUTO and/or IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>– Tickets will arrive in the appropriate new queue <i>iana-pen@iana.org</i>.</li> <li>– Ticket is manually assigned to an IPS.</li> </ul> <ul style="list-style-type: none"> <li>• Go to Decision box 6.</li> </ul>   |
| <b>6</b>    | <b>IS FURTHER DOCUMENTATION/LETTER AND CLARIFICATIONS REQUIRED?</b>  |
| Description | Review the information in the ticket. Check whether 1) a letter is required and 2) supplemental documents and information is required to verify the requested changes.   |
| Actor       | IPS or AUTO  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system <ul style="list-style-type: none"> <li>– Request state—no change</li> <li>– Request clock is still in the “IANA” time—no change.</li> </ul> </li> <li>• Ticketing system <ul style="list-style-type: none"> <li>– IIPS checks the requested changes and compares them with the existing record in the PEN database, determines whether we have received an email confirmation from the listed contact or a bounce from the listed email address, and if additional supplemental documents and/or a letter are required to process the removal request.</li> </ul> </li> <li>• If yes, go to Step 7.</li> <li>• If no, go to Decision box 9.</li> </ul>   |
| <b>7</b>    | <b>REQUEST FOR MORE INFORMATION</b>  |
| Description | A message is sent to the requester asking for more information regarding the requested   |

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|             |   |
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|             | changes.  |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system records the outgoing message.</li> <li>• The ticketing system records outgoing message.</li> <li>• IPS reviews the ticket information and sends a message to the requester to request additional information and clarifications to verify the requested changes.</li> <li>• Go to Decision box 8.</li> </ul>  |
| <b>8</b>    | <b>REQUESTED INFORMATION RECEIVED?</b>  |
| Description | Has the requested documentation and/or information been sent back to ICANN by the requester?  |
| Actor       | Requester and/or Listed Contact   |
| Documents   | A signed letter, a copy of the original assignment notification, etc., in pdf or fax  |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system records the returned information.</li> <li>• Ticketing system records the returned information.</li> <li>• Information has been sent back to ICANN.</li> <li>• This ticket will stay in this Step until a response is received. Automated Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>• If yes, go to Decision box 6.</li> <li>• If no AND past 30 days, go to Step 17.</li> </ul> |
| <b>9</b>    | <b>IS FURTHER CONSULTATION REQUIRED?</b>  |
| Description | Does ICANN need to consult with someone in the IETF community regarding this request?   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system               <ul style="list-style-type: none"> <li>– IPS changes “Request state” to “PENDING_IESG_REVIEW.”</li> <li>– Request clock is automatically set to “Others” time.</li> <li>–</li> </ul> </li> <li>• Are there questions that cannot be answered or determined by the requestor that require IANA to go to the IETF (IESG, AD, WGC and/or Expert)?</li> <li>• If yes, go to Sub Process box 10.</li> <li>• If no, go to Sub Process box 12.</li> </ul>          |
| <b>10</b>   | <b>IETF CONSULTATION SUB PROCESS</b>  |
| Description | IETF Consultation Sub Process   |
| Actor       | PPM or IPS  |
| Documents   | N/A   |
| Steps       | Go to Decision box 11.  |
| <b>11</b>   | <b>NEED TO GO BACK TO THE REQUESTER?</b>  |
| Description | Does ICANN need to go back to the requester with requests for clarification and/or questions?   |
| Actor       | PPM or IPS  |
| Documents   | Additional documentation if required  |
| Steps       | <ul style="list-style-type: none"> <li>• Determine if ICANN needs to go back to the requester with questions/clarification.</li> <li>• If yes, go to Step 7.</li> <li>• If no, go to Sub Process box 12.</li> </ul>   |
| <b>12</b>   | <b>IANA REVIEW SUB PROCESS</b>  |
| Description | IANA Review Sub Process   |

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|             |  |
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| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Go to Decision box 13.</li> </ul>   |
| <b>13</b>   | <b>PASS IANA REVIEW?</b>   |
| Description | Did the request pass IANA Review?  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The IANA Review result is recorded in the ticketing system.</li> <li>If yes, go to Action box 14.</li> <li>If no, go to Step 16.</li> </ul>   |
| <b>14</b>   | <b>UPDATE THE PEN DATABASE</b>   |
| Description | The PEN record is immediately being removed from the IANA PEN registry.  |
| Actor       | AUTO   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system updates the registry.</li> <li>Go to Action box 15.</li> </ul>   |
| <b>15</b>   | <b>NOTIFICATION TO REQUESTER</b>   |
| Description | Inform the requester that the modification has been completed.   |
| Actor       | AUTO   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Send a "Completion" message to the requester (current contact).</li> <li>The PEN system records the outgoing "Completion" message.</li> <li>Ticketing system records the outgoing "Completion" message.</li> <li>Go to Action box 18.</li> </ul>                          |
| <b>16</b>   | <b>NOTIFICATION TO REQUESTER ABOUT ICANN DECISION (PER OFAC)</b>   |
| Description | Notify the requester that the request can not be processed.  |
| Actor       | PPM  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system records the outgoing message.</li> <li>Send email to the requester.</li> <li>Go to Action box 18.</li> </ul>   |
| <b>17</b>   | <b>"ADMIN-CLOSED" NOTIFICATION TO REQUESTER</b>  |
| Description | <p>Inform the requester that the request has been administratively closed due to the one of following scenarios:</p> <ul style="list-style-type: none"> <li>Past 30 days</li> <li>Incomplete information or lack of supportive documentation</li> <li>Rejected by the listed contact or other reasons</li> </ul> |
| Actor       | AUTO or IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system records the outgoing "Admin-closed" message.</li> <li>Ticketing system records the outgoing "Admin-closed" message.</li> <li>Send an "Admin-closed" message including the original template.</li> <li>Go to Action box 18.</li> </ul>                      |
| <b>18</b>   | <b>CLOSE TICKET</b>  |
| Description | Final step to close the ticket.  |
| Actor       | AUTO   |
| Documents   | N/A  |

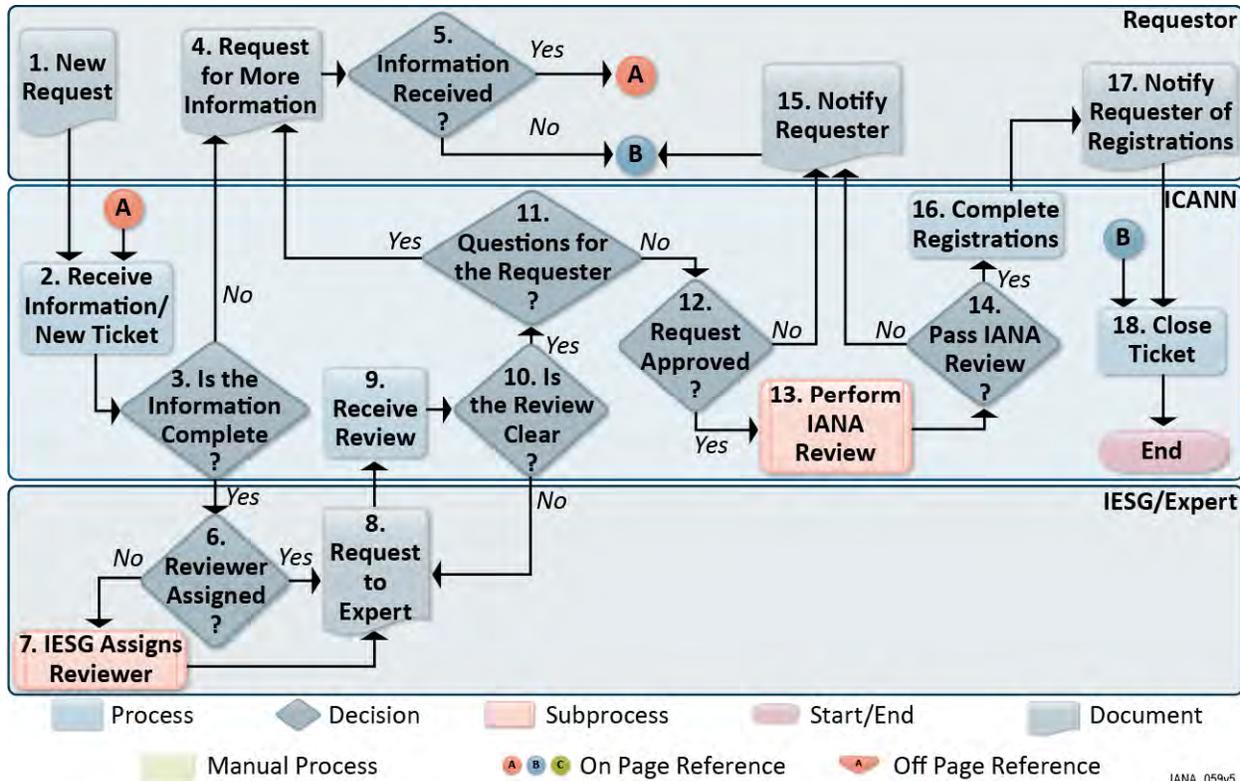
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| Steps | • Go to END. |
|-------|--------------|

**Expert Review protocol parameter request process (Also includes Specification Required)**

Figure 1.2-24 shows the top-level process that will be used for requests for protocol parameters that follow the Expert Review registration procedures. Requests that follow the Specification Required policy will also follow this process, as there is a mandatory Expert Review as part of the IETF defined process. Examples of Expert Review protocol parameters are port numbers and media types.



**Figure 1.2-24. Expert Review Process**

Figure 1.2-25 shows the top-level process that will be used for requests for protocol parameters that follow the Expert Review registration procedures.

**Definitions**

- **AUTO** – Automatically through ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist

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- **PPM** – Protocol Parameter Manager
- **Requesters** – the requester who submitted the request
- **Expert** – the Designated Expert who reviews the request
- **IESG** – Internet Engineering Steering Group

**Figure 1.2-25. Expert Review Process Step-by-Step Description**

| <b>1</b>    | <b>NEW REQUEST SENT TO ICANN</b>  |
|-------------|---|
| Description | A request for a new registration in IANA registries is sent to ICANN.   |
| Actor       | Requester   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• A message is sent via email or through an online template.</li> <li>• Go to Action box 2.</li> </ul>   |
| <b>2</b>    | <b>RECEIVE INFORMATION/NEW TICKET</b>   |
| Description | A new ticket is created. Ticketing system automatically puts the ticket in the correct queue or the ticket is manually placed in the appropriate queue.   |
| Actor       | AUTO and/or IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Tickets not sent directly to the ticket queue are manually moved to the appropriate queue.</li> <li>• Some tickets will automatically arrive in the appropriate queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Decision box 3.</li> </ul>   |
| <b>3</b>    | <b>IS INFORMATION COMPLETE?</b>   |
| Description | Review the information in the ticket. Check to make sure all required information for the registration requested is included.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Review the ticket information.</li> <li>• Check which registry they are requesting a parameter in.</li> <li>• Are all criteria met according to the governing RFC?</li> <li>• If yes, go to Decision box 6.</li> <li>• If no, go to Action box 4.</li> </ul>   |
| <b>4</b>    | <b>REQUEST FOR MORE INFORMATION</b>   |
| Description | A message is sent to the requester asking for more information regarding the requested parameter registration.  |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Send message to requester.</li> <li>• Ask clarifying questions as needed.</li> <li>• Change custom state to “Waiting on Requester.”</li> <li>• Change ticket state to “stalled.”</li> <li>• This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>• Go to Decision box 5.</li> </ul> |
| <b>5</b>    | <b>INFORMATION RECEIVED?</b>  |
| Description | Has the requested information been sent back to ICANN by the requester?   |
| Actor       | IPS   |
| Documents   | N/A   |

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|             |  |
|-------------|--|
| Steps       | <ul style="list-style-type: none"> <li>Information has been sent back to ICANN.</li> <li>If yes, go to Action box 2.</li> <li>If no AND past 30 days, go to Action box 15.</li> </ul>  |
| <b>6</b>    | <b>REVIEWER ASSIGNED?</b>  |
| Description | Identify the expert who should review this request.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Has an expert been designated to review requests in this registry?</li> <li>If yes, go to Action box 8.</li> <li>If no, go to Sub Process box 7.</li> </ul>   |
| <b>7</b>    | <b>IESG ASSIGNS REVIEWER SUB PROCESS</b>   |
| Description | IESG Consultation Sub Process  |
| Actor       | PPM or IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Go to Action box 8.</li> </ul>  |
| <b>8</b>    | <b>REQUEST TO EXPERT</b>   |
| Description | ICANN sends Expert a request for review or clarification.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Forward request to the designated expert.</li> <li>This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days. If no response after 30 days, go to Action box 7.</li> <li>Go to Action box 9.</li> </ul> |
| <b>9</b>    | <b>RECEIVE REVIEW</b>  |
| Description | The Expert sends his/her review to ICANN.  |
| Actor       | Expert/IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Ticket state is automatically set to "open."</li> <li>Change custom state to "In Progress."</li> <li>Go to Decision box 10.</li> </ul>  |
| <b>10</b>   | <b>IS THE REVIEW CLEAR?</b>  |
| Description | Determine whether ICANN needs more information from the reviewer before proceeding.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Can ICANN determine what to do next, based on the expert's instructions?</li> <li>If yes, go to Decision box 11.</li> <li>If no, go to box 8.</li> </ul>  |
| <b>11</b>   | <b>QUESTIONS FOR THE REQUESTER?</b>  |
| Description | Does the expert want more information from the requester?  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>If yes, go to Action box 4.</li> <li>If no, go to Decision box 12.</li> </ul>   |
| <b>12</b>   | <b>REQUEST APPROVED?</b>   |
| Description | Did the expert approve this request?   |
| Actor       | IPS  |
| Documents   | N/A  |

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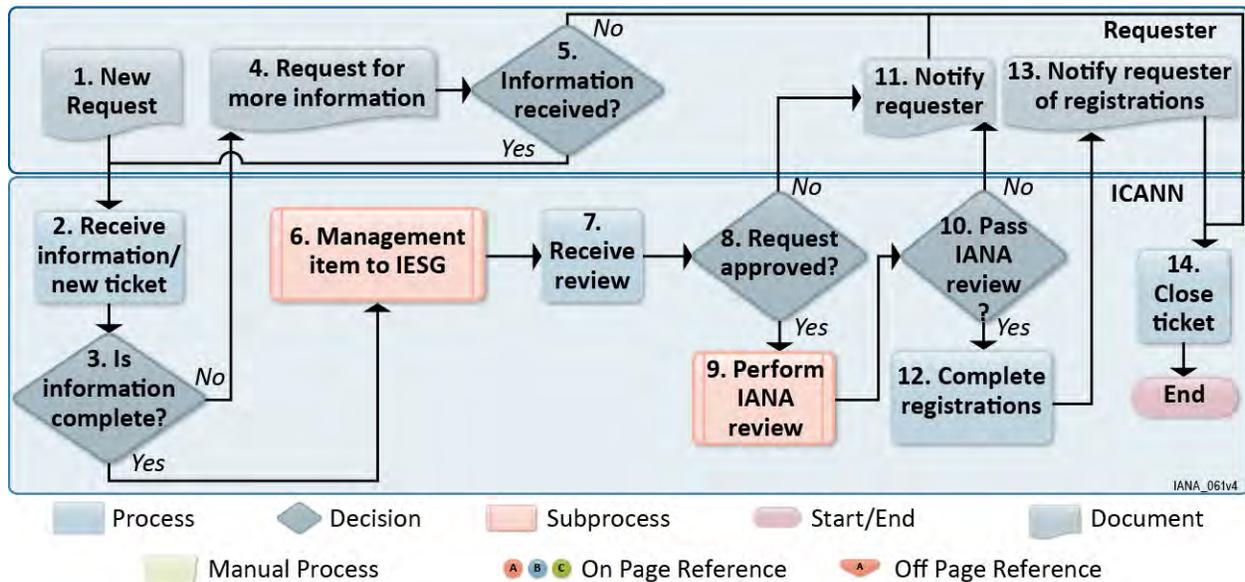
|             |   |
|-------------|---|
| Steps       | <ul style="list-style-type: none"> <li>The expert doesn't want more information from the requester. Has the expert approved this request for registration?</li> <li>If yes, go to Sub Process 13.</li> <li>If no, go to Action box 15.</li> </ul> |
| <b>13</b>   | <b>IANA REVIEW SUB PROCESS</b>  |
| Description | IANA Review Sub Process   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Go to Decision box 10.</li> </ul>  |
| <b>14</b>   | <b>PASS IANA REVIEW?</b>  |
| Description | Did the request pass IANA Review?   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>If yes, go to Action box 16.</li> <li>If no, go to Action box 15.</li> </ul>   |
| <b>15</b>   | <b>NOTIFICATION TO REQUESTER</b>  |
| Description | Inform the requester that the registrations cannot be made.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Write to the requester and explain that the registration cannot be completed.</li> <li>Go to Action box 18.</li> </ul>   |
| <b>16</b>   | <b>COMPLETE REGISTRATIONS</b>   |
| Description | Perform the actions in the IANA Registries.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Complete registrations in existing registries.</li> <li>Go to Action box 17.</li> </ul>  |
| <b>17</b>   | <b>NOTIFICATION TO REQUESTER</b>  |
| Description | Inform the requester that the request is complete   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Confirm that registrations are visible in the IANA Registries.</li> <li>Write to the requester and send them details of registrations.</li> <li>Go to Action box 18.</li> </ul>                            |
| <b>18</b>   | <b>CLOSE TICKET</b>   |
| Description | Final step to close the ticket.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Go to END.</li> </ul>  |

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**IESG Approval protocol parameter request process**

Figure 1.2-26 shows the top-level process that will be used for requests for protocol parameters that follow the IESG Approval registration procedures. Examples include DNS Label Types and Electronic Commerce Modelling Language (ECML) Parameter Types.



**Figure 1.2-26. IESG Approval Process**

Figure 1.2-27 shows the top-level process will be used for requests for protocol parameters that follow the IESG Approval registration procedures.

**Definitions**

- **AUTO** – Automatically through ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Requesters** – the requester who submitted the request
- **IETF** – Internet Engineering Task Force
- **IESG** – Internet Engineering Steering Group

**Figure 1.2-27. IESG Approval Process Step-by-Step Description**

| <b>1</b>    | <b>NEW REQUEST SENT TO ICANN</b>   |
|-------------|--|
| Description | A request for a new registration in IANA registries is sent to ICANN.  |
| Actor       | Requester  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• A message is sent to <a href="mailto:iana@iana.org">iana@iana.org</a> or to a specific queue via email or through an online template.</li> <li>• Go to Action box 2.</li> </ul>   |
| <b>2</b>    | <b>RECEIVE INFORMATION/NEW TICKET</b>  |
| Description | A new ticket is created. Ticketing system automatically puts the ticket in the correct queue or the ticket is manually placed in the appropriate queue.  |
| Actor       | AUTO and/or IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Tickets that arrive in <a href="mailto:iana@iana.org">iana@iana.org</a> are manually moved to the appropriate queue.</li> <li>• Some tickets will automatically arrive in the appropriate queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Decision box 3.</li> </ul>  |
| <b>3</b>    | <b>IS INFORMATION COMPLETE?</b>  |
| Description | Review the information in the ticket. Check to make sure all required information for the registration requested is included.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Review the ticket information.</li> <li>• Check which registry they are requesting a parameter in.</li> <li>• Add the registry information if applicable to a custom field.</li> <li>• Are all criteria met according to the governing RFC?</li> <li>• If yes, go to Decision box 6.</li> <li>• If no, go to Action box 4.</li> </ul> |
| <b>4</b>    | <b>REQUEST FOR MORE INFORMATION</b>  |
| Description | A message is sent to the requester asking for more information regarding the requested parameter registration.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Send message to requester.</li> <li>• Ask clarifying questions as needed.</li> <li>• This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>• Go to Decision box 5.</li> </ul>     |
| <b>5</b>    | <b>REQUESTED INFORMATION RECEIVED?</b>   |
| Description | Has the requested information been sent back to ICANN by the requester?  |
| Actor       | IPS  |
| Documents   | N/A  |

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|             |   |
|-------------|---|
| Steps       | <ul style="list-style-type: none"> <li>Information has been sent back to ICANN.</li> <li>If yes, go to Action box 2.</li> <li>If no AND past 30 days, go to Action box 14.</li> </ul> |
| <b>6</b>    | <b>IESG MANAGEMENT ITEM SUB PROCESS</b>   |
| Description | IESG Management Item Sub Process  |
| Actor       | PPM or IPS  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Go to Action box 7.</li> </ul>   |
| <b>7</b>    | <b>RECEIVE REVIEW</b>   |
| Description | The IESG sends the IESG's decision to ICANN.  |
| Actor       | IESG  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Go to Decision box 8.</li> </ul>   |
| <b>8</b>    |   |
| Description | Request approved?   |
| Actor       | PPM or IPS  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>If yes, go to Action box 9.</li> <li>If no, go to Action box 11.</li> </ul>  |
| <b>9</b>    | <b>IANA REVIEW SUB PROCESS</b>  |
| Description | IANA Review Sub Process   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Go to Decision box 10.</li> </ul>  |
| <b>10</b>   | <b>PASS IANA REVIEW?</b>  |
| Description | Did the request pass IANA Review?   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>If yes, go to Action box 12.</li> <li>If no, go to Action box 11.</li> </ul>   |
| <b>11</b>   | <b>NOTIFICATION TO REQUESTER</b>  |
| Description | Notify the requester that the request cannot be processed.  |
| Actor       | PPM   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Send email to the requester.</li> <li>Go to Action box 14.</li> </ul>  |
| <b>12</b>   | <b>COMPLETE REGISTRATIONS</b>   |
| Description | Perform the actions in the IANA registries.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Complete registrations in existing registries.</li> </ul>  |

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|             |  |
|-------------|--|
|             | <ul style="list-style-type: none"> <li>Go to Action box 13.</li> </ul>   |
| <b>13</b>   | <b>NOTIFICATION TO REQUESTER</b>   |
| Description | Inform the requester that the registration has been completed.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Confirm the registration is visible in the IANA registries.</li> <li>Write to the requester and send them details of the registration completed.</li> <li>Go to Action box 14.</li> </ul> |
| <b>14</b>   | <b>CLOSE TICKET</b>  |
| Description | Final step to close the ticket.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Go to END.</li> </ul>   |

**1.2.9.1.2 Disseminate listings of assigned Parameters; Review documents**

ICANN will disseminate the listing of assigned protocol parameters through online publication on ICANN’s IANA website. On the website, a list of every registry that ICANN maintains for the IETF will be found along with other important information including the document defining the registry, registration procedures, and the names of the IESG designated experts if applicable. Every time a new registry is created, ICANN will add the necessary information to the protocol parameters listing.

In addition to the listing of all the registries, registration procedures and documents defining the registries, ICANN will make available each registry in the required formats as requested by the defining RFC or through requests from the IETF. Most registries will be available in multiple formats: xml, text and csv. These multiple formats will allow viewers of the registries to use the information in ways that work for them.

ICANN will review Internet-Drafts requesting the creation of registries or revisions to existing registries to make sure they include all necessary information needed to perform those actions. ICANN will continue to review each document at pre-defined stages as defined by the IETF. Working closely with the IESG, ICANN will confirm the instructions, usually located in an “IANA Considerations” section, making sure that they have identified all the necessary pieces to a new registry (e.g., titles, registration procedures, initial registrations, and range of registry values if applicable). For updates to existing registries, ICANN will make sure that the request follows the existing registration procedures and any other established rules in the defining RFC. When Internet-Drafts do not clearly document the requested actions, ICANN will work together with the IESG, Working Group Chairs and Internet-Draft authors to resolve unresolved issues or unanswered questions. ICANN will participate in twice monthly teleconferences with the IESG where the Internet-Draft documents are discussed.

After the requested actions have been performed and the RFC-Editor has assigned a number for the published document, ICANN will review what has been published in the RFC and what will appear in the registry to verify there are no discrepancies. In the case of discrepancies, ICANN

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will work with the RFC-Editor, RFC authors, Working Group Chairs, and Area Directors of the IESG to either make modifications to the maintained registries or to submit an RFC erratum to document the issue. During this process, the references in the registry that point to the approved document will be changed from an Internet-Draft to the RFC number for the published document.

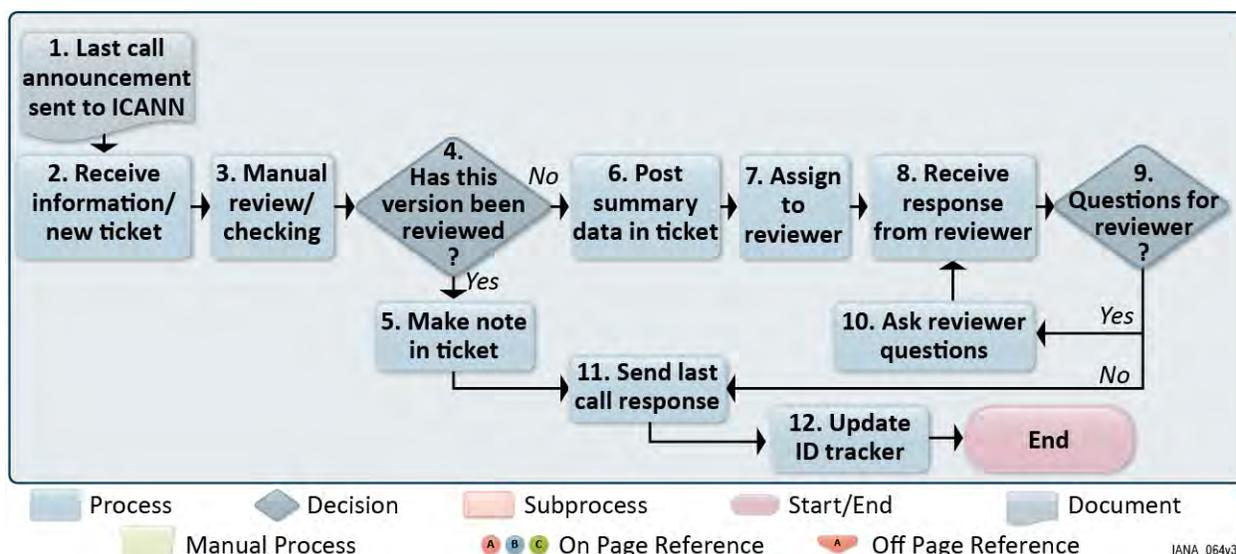
**Figure 1.2-28** lists the process flowcharts that will be used to review technical documents (Internet-Drafts) and how information will get in the listing of the protocol parameter registries.

**Figure 1.2-28. List of Process Flowcharts**

| FIGURE # | CHART TITLE                             | DESCRIPTION  |
|----------|---|--|
| 2.1-29   | Internet-Draft Last Call Process        | This process will be used to review an Internet-Draft in IETF Last Call. The document is reviewed for proposed protocol parameter related actions, usually described in the "IANA Considerations" section of the document.   |
| 2.1-31   | Internet-Draft Evaluation Process       | This process will be used to review an Internet-Draft in IESG Evaluation. The document is compared to a version reviewed during Last Call to see if the requested actions are still clearly defined, as there can sometimes be changes between document versions. For I-Ds that are not going through the IETF process, this is the first official review that ICANN performs. |
| 2.1-33   | Internet-Draft Update Reference Process | This process will be used to update the references in the registries maintained by ICANN. After ICANN performs the actions during the Approvals process, ICANN puts placeholders as references until the final document is published in the form of an RFC.  |

**Top level Last Call review of Internet-Drafts process**

**Figure 1.2-29** shows the top-level process that will be used for the review of Internet-Drafts that are entering the IETF Last Call and ends with ICANN’s submission of review comments.



**Figure 1.2-29. Internet-Draft Last Call Process**

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Figure 1.2-30 shows the top-level process that will be used for the review of I-Ds that are entering the IETF Last Call and ends with ICANN’s submission of review comments.

**Definitions**

- **AUTO** – Automatically through ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Authors** – the authors of the Internet-Draft that has been approved for publication as an RFC
- **Reviewer** – reviews the Internet-Draft on ICANN’s behalf and determines IANA Actions

**Figure 1.2-30. Internet-Draft Last Call Process Step-by-Step Description**

| 1           | LAST CALL ANNOUNCEMENT SENT TO ICANN  |
|-------------|---|
| Description | Notification that an Internet-Draft has entered IETF Last Call is sent to ICANN.  |
| Actor       | IETF Secretariat  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• A message is sent to <i>drafts-lastcall@iana.org</i>.</li> <li>• Message from Secretariat comes in a specified format.</li> <li>• Go to Action box 2.</li> </ul>   |
| 2           | RECEIVE INFORMATION/NEW TICKET  |
| Description | A new ticket is created and ticketing system automatically adds the ticket to the correct queue.  |
| Actor       | AUTO  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• E-mail sent to <i>draft-approval@iana.org</i> is automatically added to the appropriate queue.</li> <li>• Tickets that arrive in <i>drafts-lastcall@iana.org</i> are manually moved to the appropriate ticketing system queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Action box 3.</li> </ul>                           |
| 3           | MANUAL REVIEW/CHECKING  |
| Description | Gather all information needed to determine the actions to be performed by ICANN. This step also includes filling in custom fields for the ticket.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Add the draft string to a custom field.</li> <li>• Add the version number to a custom field.</li> <li>• Refer to the Last Call expiration date in the message and fill in the “Last Call Duration” and “Due Date” fields accordingly.</li> <li>• Check for any related tickets and add as a “refers to.”</li> <li>• Go to Decision box 4.</li> </ul> |

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| 4           | HAS THIS VERSION BEEN REVIEWED?  |
|-------------|--|
| Description | Staff checks to see if a Last Call ticket for the same version of the document has already been processed.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Input to making decision.</li> <li>• Has staff already sent the IESG a review for this version of the document?</li> <li>• If yes, go to Decision box 5.</li> <li>• If no, go to Action box 6.</li> </ul>   |
| 5           | MAKE NOTE IN TICKET  |
| Description | Staff adds comment in ticket noting that this version of the document has already been reviewed.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Staff comments in ticket.</li> <li>• Go to Action box 11.</li> </ul>  |
| 6           | POST SUMMARY DATA IN TICKET  |
| Description | Staff summarizes document data for the reviewer's benefit.   |
| Actor       | IPS  |
| Documents   | Internet-Draft posted on IETF website  |
| Steps       | <ul style="list-style-type: none"> <li>• Open the I-D and check its length.</li> <li>• Send the reviewer a note from the ticket listing the document's title, string, length, and due dates.</li> <li>• Go to Action box 7.</li> </ul>   |
| 7           | ASSIGN TO REVIEWER   |
| Description | Assign the ticket to reviewer who will determine what (if any) ICANN actions this Internet-Draft will require upon approval.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Assign ticket to reviewer.</li> <li>• Go to Action box 8.</li> </ul>  |
| 8           | RECEIVE RESPONSE FROM REVIEWER   |
| Description | The reviewer sends his response to the ticket.   |
| Actor       | Reviewer   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• ICANN receives review.</li> <li>• Go to Decision box 9.</li> </ul>  |
| 9           | DOES ICANN HAVE QUESTIONS FOR THE REVIEWER?  |
| Description | Do questions or requests for clarification need to be sent to the reviewer?  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Determine if further questions need to be asked to clarify the review.</li> <li>• Identify what questions need to be asked or what needs to be clarified.</li> <li>• If yes, go to Action box 10.</li> <li>• If no, go to Action box 11.</li> </ul> |
| 10          | ASK REVIEWER QUESTIONS   |
| Description | Send an email to the reviewer with questions regarding actions.  |

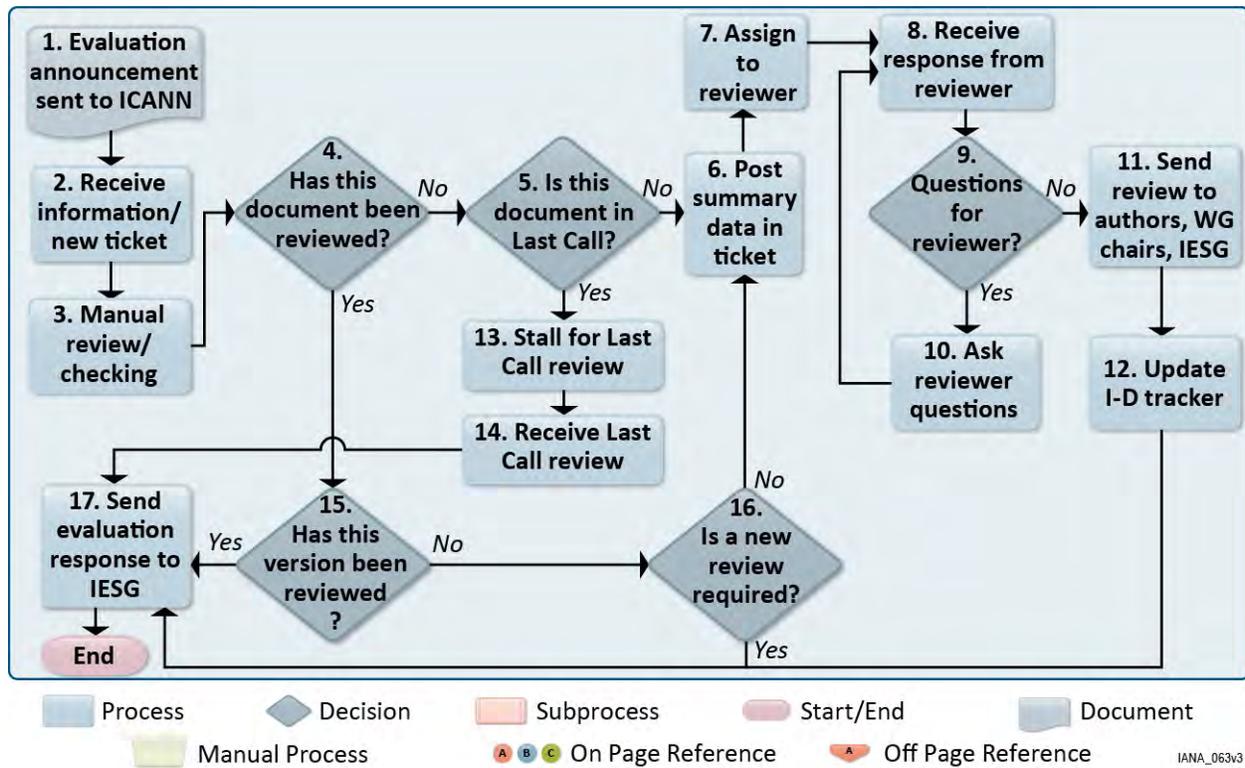
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|             |   |
|-------------|---|
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Send email to reviewer.</li> <li>Go to Action box 8.</li> </ul>  |
| <b>11</b>   | <b>SEND LAST CALL RESPONSE</b>  |
| Description | Send list of ICANN actions to authors, WGCs and IESG.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>ICANN sends list of actions to be performed and/or questions to the authors, relevant IETF Working Group chairs and IESG.</li> <li>Go to Action box 12.</li> </ul> |
| <b>12</b>   | <b>UPDATE I-D TRACKER</b>   |
| Description | Post response in the IETF I-D tracker.  |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Post the same comments sent to the authors and IESG in Action box 11 in the IETF's I-D tracker.</li> <li>Go to END.</li> </ul>                                     |

**Top-level Evaluation Review of I-Ds Process**

Figure 1.2-31 is the top-level process that will be used for the review of Internet-Drafts that are entering the IESG Evaluation step and ends with ICANN's submission of review comments.



**Figure 1.2-31. Internet-Draft Evaluation Process**

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Figure 1.2-32 is the top-level process that will be used for the review of I-Ds that are entering the IESG Evaluation step and ends with ICANN’s submission of review comments.

**Definitions**

- **AUTO** – Automatically through ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Authors** – the authors for the I-D that has been approved for publication as an RFC
- **Reviewer** – reviews the I-D on ICANN’s behalf and determines IANA Actions

**Figure 1.2-32. Internet-Draft Evaluation Process Step-by-Step Description**

| 1           | LAST CALL ANNOUNCEMENT SENT TO ICANN   |
|-------------|--|
| Description | Notification that an Internet-Draft has entered IESG Evaluation is sent to ICANN.  |
| Actor       | IETF Secretariat   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• A message is sent to <i>drafts-eval@iana.org</i>.</li> <li>• Message from Secretariat comes in a specified format.</li> <li>• Go to Action box 2.</li> </ul>  |
| 2           | RECEIVE INFORMATION/NEW TICKET   |
| Description | A new ticket is created and ticketing system automatically adds the ticket to the correct queue.   |
| Actor       | AUTO   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• E-mail sent to <i>draft-approval@iana.org</i> is automatically added to the appropriate queue.</li> <li>• Tickets that arrive in <i>drafts-eval@iana.org</i> are manually moved to the appropriate queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Action box 3.</li> </ul> |
| 3           | MANUAL REVIEW/CHECKING   |
| Description | Gather all information needed to determine the actions to be performed by ICANN. This step also includes filling in custom fields for the ticket.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Add the draft string to a custom field.</li> <li>• Add the version number to a custom field.</li> <li>• Check for any related tickets and add as a “refers to.”</li> <li>• Go to Decision box 4.</li> </ul>   |
| 4           | HAS THIS DOCUMENT BEEN REVIEWED?   |
| Description | Staff checks to see if a Last Call ticket for the document has already been resolved.  |

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|             |   |
|-------------|---|
| Actor       | IPS   |
| Documents   | n/a   |
| Steps       | <ul style="list-style-type: none"> <li>• Input to making decision</li> <li>Has staff already sent the IESG a Last Call review for this document?</li> <li>• If yes, go to Decision box 15</li> <li>• If no, go to Decision box 5</li> </ul>             |
| <b>5</b>    | <b>IS THIS DOCUMENT IN LAST CALL?</b>   |
| Description | Staff checks to see if a Last Call ticket for the document is currently in process.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Input to making decision.</li> <li>• Is there an open ticket for this document in the drafts-last call queue?</li> <li>• If yes, go to Action box 13.</li> <li>• If no, go to Action box 6.</li> </ul>         |
| <b>6</b>    | <b>POST SUMMARY DATA IN TICKET</b>  |
| Description | Staff summarizes document data for the reviewer's benefit.  |
| Actor       | IPS   |
| Documents   | Internet-Draft posted on IETF website.  |
| Steps       | <ul style="list-style-type: none"> <li>• Open the Internet-Draft and check its length.</li> <li>• Send the reviewer a note from the ticket listing the document's title, string, length, and due date.</li> <li>• Go to Action box 7.</li> </ul>        |
| <b>7</b>    | <b>ASSIGN TO REVIEWER</b>   |
| Description | Assign the ticket to reviewer who will determine what (if any) IANA Actions this I-D will require upon approval.  |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Assign ticket to reviewer.</li> <li>• Go to Action box 8.</li> </ul>   |
| <b>8</b>    | <b>RECEIVE RESPONSE FROM REVIEWER</b>   |
| Description | The reviewer sends his response to the ticket.  |
| Actor       | Reviewer  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• ICANN receives review.</li> <li>• Go to Decision box 9.</li> </ul>   |
| <b>9</b>    | <b>DOES ICANN HAVE QUESTIONS FOR THE REVIEWER?</b>  |
| Description | Do questions or requests for clarification need to be sent to the reviewer?   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Input to making decision.</li> <li>• Determine whether further questions need to be asked to clarify the review.</li> <li>• Identify what questions need to be asked or what needs to be clarified.</li> </ul> |

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|             |   |
|-------------|---|
|             | <ul style="list-style-type: none"> <li>• If yes, go to Action box 10.</li> <li>• If no, go to Action box 11.</li> </ul>   |
| <b>10</b>   | <b>ASK REVIEWER QUESTIONS</b>   |
| Description | Send an email to the Reviewer with questions regarding actions.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Send email to Reviewer.</li> <li>• Go to Action box 8.</li> </ul>  |
| <b>11</b>   | <b>SEND REVIEW TO AUTHORS, WG AND IESG</b>  |
| Description | Send list of IANA Actions to authors, Working Group chairs, and IESG.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• ICANN sends list of actions to be performed and/or questions to the authors, relevant IETF WGCs and IESG.</li> <li>• Go to Action box 12.</li> </ul>               |
| <b>12</b>   | <b>UPDATE I-D TRACKER</b>   |
| Description | Post review in the IETF I-D tracker   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Post the same comments sent to the authors and IESG in Action box 11 in the IETF's I-D tracker.</li> <li>• Go to Action box 17.</li> </ul>                         |
| <b>13</b>   | <b>STALL FOR LAST CALL REVIEW</b>   |
| Description | Stall ticket and note that it is waiting for the document's Last Call review to end.  |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Go to Action box 14.</li> </ul>  |
| <b>14</b>   | <b>RECEIVE LAST CALL REVIEW</b>   |
| Description | Evaluation processing can be resumed upon receipt of Last Call review and subsequent resolution of Last Call ticket.  |
| Actor       | IPS/reviewer  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Receive Last Call review and follow process to resolution of Last Call ticket.</li> <li>• Go to Action box 17.</li> </ul>  |
| <b>15</b>   | <b>HAS THIS VERSION BEEN REVIEWED?</b>  |
| Description | Staff checks to see whether a Last Call ticket for the same version of the document has already been processed.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Input to making decision.</li> <li>• Has staff already sent the IESG a review for this version of the document?</li> <li>• If yes, go to Action box 17.</li> </ul> |

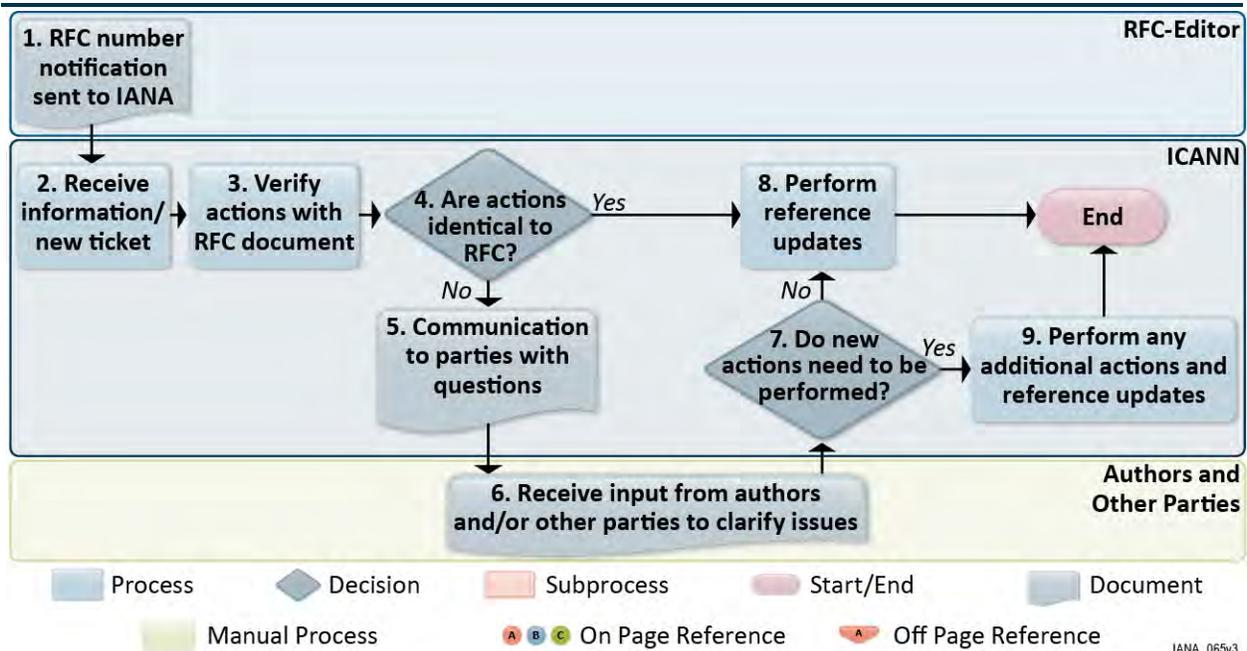
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|             |  |
|-------------|--|
|             | <ul style="list-style-type: none"> <li>If no, go to Action box 16.</li> </ul>  |
| <b>16</b>   | <b>IS A NEW REVIEW REQUIRED?</b>   |
| Description | Staff determines whether the new version of the document has changed enough to require a new review.   |
| Actor       | IPS  |
| Documents   | Multiple versions of Internet-Draft posted on IETF website.  |
| Steps       | <ul style="list-style-type: none"> <li>Input to making decision.</li> <li>Review difference between current version of the document and the version reviewed during Last Call.</li> <li>Determine whether IANA Actions are clear.</li> <li>If yes, go to Action box 17.</li> <li>If no, go to Action box 6.</li> </ul> |
| <b>17</b>   | <b>SEND EVALUATION RESPONSE TO IESG</b>  |
| Description | Send Evaluation Response telling IESG whether the document requires IANA Actions and whether the actions (if any) are clear.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Check most recent review to determine whether the document requires actions and whether the actions are clear.</li> <li>Send message to IESG that says whether there are actions and whether IANA Considerations are "OK" or "NOT OK."</li> <li>Go to END.</li> </ul>           |

**Top-level Updating References for Internet-Drafts process**

**Figure 1.2-33** is the top-level process that will be used for the review of published RFCs, beginning at the announcement of the publication and ending with ICANN updating all references in the protocol parameter registry and in the listing of registries.



**Figure 1.2-33. Internet-Draft Update Reference Process**

Figure 1.2-34 is the top-level process that will be used for the review of published RFCs, beginning at the announcement of the publication and ending with ICANN updating all references in the protocol parameter registry and in the listing of registries.

**Definitions**

- **AUTO** – Automatically through ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Authors** – the authors for the I-D that has been approved for publication as an RFC
- **AD** – Area Director for the I-D (<http://tools.ietf.org/area/>)
- **RFC-Editor** – <http://www.rfc-editor.org/index.html>

**Figure 1.2-34. Internet-Draft Update Reference Process Step-by-Step Description**

| 1           | RFC NUMBER NOTIFICATION SENT TO ICANN   |
|-------------|---|
| Description | An RFC-to-be notification or Intent to a new RFC is sent to ICANN.  |
| Actor       | RFC-Editor  |
| Documents   | Email notification from RFC Editor  |
| Steps       | <ul style="list-style-type: none"> <li>• A message is sent to <a href="mailto:drafts-update-ref@icann.org">drafts-update-ref@icann.org</a>.</li> <li>• Message contains the following basic information:</li> </ul> |

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|             |  |
|-------------|--|
|             | <ul style="list-style-type: none"> <li>– The RFC Editor has made the following assignment: <ul style="list-style-type: none"> <li>• RFC ### (draft-string)</li> <li>• Title of the document</li> <li>• Date of Pub: Month Year</li> </ul> </li> <li>• Go to Step 2.</li> </ul>   |
| <b>2</b>    | <b>RECEIVE INFORMATION/NEW TICKET</b>  |
| Description | A new ticket is created and ticketing system automatically adds the ticket to the correct queue.   |
| Actor       | AUTO   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• E-mail sent to <i>drafts-update-ref@icann.org</i> is automatically added to the appropriate queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Step 3.</li> </ul>  |
| <b>3</b>    | <b>VERIFY IANA ACTIONS WITH RFC DOCUMENT</b>   |
| Description | Review the published RFC and determine if the requested registrations in the IANA Considerations section match those in the IANA registries. This step also includes filling in custom fields for the ticket.  |
| Actor       | IPS  |
| Documents   | <i>http://www.rfc-editor.org/rfcsearch.html</i> , previous “resolved” draft related tickets and, if applicable, any open or resolved tickets related to the RFC-to-be in ticketing system.   |
| Steps       | <ul style="list-style-type: none"> <li>• Add the draft string to a custom field; the draft string can be located in the subject line and with the message.</li> <li>• Add the version number to a custom field; the version number can be located in the subject line.</li> <li>• Review the RFC and relevant registries to determine if they match.</li> <li>• Go to Step 4.</li> </ul> |
| <b>4</b>    | <b>ARE ACTIONS IDENTICAL TO RFC?</b>   |
| Description | Are Actions identical to RFC?  |
| Actor       | IPS  |
| Documents   | RFC Email notification in Step 1 and <i>http://www.rfc-editor.org/rfcsearch.html</i>   |
| Steps       | <ul style="list-style-type: none"> <li>• Verify if the requested actions (in IANA registries) are identical to the assignments documented in the IANA Considerations section in the RFC.</li> <li>• If yes, go to Step 9.</li> <li>• If no, go to Step 5.</li> </ul>   |
| <b>5</b>    | <b>COMMUNICATION TO PARTIES WITH QUESTIONS</b>   |
| Description | ICANN sends questions to Authors and/or RFC-Editor (if applicable) regarding the discrepancies.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Identify the discrepancies between the IANA registries and the RFC, and send the questions to Authors for clarifications.</li> <li>• Go to Step 6.</li> </ul>   |
| <b>6</b>    | <b>RECEIVE INPUT FROM AUTHORS AND/OR OTHER PARTIES TO CLARIFY ISSUES</b>   |
| Description | Authors send back information to clarify the discrepancies.  |
| Actor       | Authors and/or other involved parties (i.e., experts, ADs, etc.)   |
| Documents   | N/A  |

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|             |  |
|-------------|--|
| Steps       | <ul style="list-style-type: none"> <li>• ICANN receives feedback from the authors to clarify the issues.</li> <li>• Identify if the issues have been answered.</li> <li>• The ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days. If no response is received in a reasonable timeframe, IPS will bring this to the PPM’s attention and/or escalate this ticket to the Area Directors (ADs) of the RFC.</li> <li>• Go to Step 7.</li> </ul> |
| <b>7</b>    | <b>DO NEW ACTIONS NEED TO BE PERFORMED?</b>  |
| Description | Is there any new actions resulting from the Action box #6?   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Identify if an errata is required for the addressed discrepancy to be submitted to the RFC-Editor.</li> <li>• Determine if further questions need to go back to the authors for further clarification.</li> <li>• If yes, go to Step 9.</li> <li>• If no, go to Step 8.</li> </ul>  |
| <b>8</b>    | <b>PERFORM REFERENCE UPDATES</b>   |
| Description | Update the draft string in the IANA registries to the RFC numbers.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Update draft string in both the IANA registries and Matrix to the RFC number.</li> <li>• Go to END.</li> </ul>  |
| <b>9</b>    | <b>PERFORM ANY ADDITIONAL ACTIONS AND REFERENCE UPDATES</b>  |
| Description | Perform any additional actions and update draft string in the IANA registries to the RFC number.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Add/Edit/Remove any entries of assignments from the IANA registries upon confirmation by the Authors in Action Box #6; confirm with Authors for the additional edits if needed.</li> <li>• Update draft string in both the IANA registries and Matrix to the RFC number.</li> <li>• If an erratum is needed, authors (or ICANN) will submit errata to the RFC Editor.</li> <li>• Go to END.</li> </ul>  |

In response to the IETF community’s request for more transparency during the review of Internet-Drafts, the RFC-Editor, IETF Secretariat and ICANN collaborated on documentation for end-to-end tracking of documents in the IETF’s datatracker (RFC 6359). ICANN will continue to work with the IETF to develop the mechanisms to record the information for reviews of Internet-Drafts, showing states of documents that are being reviewed by ICANN in the IETF’s datatracker. ICANN will remain the authoritative source of information for the “IANA” states for documents that are being reviewed for protocol parameters actions.

**1.2.9.1.3 Operate .ARPA TLD**

ICANN understands the importance and responsibility of the management of .ARPA and, through direction of the IAB, will perform this requirement for the addition of new second-level domains to the .ARPA zone and updates to existing names.

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ICANN will operate the .ARPA TLD within the current registration policies as documented in RFC 3172 and under the guidance of the IAB. The .ARPA domain is the “Address and Routing Parameter Area” domain and is designated for use exclusively for Internet-infrastructure purposes. The addition of new second-level domains in .ARPA must be requested and approved by the IAB, and the requests are usually documented in the form of an RFC. After an RFC creating a new second-level domain in .ARPA is approved for publication as an RFC, ICANN will create a request, in the form of a template (see **Appendix B**), to delegate a new second-level domain in .ARPA.

ICANN will perform Technical checks to see if the proposed name servers for the new .ARPA second-level name are working. These checks will include the following shown in **Figure 1.2-35**.

**Figure 1.2-35. Technical Checks**

| TERMS AND DEFINITIONS USED   |  |
|--|--|
| The designated zone is the domain for which the change of delegation is sought, and for which IANA maintains the parent zone.  |  |
| For purposes of these technical checks, an authoritative name server is a DNS server that has been designated to answer authoritatively for the designated zone and is being requested to be listed in the delegation. It is recorded by its fully-qualified domain name, potentially along with its IP addresses. |  |
| Name server tests are completed against each unique tuple of a hostname, an IP address and a protocol. If a hostname has multiple IP addresses, for example, the tests will be conducted against each IP address.  |  |
| Minimum Number of Name Servers   | <ul style="list-style-type: none"> <li>There must be at least two NS records listed in a delegation, and the hosts must not resolve to the same IP address.</li> </ul>   |
| Valid Hostnames  | <ul style="list-style-type: none"> <li>The hostnames used for the name servers must comply with the requirements for valid hostnames described in RFC 1123, section 2.1.</li> </ul>  |
| Name Server Reachability   | <ul style="list-style-type: none"> <li>The name servers must answer DNS queries over both the User Datagram Protocol (UDP) and Transmission Control Protocol (TCP) on port 53.</li> <li>Tests will be conducted from multiple network locations to verify the name server is responding.</li> </ul>  |
| Answer Authoritatively   | <ul style="list-style-type: none"> <li>The name servers must answer authoritatively for the designated zone. Responses to queries to the name servers for the designated zone must have the “AA”-bit set.</li> <li>This will be tested by querying for the Statement of Authority (SOA) record of the designated zone with no “RD”-bit set.</li> </ul> |
| Network Diversity  | <ul style="list-style-type: none"> <li>The name servers must be in at least two topologically separate networks.</li> <li>A network is defined as an origin autonomous system in the BGP routing table.</li> <li>The requirement is assessed through inspection of views of the BGP routing table.</li> </ul>  |
| Consistency Between Glue and Authoritative Data  | <ul style="list-style-type: none"> <li>For name servers which have IP addresses listed as glue, the IP addresses must match the authoritative A and AAAA records for that host.</li> </ul>   |
| Consistency Between Delegation and Zone  | <ul style="list-style-type: none"> <li>The set of Name Server (NS) records served by the authoritative name servers must match those proposed for the delegation in the parent zone.</li> </ul>  |

| <b>TERMS AND DEFINITIONS USED</b>              |  |
|--|--|
| Consistency Between Authoritative Name Servers | <ul style="list-style-type: none"> <li>• The data served by the authoritative name servers for the designated zone must be consistent.</li> <li>• All authoritative name servers must serve the same NS record set for the designated domain.</li> <li>• All authoritative name servers must serve the same SOA record for the designated domain.</li> <li>• If for operational reasons the zone content fluctuates rapidly, the serial numbers need only be loosely coherent.</li> </ul>  |
| No Truncation of Referrals                     | <ul style="list-style-type: none"> <li>• Referrals from the parent zone’s name servers must fit into a non-EDNS0 UDP DNS packet; therefore, the DNS payload must not exceed 512 octets.</li> <li>• The required delegation information in the referral is a complete set of NS records and the minimal set of requisite glue records. The response size is assessed as a response to a query with a maximum-sized Qualified Name (QNAME).</li> </ul>   |
| The Minimal Set of Requisite Glue Records      | <ul style="list-style-type: none"> <li>• One A record, if all authoritative name servers are in-bailiwick of the parent zone; and,</li> <li>• One AAAA record, if there are any IPv6-capable authoritative name servers and all IPv6-capable authoritative name servers are in-bailiwick of the parent zone.</li> </ul>  |
| Prohibited Networks                            | <ul style="list-style-type: none"> <li>• The authoritative name server IP addresses must not be in specially designated networks that are either not globally routable or are otherwise unsuited for authoritative name service.</li> <li>• IPv4 networks considered not globally routable are 0.0.0.0/8, 10.0.0.0/8, 127.0.0.0/8, 169.254.0.0/16, 172.16.0.0/12, 192.0.2.0/24, 192.168.0.0/16, 198.18.0.0/15, and 224.0.0.0/3. (See RFC 3330.)</li> <li>• IPv6 networks considered not globally routable are ::/128, ::1/128, 2001:2::/48, 2001:10::/28, 2001:DB8::/32, FC00::/7, and FE80::/10. (See RFC 5156.)</li> </ul> |
| Other Prohibited Networks                      | <ul style="list-style-type: none"> <li>• ::FFFF:0:0/96 (IPv4 mapped addresses, see RFC 4291)</li> <li>• 2001::/32 (Teredo, see RFC 4380)</li> <li>• 2002::/16 (6to4, see RFC 3056)</li> <li>• 192.88.99.0/24 (6to4, see RFC 3068)</li> </ul>   |
| No Open Recursive Name Service                 | <ul style="list-style-type: none"> <li>• The authoritative name servers must not provide recursive name service.</li> <li>• This requirement is tested by sending a query outside the jurisdiction of the authority with the “RD”-bit set.</li> </ul>  |
| Same Source Address                            | <ul style="list-style-type: none"> <li>• Responses from the authoritative name servers must contain the same source IP address as the destination IP address of the initial query.</li> </ul>  |

The template request will be sent to the proposed administrative and technical contacts—those who will be responsible for the second-level domain, requesting confirmation and approval of the proposed template. After the confirmations from both the administrative and technical contacts are received, the technical checks will be repeated. After a successful pass, ICANN will send the request to Verisign, currently operating the .ARPA zone, for completion. Verisign will confirm that the second-level domain has been added to the .ARPA zone, and ICANN will confirm to both the administrative and technical contacts that the request is completed.

For both adding new second-level names or modifications to existing names in .ARPA, the below step-by-step process will be used. The only difference between adding new second-level names and making changes to existing names will be which party sends the text template

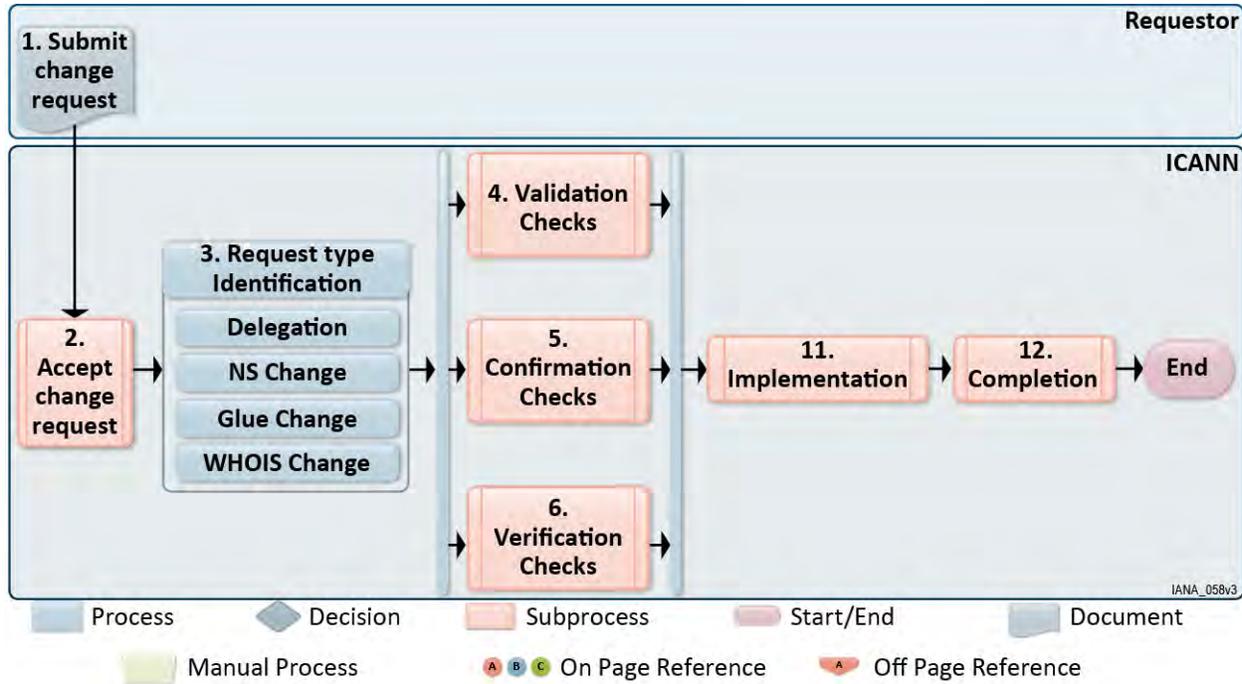
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requesting the changes. For new second-level names, this step will be completed by ICANN after publication of the RFC.

**Top-level Process for Managing the .ARPA Domain**

Figure 1.2-36 is the top-level process that will be used for the .ARPA management.



**Figure 1.2-36. Process for .ARPA Management**

The following steps include those listed below:

- **.ARPA Request** — A request is created when a template (see **Appendix B**) is submitted to ICANN. For requests adding a new second-level domain to the .ARPA zone, ICANN creates the request upon the publication of the RFC.
- **Validation Checks** — Technical checks
- **Procedural Checks** — Confirmations
- **Legal Checks** — Any necessary legal reviews are performed on the request.
- **Process Request** — For requests requiring changes to the .ARPA zone (e.g., new second-level names, name server changes, and DS records), the requests are sent to Verisign (current .ARPA administrator) for implementation. For requests requiring data changes (e.g., contact names, addresses, and phone numbers), the requests are processed by ICANN.
- **Request Confirmation** — The requester is informed of the registration and that the request is complete.

**1.2.9.1.4 Implementation**

ICANN understands the importance and responsibility of the implementation of DNSSEC in the .ARPA TLD. Through direction of the IAB and working with NTIA and Verisign, ICANN

understands the deployment of a replacement for the current interim agreement for DNSSEC in .ARPA will fulfill the requirement as described in this proposal.

ICANN notes that an interim arrangement for the deployment of DNSSEC in the .ARPA TLD was made in early 2010, and the .ARPA TLD was operationally signed on 2010-03-17. Under this interim arrangement, the .ARPA zone is signed and distributed by Verisign. ICANN understands this requirement to be direction to deploy production, long-term architecture for DNSSEC in .ARPA to replace the interim arrangement. ICANN commits to implementing such an arrangement. A proposed schedule and high-level summaries of the approach and implementation are included below.

ICANN observes that the interim arrangement has proven to be stable and considers that there is no operational urgency in replacing it. ICANN therefore proposes a conservative, measured approach to replacing the interim arrangement.

ICANN is and will continue to be committed to transparency in its operation of critical Internet infrastructure. Changes made to the technical operation of the .ARPA TLD will be widely announced, following the model of the wide technical review facilitated by ICANN, Verisign and NTIA in their successful deployment of DNSSEC in the root zone.

ICANN will follow a schedule for the production, long-term infrastructure supporting DNSSEC in the .ARPA TLD. The milestones specified refer to the proposed implementation, included below, and will be subject to change depending on the implementation plan agreed with NTIA and Verisign. A list of milestones is shown in **Figure 1.2-37**.

**Figure 1.2-37. List of Milestones**

|                |  |
|----------------|--|
| <b>STEP 1</b>  | Detailed technical proposal sent to RSSAC and the IAB for discussion.  |
| <b>STEP 2</b>  | Consensus reached with RSSAC and IAB on the detailed technical proposal.   |
| <b>STEP 3</b>  | Detailed technical proposal submitted to NTIA and Verisign.  |
| <b>STEP 4</b>  | Production DNSSEC infrastructure for ARPA deployed.  |
| <b>STEP 5</b>  | Dual operation   |
| <b>STEP 6</b>  | Report on dual operation period submitted to NTIA with proposal to enter full production.  |
| <b>STEP 7</b>  | Successor DS Resource Record Set (RRSet) submitted through IANA root zone management process.  |
| <b>STEP 8</b>  | Replacement NS RRSet submitted through IANA root zone management process.  |
| <b>STEP 9</b>  | Root Server Operators (A, B, C, D, E, F, G, H, I, K, L, M; J does not serve .ARPA currently) have all dropped the .ARPA zone from their servers. |
| <b>STEP 10</b> | Outgoing DS RRSet removal submitted through IANA root zone management process.   |
| <b>STEP 11</b> | Final DS RRSet for ARPA published in root zone.  |
| <b>STEP 12</b> | Full production  |

The following is a high-level description of what ICANN will propose as the architecture intended to illustrate the approach. ICANN will deliver a detailed technical proposal to NTIA and the IAB for discussion, as described in the proposed schedule, above. ICANN also will seek a review on its technical approach from RSSAC and the IAB and to address any concerns raised.

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ICANN considers that operational security and stability of a signed .ARPA zone are best achieved by a single entity performing the unsigned zone maintenance, zone signing and zone distribution functions. This is consistent with the stable operation of the interim arrangement for DNSSEC in .ARPA, and also follows industry best practices for operation of top-level domain infrastructure. ICANN, as IANA Functions Operator, will perform these three functions.

The .ARPA zone is currently served by 12 of the 13 root servers (A, B, C, D, E, F, G, H, I, K, L, M). Consistent with the approach indicated by the IAB in RFC 3172 section 2 and RFC 2870 section 5, ICANN will change the nameservers for the .ARPA zone, and, following implementation, root servers will no longer serve the .ARPA zone.

ICANN proposes that .ARPA be served by the same nameservers used for IANA.ORG, namely A.IANA-SERVERS.NET, B.IANA-SERVERS.NET, C.IANA-SERVERS.NET, D.IANA-SERVERS.NET, and NS.ICANN.ORG. ICANN observes that this nameserver set incorporates significant operational diversity and has been proven to be stable over a considerable period of time. Nameservers in that set are currently operated (under ICANN's direction and administrative control) by Packet Clearing House (PCH), Internet Systems Consortium (ISC), ICANN's Information Technology department, and ICANN's DNS Operations department. ICANN continually reviews performance of these nameservers and incorporates changes from time to time to best ensure the security and stability of their operation.

ICANN will use its Generic Signing Infrastructure (GSI) platform for key management and DNSSEC signing of the .ARPA zone. The GSI is currently used to sign other important, non-IANA Functions infrastructure zones such as IN-ADDR.ARPA (for IPv4 reverse mapping) and IP6.ARPA (for IPv6 reverse mapping). ICANN will publish a DNSSEC Policy and Practice Statement (DPS) for the GSI, and the controls associated with key management and operations will be subject to external audit, following which ICANN expects to receive SysTrust accreditation, consistent with the audit and accreditation awarded to ICANN by PricewaterhouseCoopers for its management of the Root Zone Key Signing Key (KSK). External audit and subsequent accreditation will take place once the new architecture is in full production.

ICANN will follow a substantial period of dual operation, during which the existing .ARPA zone (maintained and signed by Verisign) will continue to be served by the 12 root servers. The .ARPA zone, maintained and signed by ICANN, will be published on new production nameservers such that the stability, performance and availability of the successor .ARPA zone will be accurately gauged during this period.

The transition from the Verisign-maintained and -signed .ARPA zone to one maintained and signed by ICANN will be coordinated by ICANN according to the high-level schedule included above. The transition will incorporate a KSK rollover in the .ARPA zone (we do not propose the transfer of any key materials from Verisign to ICANN) and will be seamless to end-users. Root Server Operators will be engaged via RSSAC, and ICANN expects full cooperation from Root Server Operators for this transition, building on the excellent operational relationship between Root Server Operators and ICANN that was evident in the deployment of DNSSEC in the root zone.

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ICANN will extend the monthly reports to NTIA relating to the .ARPA TLD to incorporate elements relating to the performance, stability and availability of the .ARPA nameservers and to relevant events and procedures carried out on the GSI pertaining to DNSSEC in the .ARPA TLD.

### **1.2.9.2 Administrative Functions Associated with Root Zone Management**

ICANN has successfully performed the IANA Functions for more than 13 years, most recently in accordance with the 2006 Contract. Consequently, many of the processes defined within this response have been historically documented and implemented by ICANN, relying on the deep understanding that ICANN brings to the non-obvious complexities of the IANA Functions. The proposed workflow for Requirement C.2.9.2 reflects the process currently used in operating the Administrative Functions associated with Root Zone Management, and ICANN proposes to continue this workflow. This will be fully conformant with the overall workflow described in the Solicitation and the illustration in Appendix 1 of the Statement of Work.

ICANN has improved its performance of the IANA Functions to accommodate the growing complexity and requirements of the Root Zone Management task. Some of the new demands that did not exist in 1999 include the complex operational requirements of DNSSEC, introduction of IPv6 records, increased speed at which changes need to be implemented, requirements of introducing new gTLDs in two early rounds (in 2000 and 2004), and introduction of Internationalized Domain Names.

All of these new services have been successfully introduced by ICANN into IANA Functions in a timely fashion. To support this, ICANN has implemented new systems to optimize the process and improve accuracy. When ICANN took over IANA Functions in 1998, the Root Zone Management process was completely manual and paper-based. During ICANN's stewardship, the process evolved with new tools including a dedicated Root Zone Database management system deployed in 2000, a fully electronic ticket tracking system in 2005, implementation of automation and fully objective technical tests in 2007, and migration to an automated workflow management system that was deployed in 2011.

ICANN has a deep and thorough understanding of the requirements of the DNS Root Zone Management process. As the IANA Functions operator since 1998, ICANN has many years of practical experience in the unique requirements of the Root Zone process, including the historical legacy that is the basis upon which many of the details of the functions are executed. The staff and management are comprised of experts with many years of experience managing the root zone process, and who maintain personal relationships with the majority of TLD Managers and other actors involved in the process.

#### ***Understanding the Requirement***

To execute the Root Zone Management functions in a responsible way, ICANN recognizes the most important criterion is the technical stability of the Root Zone. Without a correctly functioning Root Zone, the ongoing stability of the Domain Name System is compromised. The series of checks-and-balances in the process ensure that changes are reviewed several times by multiple parties, and do not to impact secure and stable Root Zone operation before implementation. The process also will ensure accuracy for the changes by ensuring TLD Managers review and positively confirm the correctness of the change, and confirming the

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accuracy of changes by using the DNS protocol to reconcile the proposed changes to the DNS Root Zone with the contents of the TLD's NS, A, AAAA, and DNSKEY records obtained independently from other DNS zones. As the DNS Root Zone is designed to reflect existing information located elsewhere in the DNS, this form of checking acts as an important indicator that any request is properly implemented and accurately reflects the wishes of the operator.

The requirements for a deliberate process are tempered by the recognition that TLD Managers require timely service to maintain ongoing stable operation of their individual registries. Therefore, ICANN implements a service that minimizes the amount of time that a request requires for processing to that which is necessary to correctly execute the function.

To ensure timely operation, the process must be predictable, repeatable, and well understood by the various parties. ICANN notes that a common cause of delay when processing requests is TLD Managers submitting incomplete or inaccurate requests. Ensuring that process and requirements are fully understood helps reduce that delay and allow TLD Managers to better plan for the process.

ICANN also recognizes that accountability is essential to maintain the trust required by the community to successfully operate the function. ICANN provides a comprehensive level of detail to TLD Managers about how their requests are being processed, including regular status updates and a complete timeline describing the processing of a request. ICANN reports to the community its execution of the function through a combination of presentations and regular reporting.

### ***Technical Approach***

ICANN describes our technical approach to meeting this requirement in the following sections.

#### **1.2.9.2(1) Facilitate and Coordinate Root Zone**

ICANN will use its established process, described below, that are well understood by the various parties involved in Root Zone Management in order to continue to facilitate and coordinate the root zone's contents.

Using the language of the Solicitation, and in accordance with the existing process workflow, a TLD manager will submit a change request to the IANA Functions Operator (ICANN), which will then be processed and evaluated according to the type of change being requested. Once the various checks are satisfactorily conducted, the request will be transmitted to the Administrator, NTIA, for authorization. Following successful authorization, the Root Zone Maintainer, Verisign, will execute changes to the root zone file. Finally, ICANN as the IANA Functions Operator will implement the authorized changes to the WHOIS database and the request will be completed.

The process is designed to be as lightweight as possible within the requirements of the DNS Root Zone management process. This allows for straight-through processing with almost full automation for the significant majority of DNS Root Zone change requests. Manual processing will be performed only in cases where automation cannot be achieved without compromising the integrity of the evaluation required.

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### General Process Workflow for Root Zone Change Requests

This process workflow will be used for the life cycle of a Change Request. During the life of a request, the process will go through a number of phases. These phases will be conducted for all types of changes requested under Requirement C.2.9.2, however the specifics of the process conducted within each phase will vary depending on factors such as whether it is a technical or non-technical change, and whether it involves a substantive change of who operates the domain (commonly known as a “TLD redelegation”). These differences in processing details are elaborated upon individually under the responses to Requirements C.2.9.2.a through C.2.9.2.d. See Figures 1.2-38 and 1.2-39.

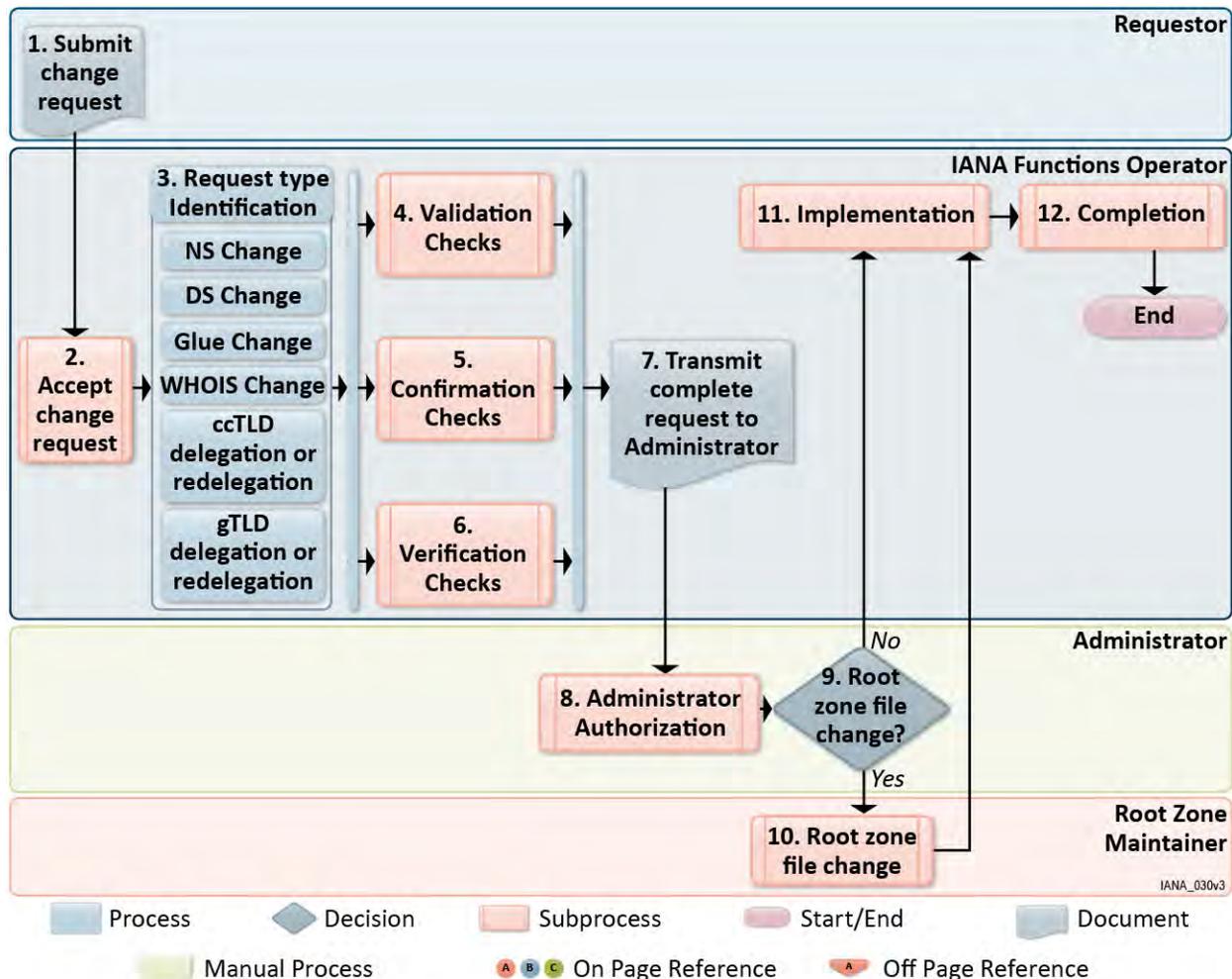


Figure 1.2-38. Top-Level Root Zone Process

Figure 1.2-39. Top-Level Root Zone Change Step-by-Step Description

| 1           | SUBMIT CHANGE REQUEST   |
|-------------|---|
| Description | A change request is submitted by requestor, typically through ICANN’s IANA Root Zone Management website. ese requests will typically be lodged through ICANN’s IANA Root Zone Management website. The software used for processing standard root zone change requests is an existing system that was developed by ICANN and coordinates operations for updating the root zone with the Administrator and Root Zone Maintainer. Should a requestor not to use this |

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|                    |   |
|--------------------|---|
|                    | system, the request may be emailed to root-mgmt@iana.org, submitted via facsimile or postal mail.   |
| <b>2</b>           | <b>ACCEPT CHANGE REQUEST</b>  |
| <b>Description</b> | A change request is accepted.   |
| <b>3</b>           | <b>REQUEST TYPE IDENTIFICATION</b>  |
| <b>Description</b> | The type of change request (i.e., Name Server (NS) record change, Delegation Signer (DS) record change, glue record change, WHOIS database change, ccTLD (re-)delegation, gTLD (re-)delegation, or a combination thereof) will be identified in order to determine which checks must be performed during the processing of the request.   |
| <b>4</b>           | <b>VALIDATION CHECKS</b>  |
| <b>Description</b> | Checks for request completeness are performed, as well as technical checks on the technical elements of the request. In the case of those requests submitted via the automated root zone management system, many of these checks are performed automatically in tandem with accepting the change request. If the request is unclear or has validation issues, further clarification is sought from the requester.   |
| <b>5</b>           | <b>CONFIRMATION CHECKS</b>  |
| <b>Description</b> | For existing top-level domains, the existing administrative and technical contacts for the top-level domain are asked to consent to the proposed change. For changes that involve inducting new contact persons, the new contacts are asked to consent to their new responsibility. The Sponsoring Organization is asked to endorse certain changes, particularly relating to personnel changes in the contacts for the domain (e.g., staff succession). In some cases, third parties are involved in consenting to changes to the root zone. This is either through explicit request from the operator (who has placed “special handling instructions” on file), or through legal, contractual, or governmental obligation. In the specific case of changing the IP addresses (“glue”) of a name server shared by multiple top-level domains, the contact persons from other affected TLDs will also be asked to confirm the change. |
| <b>6</b>           | <b>VERIFICATION CHECKS</b>  |
| <b>Description</b> | Requests are reviewed to deem whether they represent a material change to the operator of the domain. If they are, they are considered a “re-delegation” and must be reviewed against a set of additional public interest criteria, as described under C.2.9.2.c and C.2.9.2.d. Additionally, at this stage any necessary legal reviews are performed on the request, and any special handling of the request as requested by certain TLD managers is performed.  |
| <b>7</b>           | <b>TRANSMIT COMPLETE REQUEST TO ADMINISTRATOR</b>   |
| <b>Description</b> | The complete request is transmitted to administrator.   |
| <b>8</b>           | <b>AUTHORIZATION</b>  |
| <b>Description</b> | Changes to the DNS Root Zone File, as well as changes to the DNS Root Zone WHOIS Database, are transmitted to the Administrator for authorization. Such changes cannot be enacted without explicit positive authorization from the Administrator. Once a request has passed review and is ready for transmittal to the Administrator for authorization, the system will instantiate a Change Request in the Root Zone Maintainer’s system using the EPP protocol. At this stage of the process, the Root Zone Maintainer’s system will hold the request as pending until it receives proper authorization from the Administrator.   |
| <b>9</b>           | <b>ROOT ZONE FILE CHANGE?</b>   |
| <b>Description</b> | If yes, go to Step 10.<br>If no, go to Step 11.   |
| <b>10</b>          | <b>ROOT ZONE FILE CHANGE</b>  |

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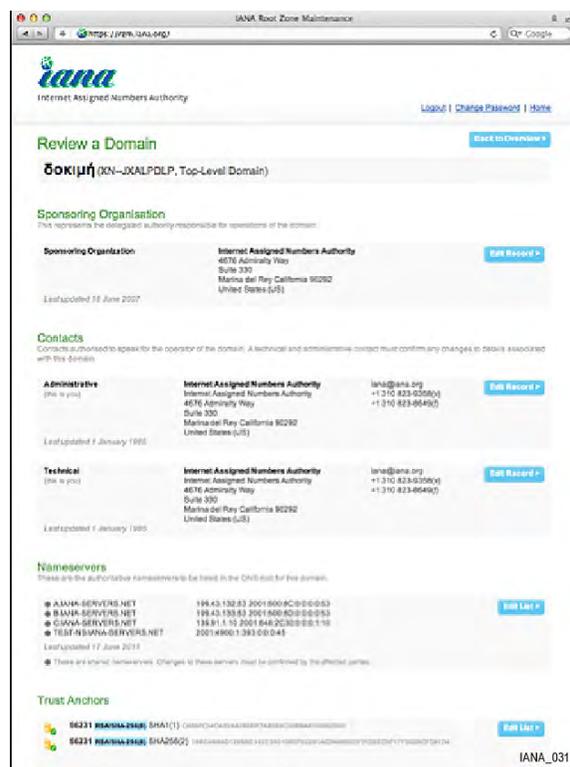
|                    |  |
|--------------------|--|
| <b>Description</b> | The Root Zone Maintainer conducts changes to the Root Zone File following authorization by the Administrator.  |
| <b>11</b>          | <b>IMPLEMENTATION</b>  |
| <b>Description</b> | ICANN conducts changes to the Root Zone Whois Database. Changes to the Root Zone File are cross-verified by ICANN to ensure they were enacted correctly. Any potential implementation issues are identified, researched, and if necessary remedied through mutual communication between the parties.                   |
| <b>12</b>          | <b>COMPLETION</b>  |
| <b>Description</b> | The Root Zone Maintainer propagates any changes to the Root Zone File to the Authoritative Root Zone Servers; and changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at whois.iana.org by the IANA Functions Operator, ICANN. The requester is informed that the request is completed. |

Online interface for Request Management

ICANN will recommend to TLD managers that they submit their change requests via a secure online website that ICANN has developed which provides an advanced interactive interface that allows existing managers to enter changes, review their proposed changes, and revert or make further changes, all prior to lodgment as a formal Change Request. The interface also will provide complex functionality to advise the TLD manager of common scenarios, such as when the request may need to be split into multiple parts in order to expedite processing. During this lodgment process, online feedback will be immediately provided on common errors associated with request completeness and technical accuracy. Upon lodgment as a formal Change Request, a reference number will be immediately provided via the web interface, and the status will be tracked moving forward.

**Figure 1.2-40** is a representative screen shot of the currently deployed interface for TLD managers.

Subsequent to lodging a change request, TLD managers will use this online interface to review currently pending requests to identify their current status, as well as review historical requests that have been concluded. The interface will provide the ability for TLD managers to withdraw any request that has not yet advanced to its final implementation phases, and perform common administrative tasks such as updating their login credentials to the system.



**Figure 1.2-40. ICANN Interface for TLD Managers**

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### Template

If a change request is submitted via means other than through the automated web interface — such as email, facsimile, or postal mail — the requestor will be encouraged to do so using a template posted on ICANN’s IANA website. This form reflects the transmittal format used for the Administrator’s Authorization prior to the migration to the automated root zone management workflow in 2011. Using the form will not be a mandatory requirement: so long as the applicant clearly and unambiguously articulates the nature of the request, any request will be accepted by ICANN and will be entered into the online system on the requestor’s behalf.

The proposed template is attached in **Appendix B**.

#### **1.2.9.2(2) Maintain 24x7 Operation**

ICANN will maintain all online services in relation to the performance of C.2.9.2 and ensure they are available 24x7, with the exception of any scheduled maintenance that may need to be performed from time to time.

ICANN will ensure any scheduled maintenance does not impact the full 24x7 availability of the DNS Root Zone, DNS Root Zone Servers, or ICANN’s ability for the IANA Functions Operator to facilitate emergency change requests. In order to effect this, ICANN will ensure additional systems are in place to handle any requirements during such maintenance windows, and schedule maintenance with its root management partners and other involved parties to ensure ongoing service.

The online systems for performing the tasks of C.2.9.2 will be deployed using multiple redundant facilities.

Normal root zone management operations will not require ICANN to process routine requests on a 24x7 basis. Instead, what is essential is that the online systems will be available on a 24x7 basis, that requests will be lodged on a 24x7 basis, and that ICANN Staff will be available for escalation of emergency requests on a 24x7 basis. ICANN will staff its offices, at a minimum, according to normal business hours in the US Pacific time zone. Normal routine changes that require handling by staff will be processed during these hours.

ICANN will provide an online self-service interface whereby credentialed TLD managers will submit change requests at any time. Credentialed TLD managers will also log in at any time to review the status of their request, and perform other actions, without necessitating direct involvement of ICANN staff.

As well as general staff availability during standard business hours, ICANN will continue to provide TLD managers with a 24x7 emergency contact number that allows TLD managers to quickly reach ICANN to declare an emergency and seek to expedite a Root Zone change request. ICANN will execute such changes in accordance with the obligations of the standard root zone management workflow as expeditiously as possible. This prioritization will include performing emergency reviews of the request as the first priority, out of ordinary business hours if necessary, and informing its contacts at NTIA and Verisign, in their roles as Administrator and Root Zone Maintainer, of any pending changes that will require priority authorization and implementation. See **Figures 1.2-41 and 1.2-42**.

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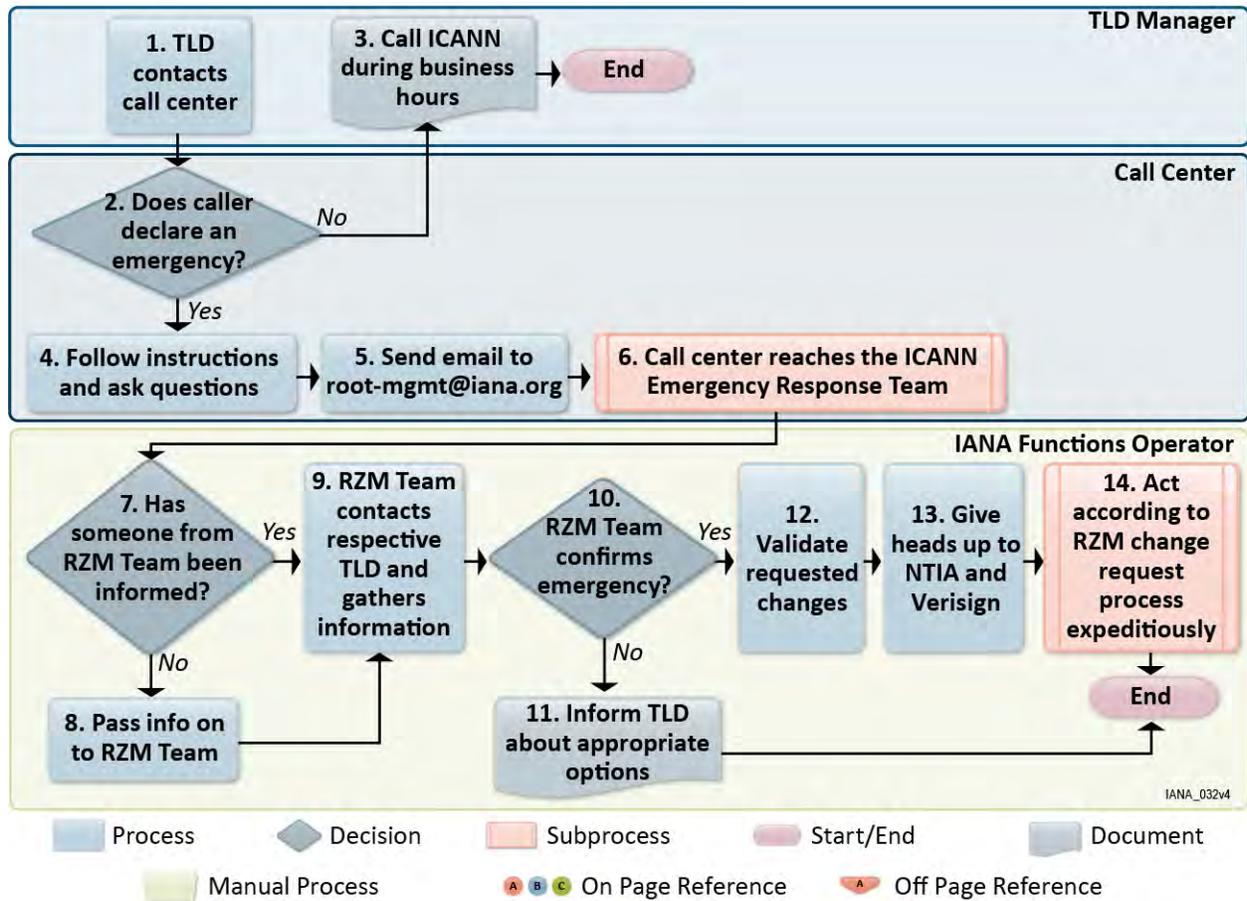


Figure 1.2-41. 24x7 Emergency Process

Figure 1.2-42. 24x7 Emergency Process Step-by-Step Description

| 1           | TLD CONTACTS CALL CENTER   |
|-------------|--|
| Description | All TLD managers are provided with an emergency contact telephone number that will reach a 24x7 call center.   |
| 2           | DOES CALLER DECLARE AN EMERGENCY?  |
| Description | The caller is asked if the issue is an emergency that requires an urgent root zone change, and can not wait until regular business hours.  |
| 3           | CALL ICANN DURING BUSINESS HOURS   |
| Description | In the event the caller decides it is not an emergency, their contact details are logged and they are advised to speak to ICANN’s IANA Function staff during regular business hours. |
| 4           | FOLLOW INSTRUCTIONS AND ASK QUESTIONS  |
| Description | Call center staff follow a set of instructions to solicit relevant information relating to the nature of the emergency, and the contact details of the TLD manager.                  |
| 5           | SEND EMAIL TO <a href="mailto:root-mgmt@iana.org">ROOT-MGMT@IANA.ORG</a>   |
| Description | The particulars of the emergency call are sent by the call center staff to the ticketing system. This opens a ticket and starts an audit log of the specific request.                |

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|--------------------|---|
| <b>6</b>           | <b>CALL CENTER REACHES THE ICANN EMERGENCY RESPONSE TEAM</b>  |
| <b>Description</b> | The call center has the emergency roster of ICANN's IANA Functions staff, as well as escalation points for ICANN senior management. The call center will call through the roster until they contact a person to hand the issue to. The ICANN staff member that receives the issue will be the primary person responsible for resolution of the issue. |
| <b>7</b>           | <b>HAS SOMEONE FROM THE ROOT ZONE MANAGEMENT (RZM) TEAM BEEN INFORMED?</b>  |
| <b>Description</b> | The primary person responsible checks if the Root Zone Management team within the ICANN's IANA Functions staff is aware of the issue.   |
| <b>8</b>           | <b>PASS INFO ON TO RZM TEAM</b>   |
| <b>Description</b> | If necessary, information relating to the emergency request is communicated to the Root Zone Management team.   |
| <b>9</b>           | <b>RZM TEAM CONTACTS TLD MANAGER</b>  |
| <b>Description</b> | The IANA Functions staff performing the root zone management functions contact the TLD manager using the contact details provided to the call center. The nature of the issue is discussed in more detail, and a plan is devised to resolve the issue.  |
| <b>10</b>          | <b>RZM TEAM CONFIRMS EMERGENCY</b>  |
| <b>Description</b> | Following dialog with the TLD manager, the RZM team confirms the particulars of the issue and the need to perform an emergency root zone change to resolve the issue.   |
| <b>11</b>          | <b>INFORM TLD ABOUT APPROPRIATE OPTIONS</b>   |
| <b>Description</b> | In the event the TLD manager and RZM team deem that an emergency root zone change can not resolve the issue, ICANN will inform the TLD manager about what other options they have to resolve the issue.   |
| <b>12</b>          | <b>VALIDATE REQUESTED CHANGES</b>   |
| <b>Description</b> | ICANN validates the request in accordance with the standard procedures described in the Root Zone Change process, including performing technical checks and performing contact confirmations. ICANN takes steps to conduct these as quickly as possible.  |
| <b>13</b>          | <b>GIVE HEADS UP TO NTIA AND VERISIGN</b>   |
| <b>Description</b> | ICANN takes all available steps to inform personnel at NTIA and Verisign that there is an active emergency change request being conducted, and encourages NTIA and Verisign to process the request as quickly as possible.  |
| <b>14</b>          | <b>ACT ACCORDING TO ROOT ZONE CHANGE REQUEST PROCESS EXPEDITIOUSLY</b>  |
| <b>Description</b> | ICANN executes the root zone change request as quickly as possible according to all standard policies and procedures. ICANN prioritizes the rapid implementation of the request above other requests at normal priority.  |

**1.2.9.2(3) Contractor shall work collaboratively with NTIA and the Root Zone Maintainer**

ICANN will continue to work with the NTIA and the Root Zone Maintainer following the successful manner in which collaboration has been conducted over the course of the current contract. This collaboration will include regularly scheduled coordination meetings on general Root Zone Management issues, and several meetings per year specifically on the topic of emergency response and scenario planning. ICANN will also work with the parties on face-to-face workshops as needed on a variety of root zone management topics.

In the execution of the Root Zone Management function, from time to time, specific operational issues warrant immediate questioning and response. Ad-hoc meetings will be called

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between Verisign, ICANN, and NTIA to resolve these issues as they arise. ICANN staff will be available on-call outside of regular business hours, and ICANN staff contact details will be provided to NTIA and Verisign to allow for immediate dialogue on any operational issues that arise.

Above and beyond the successful working relationships demonstrated in executing the routine Root Zone Management functions under the current contact, ICANN has demonstrated its ability to work collaboratively with the parties during the process of developing, testing, and deploying the Root Zone Workflow Automation System. This project involved intensive coordination and liaison between the parties over an extended period of time. The work involved complex requirements and specifications development, and a multi-year development and testing process that concluded with its successful launch in 2011.

ICANN will continue advancing these relationships by continuing regularly scheduled coordination meetings, and will work with the parties to identify areas where coordination can be improved.

#### **1.2.9.2.a Root Zone File Change Request Management**

ICANN has successfully performed the IANA Functions for more than 13 years, most recently in accordance with the 2006 contract. Consequently, many of the processes defined within this response have been historically documented and implemented by ICANN, relying on the deep understanding that ICANN brings to the complexities of the IANA Functions. The proposed workflow for Requirement C.2.9.2.a reflects the process currently used in operating the Administrative Functions associated with Root Zone Management, and ICANN will continue to use this workflow. This will be fully conformant with the overall workflow described in the Solicitation, and the illustration in Appendix 1 of the Statement of Work.

In performing the work for more than 13 years, ICANN has improved the function to accommodate the growing complexity and requirements of the Root Zone Management task. Some of the new demands that did not exist in 1999 include the complex operational requirements of DNSSEC, introduction of IPv6 records, increased speed at which changes need to be implemented, and introduction of Internationalised Domain Names.

All of these new services have been successfully introduced by ICANN in performing the IANA Functions in a timely fashion. To support this, ICANN has implemented new systems to optimize the process and improve accuracy. When ICANN took over the IANA Functions in 1998, the Root Zone Management process was completely manual and paper-based. During ICANN's stewardship, the process evolved with new tools including a dedicated Root Zone Database management system deployed in 2000, a fully electronic ticket tracking system in 2005, implementation of automation and fully objective technical tests in 2007, and migration to an automated workflow management system that was deployed in 2011.

ICANN has a deep and thorough understanding of the requirements of the DNS Root Zone Management process. As the IANA Functions operator, ICANN has many years of practical experience in the unique requirements of the Root Zone process, including the historical legacy that is the basis upon which many of the details of the functions are executed. The staff and management are comprised of experts with many years of experience in managing the root

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zone process, and based on this experience maintain personal relationships with the majority of TLD Managers and other actors involved in the process.

### ***Understanding the Requirement***

To execute the Root Zone Management functions in a responsible way, ICANN recognizes the most important criteria is the technical stability of the Root Zone. Without a correctly functioning Root Zone, the ongoing stability of the Domain Name System is compromised. The series of checks-and-balances in the process ensure changes are reviewed several times by multiple parties, and ensured not to impact secure and stable Root Zone operation before implementation. The process also ensures accuracy for the changes by ensuring that TLD Managers review and positively confirm the correctness of the change, and confirming the accuracy of changes by using the DNS protocol to reconcile the proposed changes to the DNS Root Zone, with the contents of the TLD's NS, A, AAAA, and DNSKEY records obtained independently from other DNS zones. As the DNS Root Zone is designed to reflect existing information located elsewhere in the DNS, this form of checking acts as an important indicator that any request is properly implemented and accurately reflects the wishes of the operator.

The requirements for a deliberate process are tempered by the recognition that TLD Managers require timely service to maintain ongoing stable operation of their individual registries. Therefore, ICANN implements a service that minimizes the amount of time that a request requires processing by ICANN to that necessary to correctly execute the function.

To ensure timely operation, the process must be predictable, repeatable, and well understood by the various parties. ICANN notes that a common cause of delay when processing requests is TLD Managers submitting incomplete or inaccurate requests. Ensuring that process and requirements are fully understood helps reduce that delay and allow TLD Managers to better plan for the process.

ICANN also recognizes that accountability is essential to maintain the trust required by the community to successfully operate the function. ICANN provides a comprehensive level of detail to TLD Managers about how their requests are being processed, including regular status updates, and a complete timeline describing the processing of a request. ICANN reports to the community our execution of the function, through a combination of presentations and regular reporting.

### ***Technical Approach***

ICANN's approach to this requirement will be to conduct a Change Request review to ensure it is consented to by the relevant parties, and meets minimum criteria that serve to ensure common technical issues will be identified and corrected or will not otherwise impact the stable and secure operation of the DNS Root Zone. The technical checks that will be used were developed collaboratively with the community of TLD managers and with the Root Zone Maintainer, Verisign.

The specific approach to Root Zone Change files will be based on the general process described in Section 1.2.9.2, with specific processing elements specific to Root Zone File changes.

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1.2.9.2.a.1 Receiving and processing root zone file change requests

ICANN will use the following process workflows to implement the requirements of C.2.9.2.a. These process workflows are modeled on the general process workflow described in section 1.2.9.2 of our response. As requests of different types will not be mutually exclusive (for example, a Name Server Change and a DS Record Change, can be part of the same request), the process will follow the same overall flow but will be tailored in specific elements in accordance with what is being requested in a specific instance.

The three categories of technical changes under Requirement C.2.9.2.a that will be requested for TLDs are:

- **Name server changes** – changes to the set of NS records listed for a given TLD, including adding, changing, and removing individual NS records
- **Delegation Signer Resource Record changes** – changes to the set of DS records listed for a given TLD, including adding and removing individual DS records
- **Glue record changes** – changes to the set of A and/or AAAA records listed for a given name server, including adding and removing individual A/AAAA records

For each of these three categories, ICANN will implement a specific process flow modeled on the general process flow, as described below.

### Name Server Change

Figures 1.2-43 and 1.2-44 depict the process for Name Server Change.

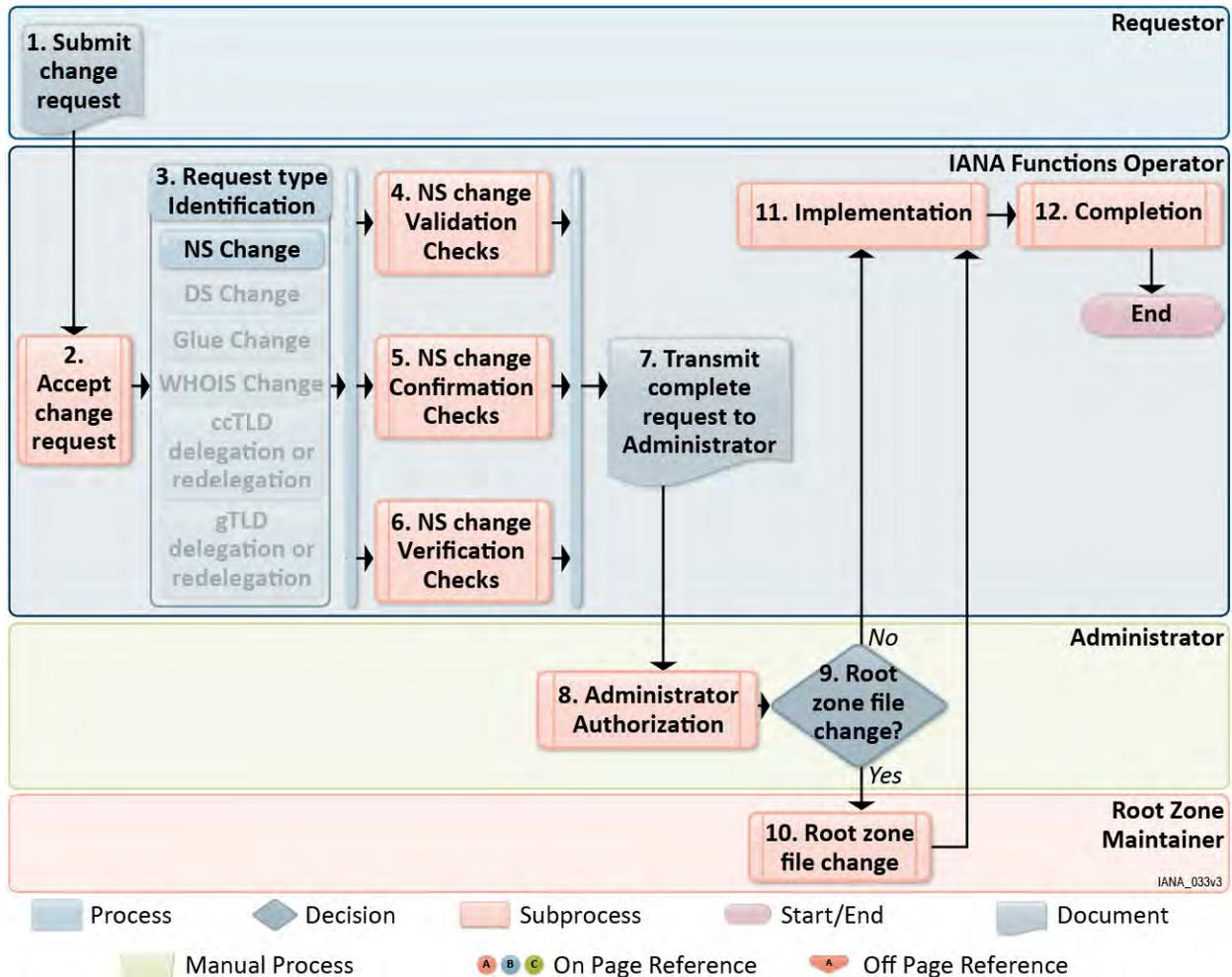


Figure 1.2-43. Name Server Change Root Zone Management Process Flow

Figure 1.2-44. Name Server Change Root Zone Management Step-by-Step Description

|                    |   |
|--------------------|---|
| <b>1</b>           | <b>SUBMIT CHANGE REQUEST</b>  |
| <b>Description</b> | A change request will be created when a requestor lodges it with ICANN. These requests will typically be lodged through ICANN’s IANA Root Zone Management website. The software used for processing standard root zone change requests is an existing system that was developed by ICANN and coordinates operations for updating the root zone with the Administrator and Root Zone Maintainer. Should a requestor not to use this system, the request may be emailed to <a href="mailto:root-mgmt@iana.org">root-mgmt@iana.org</a> , submitted via facsimile or postal mail. |
| <b>2</b>           | <b>ACCEPT CHANGE REQUEST</b>  |
| <b>Description</b> | A change request is accepted.   |
| <b>2</b>           | <b>REQUEST TYPE IDENTIFICATION</b>  |
| <b>Description</b> | This type of change request is classified as relating to changes to one or more NS records listed in the DNS Root Zone.   |

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| <b>4</b>           | <b>NS VALIDATION CHECKS</b>  |
| <b>Description</b> | Initially, checks for request completeness are conducted against the supplied NS records, such that they are comprised of properly formed and legal fully-qualified host names suitable for listing in NS records. A set of technical checks are performed. Failures against these technical checks are reported to the requester to remedy. In certain circumstances, some of these requirements can be waived if the applicant can satisfactorily demonstrate the implications are fully understood, and there is no adverse impact on DNS operation in implementing the change. |
| <b>5</b>           | <b>NS CONFIRMATION CHECKS</b>  |
| <b>Description</b> | Standard confirmations, as described in our response to C.2.9.2, are conducted. There are no additional specific confirmation checks unique to NS record changes.  |
| <b>6</b>           | <b>NS VERIFICATION CHECKS</b>  |
| <b>Description</b> | Standard verification checks, as described in the response to Requirement C.2.9.2, are conducted. There are no additional specific verification checks unique to NS record changes.  |
| <b>7</b>           | <b>TRANSMIT COMPLETE REQUEST</b>   |
| <b>Description</b> | Changes to NS records are transmitted to the Administrator for authorization.  |
| <b>8</b>           | <b>AUTHORIZATION</b>   |
| <b>Description</b> | Changes cannot be enacted without explicit positive authorization from the Administrator.  |
| <b>9</b>           | <b>ROOT ZONE FILE CHANGE?</b>  |
| <b>Description</b> | If yes, go to Step 10.<br>If no, go to Step 11.  |
| <b>10</b>          | <b>CHANGE ROOT ZONE FILE</b>   |
| <b>Description</b> | Changes to NS records are conducted by the Root Zone Maintainer following authorization by the Administrator.  |
| <b>11</b>          | <b>IMPLEMENTATION</b>  |
| <b>Description</b> | Changes to NS records in the Root Zone File are cross-verified by ICANN to ensure they were enacted correctly. Any potential implementation issues are identified, researched, and if necessary remedied through mutual communication between the parties.   |
| <b>12</b>          | <b>COMPLETION</b>  |
| <b>Description</b> | The Root Zone Maintainer propagates changes to the Root Zone File to the Authoritative Root Zone Servers; and changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at ICANN's whois.iana.org. The requester is informed that the request is completed.   |

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1.2.9.2.a.2 Delegation Signer Resource Record Change

Figures 1.2-45 and 1.2-46 depict the Delegation Signer resource record change process.

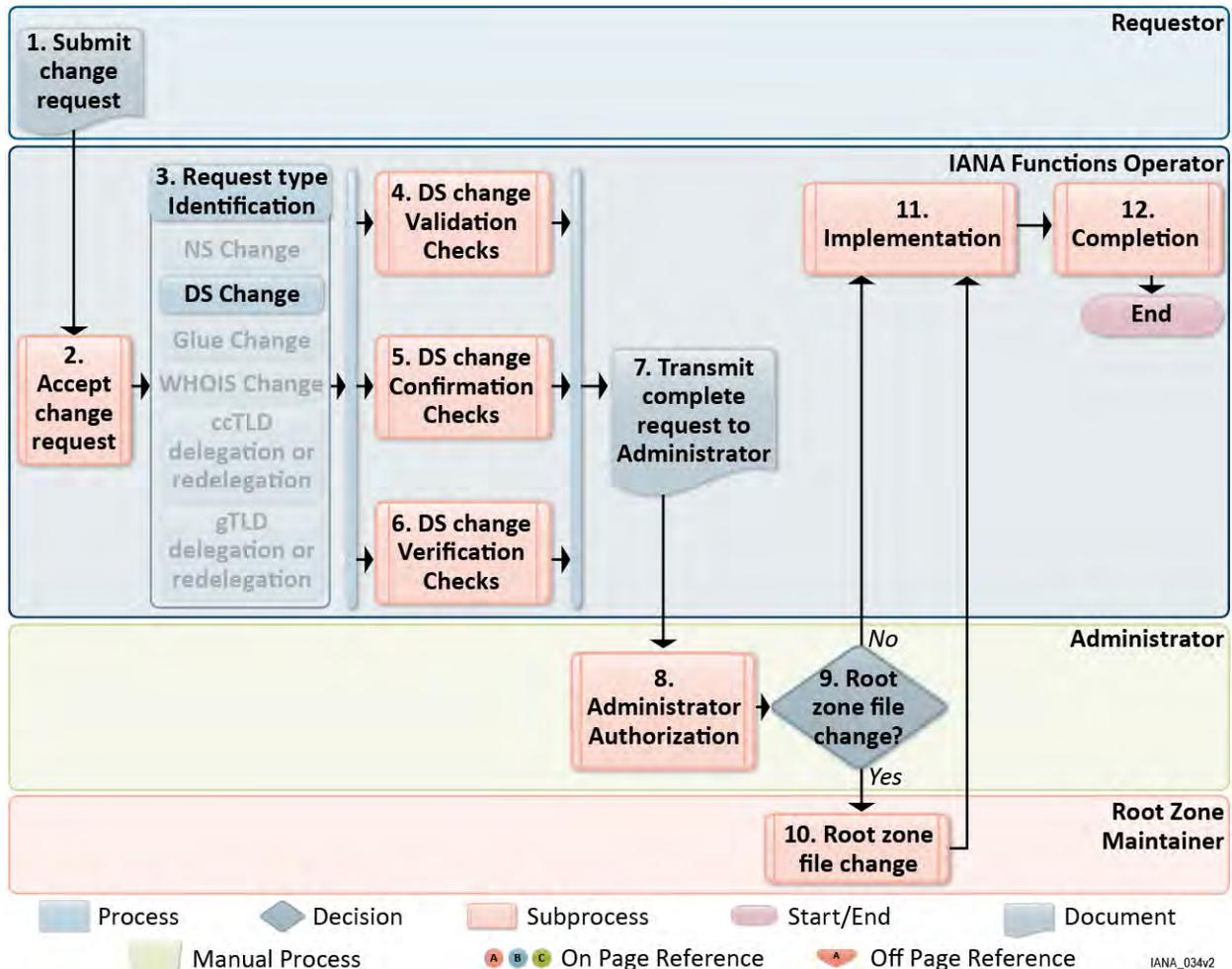


Figure 1.2-45. Delegation Signer Change Root Zone Management Process Flow

Figure 1.2-46. Delegation Signer Change Root Zone Management Step-by-Step Description

|                    |   |
|--------------------|---|
| <b>1</b>           | <b>SUBMIT CHANGE REQUEST</b>  |
| <b>Description</b> | A change request will be created when a requestor lodges it with ICANN. These requests will typically be lodged through ICANN’s IANA Root Zone Management website. The software used for processing standard root zone change requests is an existing system that was developed by ICANN and coordinates operations for updating the root zone with the Administrator and Root Zone Maintainer. Should a requestor not to use this system, the request may be emailed to <a href="mailto:root-mgmt@iana.org">root-mgmt@iana.org</a> , submitted via facsimile or postal mail. |
| <b>2</b>           | <b>ACCEPT CHANGE REQUEST</b>  |
| <b>Description</b> | A change request is accepted.   |
| <b>3</b>           | <b>REQUEST TYPE IDENTIFICATION</b>  |
| <b>Description</b> | This type of change request is classified as relating to a DS record change.  |

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|--------------------|--|
| <b>4</b>           | <b>DS VALIDATION CHECKS</b>  |
| <b>Description</b> | Checks for request completeness are conducted against the supplied DS records, such that they are comprised of properly formed digests of the correct length suitable for listing in DS records. A set of technical checks are performed. Failures against these technical checks are reported to the requester to remedy. In certain circumstances, some of these requirements can be waived if the applicant can satisfactorily demonstrate the implications are fully understood, and there is no adverse impact on DNS operation in implementing the change. |
| <b>5</b>           | <b>DS CONFIRMATION CHECKS</b>  |
| <b>Description</b> | Standard confirmations, as described in our response to C.2.9.2, are conducted. There are no additional specific confirmation checks unique to DS record changes.  |
| <b>6</b>           | <b>DS VERIFICATION CHECKS</b>  |
| <b>Description</b> | Standard verification checks, as described in the response to Requirement C.2.9.2, are conducted. There are no additional specific verification checks unique to DS record changes.  |
| <b>7</b>           | <b>TRANSMIT REQUEST</b>  |
| <b>Description</b> | Changes to DS records are transmitted to the Administrator for authorization.  |
| <b>8</b>           | <b>AUTHORIZATION</b>   |
| <b>Description</b> | Changes cannot be enacted without explicit positive authorization from the Administrator.  |
| <b>9</b>           | <b>ROOT ZONE FILE CHANGE?</b>  |
| <b>Description</b> | If yes, go to Step 10.<br>If no, go to Step 11.  |
| <b>10</b>          | <b>ROOT ZONE FILE CHANGE</b>   |
| <b>Description</b> | DS record changes are conducted by the Root Zone Maintainer following authorization by the Administrator.  |
| <b>11</b>          | <b>IMPLEMENTATION</b>  |
| <b>Description</b> | DS record changes in the Root Zone File are cross-verified by ICANN to ensure they were enacted correctly. Any potential implementation issues are identified, researched, and if necessary remedied through mutual communication between the parties.   |
| <b>12</b>          | <b>COMPLETION</b>  |
| <b>Description</b> | The Root Zone Maintainer propagates changes to the Root Zone File to the Authoritative Root Zone Servers; and changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at ICANN's whois.iana.org. The requester is informed that the request is completed.   |

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1.2.9.2.a.3 Glue Change

Figures 1.2-47 and 1.2-48 depict the Glue Change Root Zone Management process.

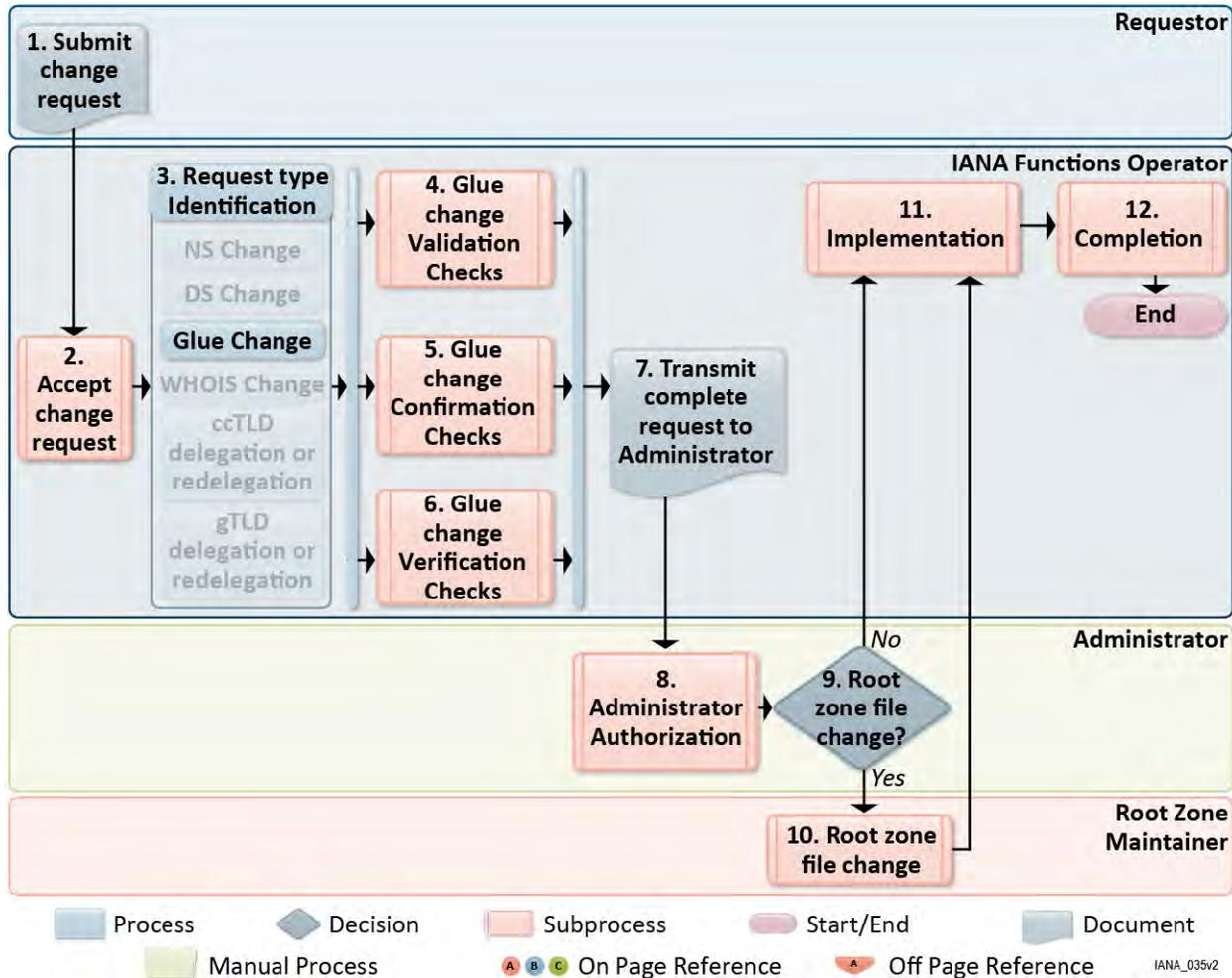


Figure 1.2-47. Glue Change Root Zone Management Process Flow

Figure 1.2-48. Glue Change Root Zone Management Step-by-Step Description

| 1           | SUBMIT CHANGE REQUEST   |
|-------------|---|
| Description | A change request will be created when a requestor lodges it with ICANN. These requests will typically be lodged through ICANN’s IANA Root Zone Management website. The software used for processing standard root zone change requests is an existing system that was developed by ICANN and coordinates operations for updating the root zone with the Administrator and Root Zone Maintainer. Should a requestor not to use this system, the request may be emailed to <a href="mailto:root-mgmt@iana.org">root-mgmt@iana.org</a> , submitted via facsimile or postal mail. |
| 2           | ACCEPT CHANGE REQUEST   |
| Description | A change request is accepted.   |
| 3           | REQUEST TYPE IDENTIFICATION   |
| Description | This type of change request is classified as relating to a glue record change.  |
| 4           | GLUE VALIDATION CHECKS  |

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|                    |  |
|--------------------|--|
| <b>Description</b> | Checks for request completeness are conducted against the supplied IP addresses, such that they are comprised of properly formed IPv4 or IPv6 addresses. A set of technical checks are performed. Failures against these technical checks are reported to the requester to remedy. In certain circumstances, some of these requirements can be waived if the applicant can satisfactorily demonstrate the implications are fully understood, and there is no adverse impact on DNS operation in implementing the change. |
| <b>5</b>           | <b>GLUE CONFIRMATION CHECKS</b>  |
| <b>Description</b> | Standard confirmations, as described in our response to C.2.9.2, are conducted. In addition, glue records can be shared amongst two or more top-level domain operators. If there is a request to alter a glue record that impacts third-party top-level domains, those third-party top-level domains are asked to also consent to the proposed glue change.  |
| <b>6</b>           | <b>GLUE VERIFICATION CHECKS</b>  |
| <b>Description</b> | Standard verification checks, as described in the response to Requirement C.2.9.2, are conducted. There are no additional specific verification checks unique to glue record changes.  |
| <b>7</b>           | <b>TRANSMIT REQUEST</b>  |
| <b>Description</b> | Changes to glue records are transmitted to the Administrator for authorization.  |
| <b>8</b>           | <b>AUTHORIZATION</b>   |
| <b>Description</b> | Glue record changes are transmitted to the Administrator for authorization. Such changes cannot be enacted without explicit positive authorization from the Administrator.   |
| <b>9</b>           | <b>ROOT ZONE FILE CHANGE?</b>  |
| <b>Description</b> | If yes, go to Step 10.<br>If no, go to Step 11.  |
| <b>10</b>          | <b>ROOT ZONE FILE CHANGE</b>   |
| <b>Description</b> | Glue record changes are conducted by the Root Zone Maintainer following authorization by the Administrator.  |
| <b>11</b>          | <b>IMPLEMENTATION</b>  |
| <b>Description</b> | Glue record changes in the Root Zone File are cross-verified by ICANN to ensure they were enacted correctly. Any potential implementation issues are identified, researched, and if necessary, remedied through mutual communication between the parties.  |
| <b>12</b>          | <b>COMPLETION</b>  |
| <b>Description</b> | The Root Zone Maintainer propagates changes to the Root Zone File to the Authoritative Root Zone Servers; and changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at ICANN's <i>whois.iana.org</i> . The requester is informed that the request is completed.   |

**1.2.9.2.a.4 Processing changes as expeditiously as possible**

ICANN will assign staff to the Root Zone Management function, and their goal will be the timely and correct execution of all requests received by the function. ICANN will review on a monthly basis the number of requests that are received and the time taken to execute the requests. According to this review, ICANN will project the number of requests anticipated for the future based on the number of TLDs, and the pipeline of potential known requests (based on such factors as the New gTLD Program, upcoming expected ccTLD delegations, and other policy development that may impact the Root Zone Management function). On the basis of this project, ICANN will review the number of staff, and if it is identified further staffing will be

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required to adequately support the timely execution of requests, ICANN will recruit additional staff.

All requests will be fully tracked in a ticket management system. This system, amongst other features, will record exact timestamps when all events in the processing in the ticket occur. This provides for an accurate record of how long the various steps in the process took. TLD Managers will be able to inspect this timeline for any of their own requests through the web-based interface that ICANN will provide, as well as through a summary that ICANN will email the TLD manager at the conclusion of a request.

In accordance with the increased reporting provisions elsewhere in this proposal, improved information on how ICANN is executing on the timely implementation of requests will be made available to the community of interested and affected parties. This information will help improve dialogue amongst these parties on the efficacy of ICANN's implementation, and will spur dialogue on any adjustments that need to be considered.

#### **1.2.9.2.b Root Zone "WHOIS" Change Request and Database Management**

ICANN has successfully performed the IANA Functions for more than 13 years, most recently in accordance with the 2006 contract. Consequently, many of the processes defined within this response have been historically documented and implemented by ICANN, relying on the deep understanding that ICANN brings to the non-obvious complexities of the IANA Functions. The proposed workflow for Requirement C.2.9.2 reflects the process currently used in operating the Administrative Functions associated with Root Zone Management, and ICANN will continue to use this workflow. This will be fully conformant with the overall workflow described in the Solicitation, and the illustration in Appendix 1 of the Statement of Work.

During the last 13+ years, ICANN has improved performance to accommodate the growing complexity and requirements of the Root Zone Management task. Some of the new demands that did not exist in 1998 include the complex operational requirements of DNSSEC, introduction of IPv6 records, increased speed at which changes need to be implemented, requirements of introducing new gTLDs in two separate rounds (in 2000 and 2004), and introduction of Internationalized Domain Names.

All of these new services have been introduced successfully by ICANN in performing the IANA Functions in a timely fashion. To support this, ICANN has implemented new systems to optimize the process and improve accuracy. When ICANN took over IANA Functions in 1999, the Root Zone Management process was completely manual and paper-based. During ICANN's stewardship, the process has evolved with new tools including a dedicated Root Zone Database management system deployed in 2000, a fully electronic ticket tracking system in 2005, implementation of automation and fully objective technical tests in 2007, and migration to an automated workflow management system that was deployed in 2011.

ICANN has a deep and thorough understanding of the requirements of the DNS Root Zone Management process. As the IANA Functions operator, ICANN has many years of practical experience in the unique requirements of the Root Zone process, including the historical legacy that is the basis upon which many of the details of the functions are executed. The staff and management are comprised of experts with many years of experience in managing root zone

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processes and maintaining personal relationships with the majority of TLD Managers and other actors involved in the process.

### ***Understanding the Requirement***

To execute the Root Zone Management functions in a responsible way, ICANN recognizes the most important criteria is the technical stability of the Root Zone. Without a correctly functioning Root Zone, the ongoing stability of the Domain Name System (DNS) is compromised. The series of checks-and-balances in the process will ensure changes are reviewed several times by multiple parties, and will not impact secure and stable Root Zone operation before implementation. The process also will ensure accuracy for the changes by ensuring that TLD Managers review and positively confirm the correctness and accuracy of the changes by using the DNS protocol to reconcile the proposed changes to the DNS Root Zone, with the contents of the TLD's NS, A, AAAA, and DNSKEY records obtained independently from other DNS zones. As the DNS Root Zone is designed to reflect existing information located elsewhere in the DNS, this form of checking will act as an important indicator that any request is properly implemented and accurately reflects the wishes of the operator.

The requirements for a deliberate process are tempered by the recognition that TLD Managers require timely service to maintain ongoing stable operation of their individual registries. Therefore, ICANN will implement a service that minimizes the amount of time that a request requires processing by ICANN staff to that which is necessary to correctly execute the function.

To ensure timely operation, the process will be predictable, repeatable, and well understood by the various parties. ICANN notes that a common cause of delay when processing requests is TLD Managers submitting incomplete or inaccurate requests. Ensuring that process and requirements are fully understood will help reduce that delay and allow TLD Managers to better plan for the process.

ICANN also recognizes accountability will be essential to maintain the trust required by the community to successfully operate the function. ICANN provides a comprehensive level of detail to TLD Managers about how their requests will be processed, including regular status updates and a complete timeline describing the processing of a request. ICANN will report to the community its execution of the function through a combination of presentations and regular reporting.

### ***Technical Approach***

ICANN's approach to this requirement will be to conduct a review of a Change Request to ensure it is consented to by the relevant parties, and that the proposed contact details are functional and complete. A small number of checks will be performed, particularly in relation to the requirement that ccTLD administrative contacts be "based in country."

#### ***1.2.9.2.b.1 Maintaining and Updating a Root Zone WHOIS Database***

The specific approach to Root Zone Change files will be based on the general process described in Section 1.2.9.2, with specific processing elements specific to WHOIS Change requests. See **Figures 1.2-49 and 1.2-50**.

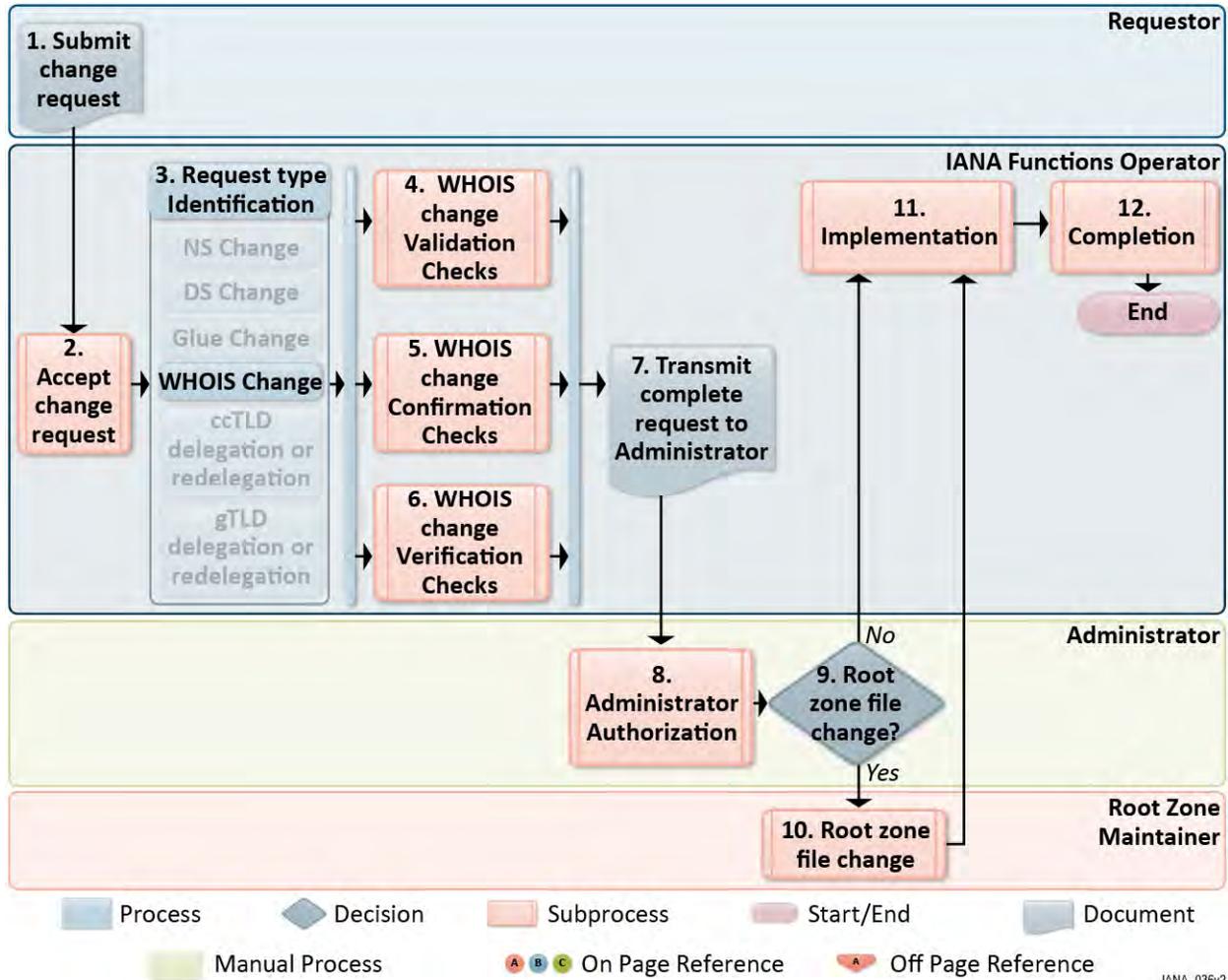


Figure 1.2-49. WHOIS Change Root Zone Management Process Flow

Figure 1.2-50. WHOIS Change Root Zone Management Step-by-Step Description

|                    |   |
|--------------------|---|
| <b>1</b>           | <b>SUBMIT CHANGE REQUEST</b>  |
| <b>Description</b> | A change request will be created when a requestor lodges it with ICANN. These requests will typically be lodged through ICANN’s IANA Root Zone Management website. The software used for processing standard root zone change requests is an existing system that was developed by ICANN and coordinates operations for updating the root zone with the Administrator and Root Zone Maintainer. Should a requestor not to use this system, the request may be emailed to <a href="mailto:root-mgmt@iana.org">root-mgmt@iana.org</a> , submitted via facsimile or postal mail. |
| <b>2</b>           | <b>ACCEPT CHANGE REQUEST</b>  |
| <b>Description</b> | A change request is accepted.   |
| <b>3</b>           | <b>REQUEST TYPE IDENTIFICATION</b>  |
| <b>Description</b> | This type of change request is classified as relating to a WHOIS record change.   |
| <b>4</b>           | <b>WHOIS CHANGE VALIDATION CHECKS</b>   |
| <b>Description</b> | Checks for request completeness are conducted against the supplied contact details. Contact details need to be provided in Latin script (i.e., English) for listing in the WHOIS, email addresses provided must be valid email addresses, and provided telephone and facsimile numbers must be  |

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|                    |   |
|--------------------|---|
|                    | valid, internationally callable telephone numbers (i.e., adhering to the E.164 standard ).  |
| <b>5</b>           | <b>WHOIS CHANGE CONFIRMATION CHECKS</b>   |
| <b>Description</b> | Standard confirmations, as described in our response to C.2.9.2, are conducted.   |
| <b>6</b>           | <b>WHOIS CHANGE VERIFICATION CHECKS</b>   |
| <b>Description</b> | Specific technical checks are not conducted for changes to WHOIS data that does not appear in the DNS Root Zone, i.e., for contact names and addresses. Changes are reviewed to ensure the WHOIS data changes do not reflect a substantive change of control of the top-level domain, under which it is classified as a redelegation as specified in C.2.9.2.c and C.2.9.2.d. Changes are reviewed for compliance with the requirement, noted in RFC 1591 and other documents that the Administrative Contact for country-code top-level domains is based in the country to which the domain is designated. |
| <b>7</b>           | <b>TRANSMIT REQUEST</b>   |
| <b>Description</b> | Changes to WHOIS records are transmitted to the Administrator for authorization.  |
| <b>8</b>           | <b>AUTHORIZATION</b>  |
| <b>Description</b> | WHOIS record changes are transmitted to the Administrator for authorization. Such changes cannot be enacted without explicit positive authorization from the Administrator.   |
| <b>9</b>           | <b>ROOT ZONE FILE CHANGE?</b>   |
| <b>Description</b> | If yes, go to Step 10.<br>If no, go to Step 11.   |
| <b>10</b>          | <b>CHANGE ROOT ZONE FILE</b>  |
| <b>Description</b> | WHOIS record changes are conducted by the Root Zone Maintainer following authorization by the Administrator.  |
| <b>11</b>          | <b>IMPLEMENTATION</b>   |
| <b>Description</b> | Changes to the WHOIS database are implemented by ICANN following positive authorization by the Administrator.   |
| <b>12</b>          | <b>COMPLETION</b>   |
| <b>Description</b> | Changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at ICANN's <i>whois.iana.org</i> . The requester is informed that the request is completed.  |

**1.2.9.2.b.2 Making publicly accessible a Root Zone WHOIS Database**

ICANN will make the contents of the WHOIS database publically available using standard WHOIS protocol. The WHOIS database, as the name suggested, will be presented as standard via this protocol. This protocol is used by almost all other domain registries as the standard way of transmitting the “WHOIS” information for a given domain or network object.

ICANN will operate this WHOIS server at *whois.iana.org* on port 43, in accordance with RFC 3912.

As an additional service, ICANN will also publish extracts of the WHOIS data on its website. This will provide an additional, customer friendly, interface to the data and also will provide for more interactivity that the WHOIS protocol does not allow for. For example, searches conducted on other attributes such as when the TLD’s data was last updated, the country to which the TLD is designated, or sorting the TLDs by language/script will be possible.

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1.2.9.2.b.3 Contents of the Root Zone WHOIS Database

ICANN will make available all of the elements available via its web-based interface, namely:

- “TLD Name,” i.e., the domain label listed in the DNS Root Zone, in both “A-label” and “U-label” form in the case of Internationalised Domain Names.
- IP addresses and corresponding names of all authoritative name servers for a given TLD (including those that may have been nominated as the “primary” and “secondary” nameservers).
- Complete contact details for the administrative contact of the TLD, including the name, address, email address, telephone, and fax numbers.
- Complete contact details for the technical contact for the TLD, including the name, address, email address, telephone, and fax numbers.
- Reports that have been compiled by IANA that pertain to the specific TLD.
- Dates relating to the record, including the creation date and last modified date.
- Other informational fields that are helpful to the community in learning about the function of the TLD, such as the website for the domain registry, the location of the WHOIS server for the given TLD, references to a list of registrars where domain registrations may be made (in the case of registries that use ICANN-accredited registrars).

ICANN will make publically available all the elements of the WHOIS Database via the WHOIS protocol, with the exception of “reports.” As the WHOIS protocol can only transmit plain text, it is not technically possible for reports (which are contained in more complex formats like HTML and PDF) through a WHOIS server. These reports will still be made available via ICANN’s IANA website. The website will provide ready access to these reports by providing links to the reports for a specific top-level domain from the web-based presentation of that TLD’s information. See **Figures 1.2-51 and 1.2-52.**

## IANA WHOIS Service

The IANA WHOIS Service is provided using the WHOIS protocol on port 43. This web gateway will query this server and return the results. Accepted query arguments are domain names, IP addresses and AS numbers.

```
% IANA WHOIS server
% for more information on IANA, visit http://www.iana.org
% This query returned 1 object

domain:      CN

organisation: Computer Network Information Center, Chinese Academy of Sciences
address:     No.4, South 4th Street
address:     Zhong Guan Cun
address:     Beijing 100080
address:     China

contact:     administrative
name:        Xiangyang Huang
organisation: Computer Network Information Center,
organisation: Chinese Academy of Sciences
address:     No.4, South 4th Street
address:     Zhong Guan Cun
address:     Beijing 100190
address:     China
phone:       +86 10 58812210
fax-no:      +86 10 58812666
e-mail:      huangxy@cnnic.cn

contact:     technical
name:        Wang Wei
organisation: China Internet Network Information Center
address:     No.4, South 4th Street
address:     Zhong Guan Cun
address:     Beijing 100190
address:     China
phone:       +86 10 58813101
fax-no:      +86 10 58812666
e-mail:      wangwei@cnnic.cn

nserver:     A.DNS.CN 2001:dc7:0:0:0:0:1 203.119.25.1
nserver:     B.DNS.CN 203.119.26.1
nserver:     C.DNS.CN 203.119.27.1
nserver:     D.DNS.CN 2001:dc7:1000:0:0:0:1 203.119.28.1
nserver:     E.DNS.CN 203.119.29.1
nserver:     NS.CERNET.NET 202.112.0.44

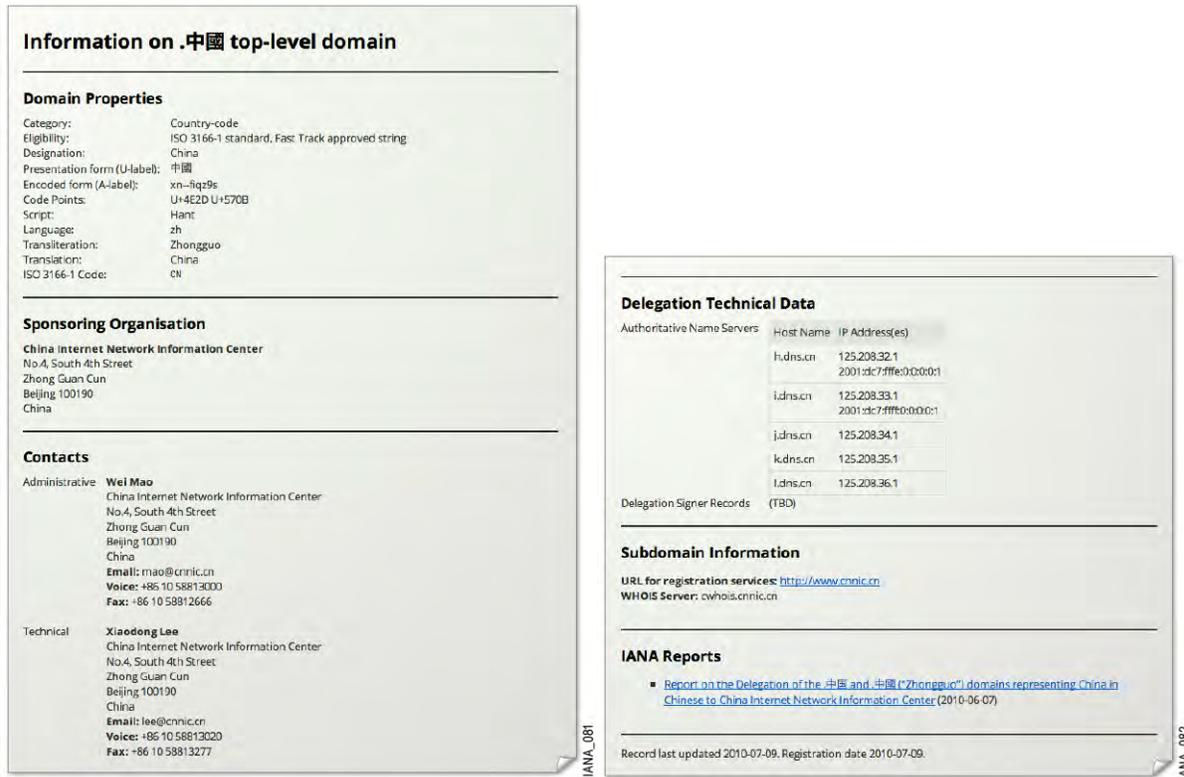
whois:       whois.cnnic.cn

status:      ACTIVE
remarks:     Registration information: http://www.cnnic.cn/

created:     1990-11-28
changed:     2012-04-11
source:      IANA
```

IANA\_083v2

Figure 1.2-51. A Sample WHOIS Output



**Information on .中國 top-level domain**

**Domain Properties**

Category: Country-code  
 Eligibility: ISO 3166-1 standard, Fast Track approved string  
 Designation: China  
 Presentation form (U-label): 中國  
 Encoded form (A-label): xn--fiqz9s  
 Code Points: U+4E2D U+570B  
 Script: Hant  
 Language: zh  
 Transliteration: Zhongguo  
 Transliteration: China  
 ISO 3166-1 Code: CN

**Sponsoring Organisation**

China Internet Network Information Center  
 No.4, South 4th Street  
 Zhong Guan Cun  
 Beijing 100190  
 China

**Contacts**

**Administrative: Wei Mao**  
 China Internet Network Information Center  
 No.4, South 4th Street  
 Zhong Guan Cun  
 Beijing 100190  
 China  
 Email: mao@cnnic.cn  
 Voice: +86 10 58813000  
 Fax: +86 10 58812666

**Technical: Xiaodong Lee**  
 China Internet Network Information Center  
 No.4, South 4th Street  
 Zhong Guan Cun  
 Beijing 100190  
 China  
 Email: lee@cnnic.cn  
 Voice: +86 10 58813020  
 Fax: +86 10 58813277

**Delegation Technical Data**

| Authoritative Name Servers | Host Name    | IP Address(es)         |
|----------------------------|--------------|------------------------|
| h.dns.cn                   | 125.208.32.1 | 2001:dc:7:fff0:0:0:0:1 |
|                            | 125.208.33.1 | 2001:dc:7:fff0:0:0:0:1 |
| j.dns.cn                   | 125.208.34.1 |                        |
| k.dns.cn                   | 125.208.35.1 |                        |
| l.dns.cn                   | 125.208.36.1 |                        |

Delegation Signer Records (TBD)

**Subdomain Information**

URL for registration services: <http://www.cnnic.cn>  
 WHOIS Server: [whois.cnnic.cn](http://whois.cnnic.cn)

**IANA Reports**

- Report on the Delegation of the .中國 and .中国 ("Zhongguo") domains representing China in Chinese to China Internet Network Information Center (2010-06-07)

Record last updated 2010-07-09. Registration date 2010-07-09.

Figure 1.2-52. A Sample Web-based View

#### 1.2.9.2.b.4 Receiving and processing Root Zone WHOIS Change Requests

ICANN will receive and process Root Zone WHOIS Change Requests according to all the mechanisms described in its approach to 1.2.9.2. Specifically, the ordinary mechanisms for other Root Zone related changes — such as email, and lodgment via the web-based interface — will allow for the submission of Root Zone Change requests to ICANN.

#### 1.2.9.2.c Delegation and Redellegation of a Country Code Top-Level Domain (ccTLD)

In executing the IANA Functions, ICANN has always paid careful consideration in how it performs the delegation and redelegation of country-code top-level domains. ICANN recognizes it as an important focal point where the interests of different countries and various actors converge, and there is great sensitivity in how the task is conducted.

In ICANN’s execution of this responsibility, it has evolved the process from one that was ad-hoc and poorly documented, to one that is executed in a consistent manner while evolving to meet the growing requirements from the community of interested and affected parties. For example, the role of Governments was not defined in the operating procedures prior to 1997, but the process has been evolved to make the concerns of government a specific part of the evaluation process.

#### Understanding the Requirement

In performing the IANA Functions since 1998, ICANN has been responsible for conducting due diligence in relation to applications to either instantiate a new country-code top-level domain

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(ccTLD) in the DNS Root Zone (known as a “delegation”), or enact any change that will facilitate a substantive change of operation of the domain (known as a “redelegation”).

ICANN’s approach to conducting this review will be to assess the various requirements of a regular root zone change request (i.e., that it meets the requirements identified in C.2.9.2.a and C.2.9.2.b), as well as assess how the request meets a number of public interest criteria that have been reflected in documents such as RFC 1591 and the GAC Principles and Guidelines for the Delegation and Administration of Country Code Top Level Domains. After analysis, a report on these items will be presented to the ICANN Board of Directors for consideration. After approval by the ICANN Board, such requests will be transmitted with a Delegation and Redelegation Report to the Administrator for authorization, and then will be implemented in the same fashion as routine requests under C.2.9.2.a and C.2.9.2.b. ICANN’s own structures, the Country Code Name Supporting Organization (ccNSO) and Governmental Advisory Committee (GAC), currently are developing improved guidance via a Policy Development Process (PDP) that will be fed into the future evolution of how the assessment criteria is applied. Once this guidance is ratified through the ICANN process by the ICANN Board, a proposed implementation plan will be developed.

### ***Technical Approach***

ICANN describes our technical approach to meeting this requirement in the following sections.

Figures 1.2-53 and 1.2-54 depict workflows. Figure 1.2-55 is a step-by-step description. A sample report is in Appendix B.

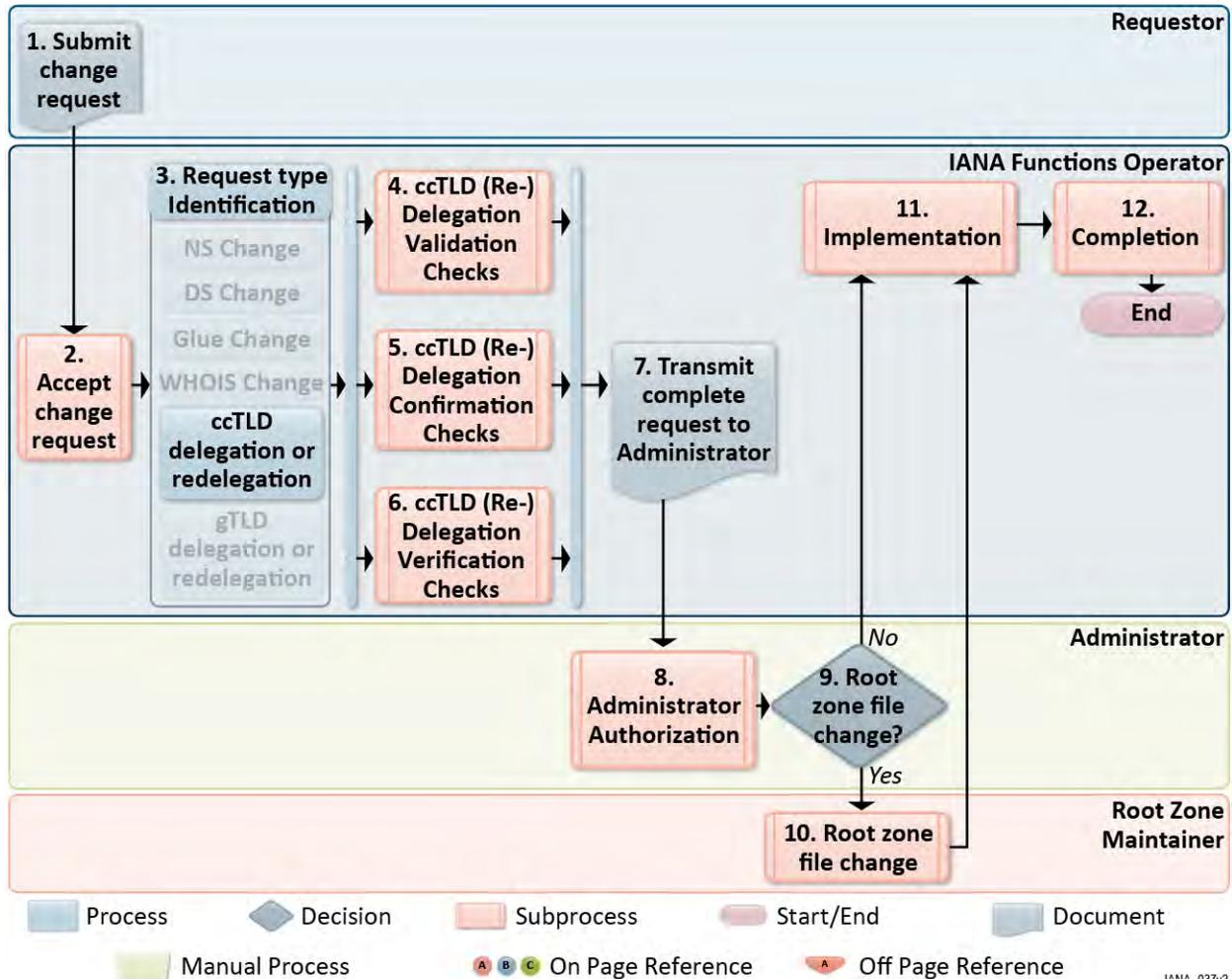


Figure 1.2-53. Process Workflow for Country-Code Top-Level Domain Delegation and Redelegation Requests

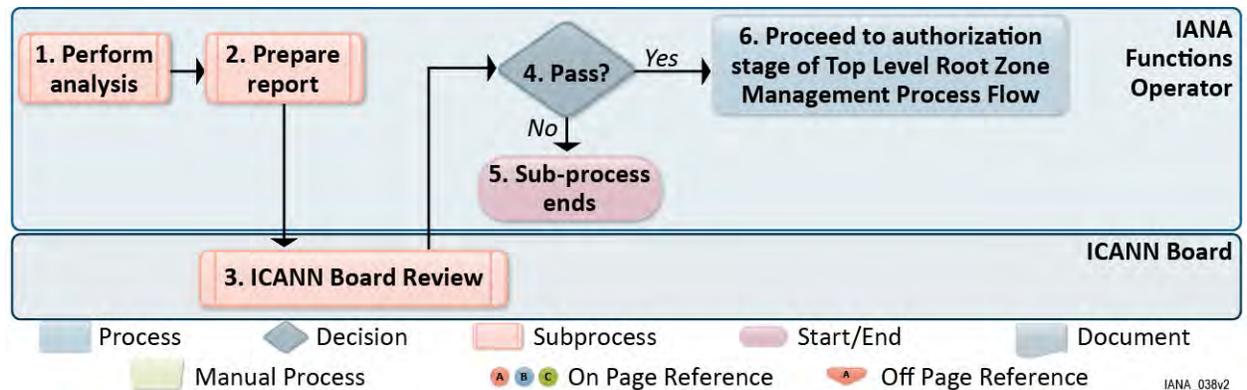


Figure 1.2-54. ccTLD Review Root Zone Management Sub-Process Flow

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**Figure 1.2-55. ccTLD Review Root Zone Management Sub-Process Step-by-Step Description**

|                      |  |
|----------------------|--|
| <b>1</b>             | <b>SUBMIT CHANGE REQUEST</b>   |
| <b>Description</b>   | A change request will be created when it is lodged with ICANN. These requests will typically be lodged through ICANN’s IANA Root Zone Management website. Should a TLD operator choose not to use this system, the request can be emailed to root-mgmt@iana.org, or submitted via facsimile or postal mail. In addition to describing the particulars of the proposed change, the requester is required to tender documentation that allows the request to be reviewed in line with the delegation/redelegation assessment criteria. |
| <b>2</b>             | <b>ACCEPT CHANGE REQUEST</b>   |
| <b>Description</b>   | A change request is accepted.  |
| <b>3</b>             | <b>REQUEST TYPE IDENTIFICATION</b>   |
| <b>Description</b>   | This type of change request is classified as relating to the delegation or redelegation of a country-code top-level domain.  |
| <b>4</b>             | <b>CCTLD DELEGATION/REDELEGATION VALIDATION CHECKS</b>   |
| <b>Description</b>   | As delegations and redelegations involve changes to the DNS Root Zone File, and the WHOIS Database, the standard checks that are performed in sections C.2.9.2.a and C.2.9.2.b are performed. In addition, the request is reviewed to ensure supporting documentation has been provided by the requester as required.  |
| <b>5</b>             | <b>CCTLD DELEGATION/REDELEGATION CONFIRMATION CHECKS</b>   |
| <b>Description</b>   | Standard confirmations, as described in our response to C.2.9.2, are conducted. The consent of the relevant directly involved actors is one of the assessment criteria involved in performing a ccTLD delegation or redelegation, and will be referenced in the related Delegation and Redelegation Report.  |
| <b>6</b>             | <b>CCTLD DELEGATION/REDELEGATION VERIFICATION CHECKS</b>   |
| <b>Description</b>   | As delegations and redelegations involve changes to the DNS Root Zone File and the WHOIS Database, the standard checks listed in sections C.2.9.2.a and C.2.9.2.b are performed.   |
| <b>SUB-PROCESS 1</b> | <b>PERFORM ANALYSIS</b>  |
| <b>Description</b>   | Significant additional processing of this type of request involving staff analyzing the request against a number of public interest criteria. This evaluation is described in detail below.  |
| <b>SUB-PROCESS 2</b> | <b>PREPARE CCTLD DELEGATION OR REDELEGATION REPORT</b>   |
| <b>Description</b>   | A distillation or Report of the relevant criteria is produced by ICANN. This Report and relevant supporting information is presented to ICANN’s Board of Directors for acceptance, and is later presented to the Administrator as part of the request for authorization.   |
| <b>SUB-PROCESS 3</b> | <b>ICANN BOARD REVIEW</b>  |
| <b>Description</b>   | Upon completion of the Delegation or Redelegation Report, it is transmitted to ICANN’s Board of Directors for review and consideration. The Board may request additional information before making a determination.  |
| <b>7</b>             | <b>TRANSMIT REQUEST</b>  |
| <b>Description</b>   | Changes are transmitted to the Administrator for authorization.  |
| <b>8</b>             | <b>AUTHORIZATION</b>   |
| <b>Description</b>   | Delegation and Redelegation requests for ccTLDs are transmitted to the Administrator for authorization, including the Delegation and Redelegation Report. Such changes cannot be enacted without explicit positive authorization from the Administrator.   |
| <b>9</b>             | <b>ROOT ZONE FILE CHANGE?</b>  |
| <b>Description</b>   | If yes, go to Step 10.   |

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|                    |   |
|--------------------|---|
|                    | If no, go to Step 11.   |
| <b>10</b>          | <b>CHANGE ROOT ZONE FILE</b>  |
| <b>Description</b> | Root Zone File changes are conducted by the Root Zone Maintainer following authorization by the Administrator.  |
| <b>11</b>          | <b>IMPLEMENTATION</b>   |
| <b>Description</b> | Changes in the Root Zone File are cross-verified by ICANN to ensure they were enacted correctly. Any potential implementation issues are identified, researched, and if necessary remedied through mutual communication between the parties.  |
| <b>12</b>          | <b>COMPLETION</b>   |
| <b>Description</b> | The Root Zone Maintainer propagates changes to the Root Zone File to the Authoritative Root Zone Servers and changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at ICANN's <i>whois.iana.org</i> . The Delegation and Redelegation Report for the request is posted on ICANN's IANA website. The requester is informed that the request is completed. |

1.2.9.2.c.1 Performing the review and analysis

ICANN will apply existing policy frameworks and precedents in processing requests relating to the delegation and redelegation of a ccTLD. The areas of assessment are as follows:

- (a) Whether the proposed request meets the standard root zone change criteria, described in 1.2.9.2.a and 1.2.9.2.b.
- (b) Whether the proposed string is eligible for delegation under the ICANN policies, which currently means it is either (i) a current alpha-2 code listed in the ISO 3166-1 standard; (ii) an approved "IDN Fast Track" string for a country or territory currently listed in the ISO 3166-1 standard; (iii) a reserved code under the definition in ICANN Board Resolution 00.74 (currently applicable to "EU"); or (iv) a grandfathered TLD that was considered an "exceptionally reserved" code at the time of its initial delegation, prior to the existence of ICANN (currently applicable to "UK" and "AC").
- (c) Whether the proposed contacts for the domain consent to their responsibilities.
- (d) Whether there is documented support from significantly interested parties in the local Internet community.
- (e) Whether the relevant government or public authority provides support or non-objection.
- (f) Whether the proposed operation is accountable under local law to the local Internet community.
- (g) Whether the request is compatible with any specific laws regarding how the ccTLD is operated in the country.
- (h) Whether the proposal provides for fair and equitable treatment of registrants.
- (i) Whether the registry and/or its representatives, notably the administrative contact, are based in the country.

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- (j) Whether the request is consented or contested by significantly interested parties, including the current operator (if any).
- (k) Whether there are any specific stability risks associated with the application that need to be considered.
- (l) Whether the proposed registry is properly configured and technically ready.
- (m) Whether an acceptable technical plan has been developed to support proper registry operation.
- (n) Whether an acceptable operational plan has been provided to support proper registry operation.
- (o) Whether there is an appropriate transition plan, which ensures existing registrations are not adversely impacted should the proposal be implemented.

#### 1.2.9.2.c.2 Application of existing policy frameworks and clarifications

The current procedures associated with delegation and redelegation of ccTLDs is the result of the evolution of the process over the past 30 years. While there has been no definitive policy document published that represents all factors that must be considered, a number of notable documents are considered references that influence how the process is conducted:

- RFC 1591, an articulation written by staff performing the IANA Functions of what the procedures and policy considerations were as of 1994
- ccTLD Memo #1, an articulation that governments had a role to play in determining how ccTLDs are operated, written by staff performing the IANA Function in 1997
- The Principles and Guidelines for Delegation and Administration of ccTLDs, a framework developed by governments for the relationship between governments, ccTLD managers and ICANN.

ICANN will continue to implement the procedures based on these key documents, and the significant amount of precedent that has been developed through the execution of many ccTLD delegations and redelegations. Furthermore, ICANN will continue to support efforts — such as the work being conducted by the Framework of Interpretation Working Group — to clarify the interpretation of these frameworks by the community to better inform the work of the IANA Functions.

#### 1.2.9.2.c.3 Consultation with interested and affected parties

The process which will be undertaken involves consulting with interested and affected parties. Specifically, the process always involves communication with the parties who are proposed to operate the ccTLD; and the parties who currently operate the ccTLD (if any). Applicants are required to document a number of factors involving interested and affected parties, including the disposition of the relevant local government, and significantly interested parties in the local Internet community.

ICANN notes that the Framework of Interpretation Working Group is actively evaluating exactly what kinds of consultation ICANN should conduct with interested and affected parties during

the evaluation of a delegation or redelegation request. Its guidance on the matter will inform future procedures in this area.

1.2.9.2.c.4 Consideration of relevant national frameworks and applicable laws

The process of evaluating requests asks the applicant to identify relevant regulations and laws that govern how a specific country-code top-level domain is operated. These will be an important part of the review of any specific request. It is expected that ccTLDs will be operated under the relevant laws of the country concerned. While there are a small number of ccTLDs operated outside of a specific country, these are rare and largely historical, relating to the fact that the specific country has had inadequate Internet infrastructure to sustain a reliable registry function. In such cases, the local Internet community is encouraged to consider locally-appropriate arrangements (such as data escrow) to ensure they retain ongoing availability of registry data.

In presenting the details of the evaluation of an individual request, the relevant laws and other regulations will be identified in the delegation and redelegation report in relation to how they impacted the assessment of the request.

1.2.9.2.c.5 Submission of recommendations via a Delegation and Redelegation Report

For each application to delegate a new ccTLD, or redelegate an existing country code top level domain, a Delegation and Redelegation Report will be developed for transmittal to the Administrator. This report will identify at a minimum the following elements:

- a) The applied-for string
- b) The identity of the organization seeking delegation of the string
- c) The identity of the proposed administrative and technical contacts for the string
- d) When the request to the IANA Functions Operator was lodged to obtain the delegation or redelegation
- e) The evaluation of relevant facts pertaining to the assessment criteria described in 1.2.9.2.c.1
- f) The date ICANN's Board of Directors reviewed and approved the application.

This proposed report format will demonstrate that the IANA Functions Operator followed the policy framework in processing the request.

The template for the delegation and redelegation report is as follows. ICANN anticipates that on the basis of ongoing work to refine policies, it will receive revised guidance in the future that will necessitate changes to this format. Any such changes will be agreed with NTIA in accordance with the appropriate change control process, in order to adhere to the requirement that ICANN implement policy guidance and clarifications, described in 1.2.9.2.c.2; and in consultation with parties described in 1.2.9.2.c.3.

See **Appendix B** for Sample Delegation Report.

#### **1.2.9.2.d Delegation and Redelegation of a Generic Top Level Domain (gTLD)**

Generic top-level domains (gTLDs) represent the other major category of top-level domains on which ICANN, in performance of the ICANN Functions, is required to provide recommendations for delegation and redelegation. In executing the IANA Functions, ICANN has successfully processed these requests for delegation of gTLDs in a manner consistent with ICANN policy during the two previous phases of creating new gTLDs — namely the “proof-of-concept round” in 2000 which resulted in seven new top-level domains such as .INFO, and .MUSEUM; and the “sponsored round” of 2004 which resulted in eight new top-level domains such as .MOBI and .TEL. In addition, ICANN has processed requests to redelegate generic top-level domains when the contracted party responsible for their operation has requested that a change of control be implemented. In each case, the action was reflected through a change to the Root Zone “WHOIS” Database.

##### ***Understanding the Requirement***

In contrast with the approach for ccTLDs described in 1.2.9.2.c, requestors for delegation of a gTLD must have completed an evaluation for the eligibility as a registry operator with ICANN prior to lodging a Root Zone Change Request. In the case of the current “New gTLD Program,” this means they must have successfully concluded the relevant evaluation process, and have executed a registry agreement with ICANN, before a Root Zone Change can be considered. The process guiding eligibility for root zone delegations resulting from the New gTLD Program is defined in ICANN’s New gTLD Applicant Guidebook. The processes for the 2000 and 2004 rounds are documented elsewhere on the ICANN website.

For a request to redelegate an existing gTLD, the role of the IANA Functions will be to process requests that relate to the change of control provisions in the gTLD registry agreement with ICANN.

In performing the IANA Functions, ICANN will verify that all delegation and redelegation requests under C.2.9.2.d are consistent with the approved processes and, with respect to delegation requests resulting from the New gTLD Program, will demonstrate how the process provided the opportunity for input from relevant stakeholders and was supportive of the global public interest. This review will be distilled into a Delegation and Redelegation Report which will be presented to the Administrator, and upon authorization, published on ICANN’s IANA website.

##### ***Technical Approach***

The process for handling requests to delegate and redelegate a generic top-level domain will be modeled on the top-level process flow described in section 1.2.9.2. While some of the individual elements will be the same as other types of changes — such as ensuring the correct configuration according to the technical requirements — it introduces specialized handling at steps of the process that will relate specifically to eligibility to delegate or redelegate the gTLD. See **Figures 1.2-56, 1.2-57, and 1.2-58**. A sample report is in **Appendix B**.

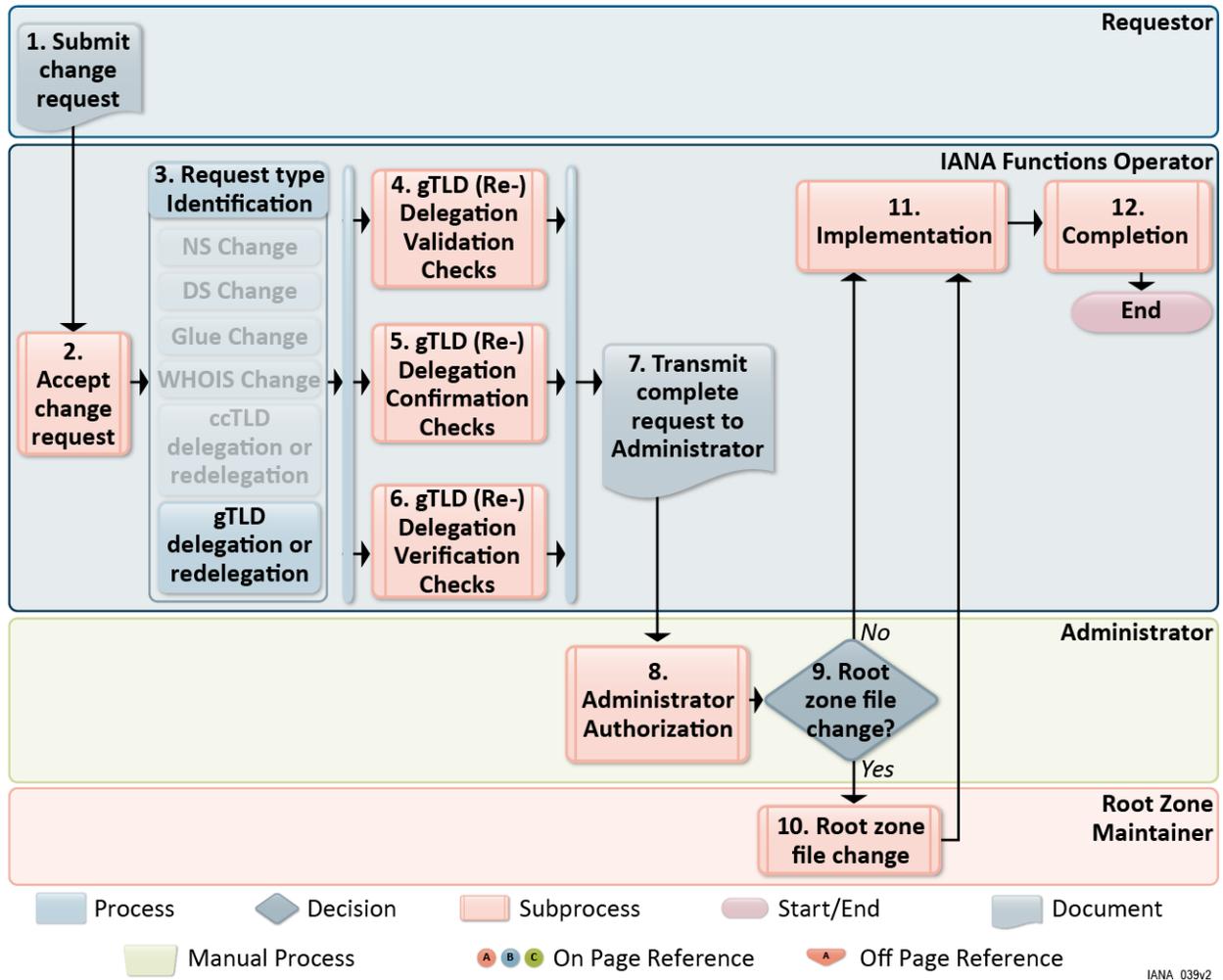


Figure 1.2-56. gTLD Delegation and Redelegation Root Zone Management Process Flow

Figure 1.2-57. gTLD Delegation and Redelegation Root Zone Management Step-by-Step Description

| 1           | SUBMIT CHANGE REQUEST   |
|-------------|---|
| Description | A change request will be created when it is lodged with ICANN. These requests will typically be lodged through ICANN’s IANA Root Zone Management website. Should a TLD operator choose not to use this system, the request can be emailed to root-mgmt@iana.org, or submitted via facsimile or postal mail. |
| 2           | ACCEPT CHANGE REQUEST   |
| Description | A change request is accepted.   |
| 3           | REQUEST TYPE IDENTIFICATION   |
| Description | This type of change request is classified as relating to the delegation or redelegation. See Figure 2.1-50.   |
| 4           | gTLD DELEGATION/REDELEGATION VALIDATION CHECKS  |
| Description | As delegations and redelegations involve changes to the DNS Root Zone File and the WHOIS Database, the standard checks in sections C.2.9.2.a and C.2.9.2.b are performed. These checks are designed to ensure the request is technically accurate and complete, and to                                      |

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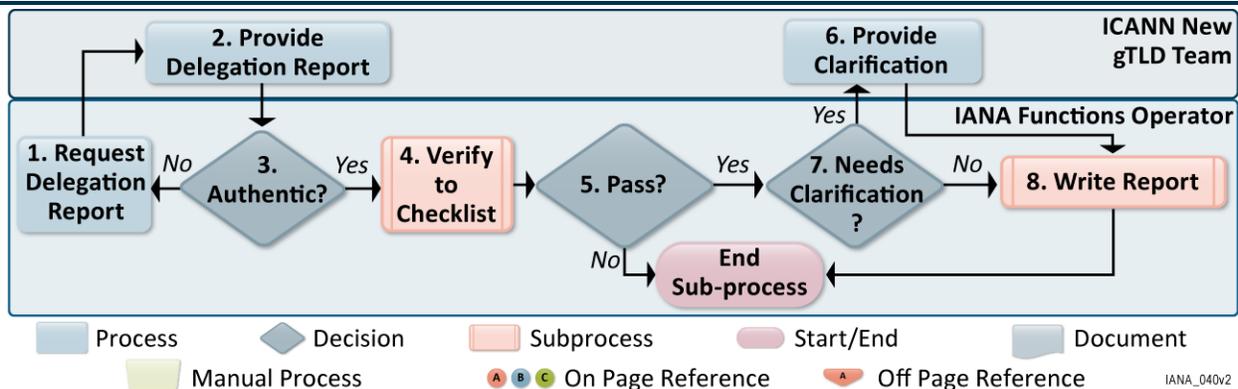
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|                      |   |
|----------------------|---|
|                      | ensure the ongoing stability of the DNS Root Zone.  |
| <b>5</b>             | <b>GTLD DELEGATION/REDELEGATION CONFIRMATION CHECKS</b>   |
| <b>Description</b>   | Standard confirmations, as described in our response to C.2.9.2, are conducted. These checks ensure the consent of the various parties involved in the process.   |
| <b>6</b>             | <b>GTLD DELEGATION/REDELEGATION VERIFICATION CHECKS</b>   |
| <b>Description</b>   | As delegations and redelegations involve changes to the DNS Root Zone File and the WHOIS Database, the standard checks that are performed in sections C.2.9.2.a and C.2.9.2.b are performed.  |
| <b>SUB-PROCESS 1</b> | <b>REQUEST GTLD DELEGATION REPORT</b>   |
| <b>Description</b>   | Staff compiles pertinent documentation to demonstrate that ICANN's process was followed for the particular gTLD.  |
| <b>SUB-PROCESS 4</b> | <b>VERIFY TO CHECKLIST</b>  |
| <b>Description</b>   | If there is any question about conformance with process, clarification is requested from relevant parties.  |
| <b>SUB-PROCESS 8</b> | <b>PREPARE REPORT</b>   |
| <b>Description</b>   | ICANN prepares a Report for the Administrator.  |
| <b>7</b>             | <b>TRANSMIT REQUEST</b>   |
| <b>Description</b>   | Changes are transmitted to the Administrator.   |
| <b>8</b>             | <b>AUTHORIZATION</b>  |
| <b>Description</b>   | Delegation and Redelegation requests for gTLDs are transmitted to the Administrator for authorization, including the gTLD Delegation and Redelegation Report. Such changes cannot be enacted without explicit positive authorization from the Administrator.  |
| <b>9</b>             | <b>ROOT ZONE FILE CHANGE?</b>   |
| <b>Description</b>   | If yes, go to Step 10.<br>If no, go to Step 11.   |
| <b>10</b>            | <b>ROOT ZONE FILE CHANGE</b>  |
| <b>Description</b>   | Root Zone File changes are implemented by the Root Zone Maintainer following authorization by the Administrator.  |
| <b>11</b>            | <b>IMPLEMENTATION</b>   |
| <b>Description</b>   | Changes in the Root Zone File are cross-verified by ICANN to ensure the changes were enacted correctly. Any potential implementation issues are identified, researched, and if necessary remedied through mutual communication between the parties.   |
| <b>12</b>            | <b>COMPLETION</b>   |
| <b>Description</b>   | The Root Zone Maintainer propagates changes to the Root Zone File to the Authoritative Root Zone Servers; and changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at ICANN's whois.iana.org. The Delegation and Redelegation Report for the request is posted on ICANN's IANA website. The requester is informed by ICANN that the request is completed. |

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**Figure 1.2-58. Root Zone Management gTLD Review Sub Process Flow**

1.2.9.2.d.1 Verifying consistency with ICANN’s processes

With respect to TLDs, including new gTLDs, ICANN adopts processes and procedures in consultation with the stakeholders of ICANN in support of the global public interest. ICANN commits to implementing those processes and procedures, and ICANN will verify that it has followed them at all stages of the validation and delegation process.

ICANN recognizes there are several different classes of generic top-level domains, depending on the terms of their agreement, that will require processing under the provisions of Section C.2.9.2.d. These include the early gTLDs assigned before ICANN was established, those from the “proof of concept” round in 2000, those from the “sponsored TLD” round in 2004, and those anticipated from the New gTLD Program rounds. The different processes applicable to different gTLDs will be considered during the review of a delegation or redelegation request for a gTLD.

During the “Staff Review” phase, ICANN will be responsible for validating that the application meets the following criteria:

- The string is eligible for delegation, as it has passed the appropriate and approved evaluation process
- The entity applying for delegation is the same entity that matches the party with which ICANN has executed the relevant registry agreement
- ICANN has documentation demonstrating that its process has been followed

For the redelegation of existing gTLDs, the central role of verifying the request will be ensuring that the proposed new registry operator has been properly evaluated and that an appropriate contract amendment process was conducted and documented.

1.2.9.2.d.2 Documentation verifying ICANN followed its Process

ICANN will review all requests to either delegate a new gTLD or to redelegate an existing gTLD in order to ensure that the approved ICANN process that led to the Root Zone Change Request was followed. In doing so, ICANN will evaluate the request in the context of such factors as: (i) which new gTLD round the TLD is the product of; (ii) the current state of ICANN policy that governs gTLDs; and (iii) the contractual status of the specific gTLD registry operator. The review will also rely on the various outputs of the evaluation process that has been conducted prior to

the submission of the Root Zone Change Request, namely, the outcomes of review panels and other processes that have been conducted.

As the majority of requests for delegation or redelegation for gTLDs in the IANA Functions contract period covered by the RFP will be subject to the process established for the New gTLD Program, it is important to consider that a few elements of the New gTLD Program are still under development and subject to change, although none are expected to materially affect the delegation or redelegation process.

For redelegations, ICANN will ensure that the evaluation process that is currently in place was and will continue to be followed.

For the delegations under the New gTLD Program ICANN will compile documentation to demonstrate that ICANN complied with the evaluation process leading to contract execution, including the following:

- Whether a background check was required, and if so, that it was conducted and the application passed.
- The applicant and the application passed evaluation on required aspects (i.e., DNS, Registry, Geographic Names, Financial, Technical, and String Similarity).
- Evaluation panels had access to any application comments that were provided in a timely manner.
- Under the GAC Early Warning System, notice was provided to the GAC, and if the process was invoked, whether the applicant amended the application in response.
- If the Governmental Advisory Committee provided advice on a given application, ICANN followed its Bylaws in considering that advice.
- If objections were filed, the results were available to ICANN before the string was approved and the registry agreement was executed.
- ICANN approved the application.
- ICANN has executed a registry agreement with the party requesting delegation.
- Applicant has successfully concluded all of its pre-delegation testing.

For each request to delegate a new gTLD, or redelegate an existing gTLD, an ICANN “Delegation and Redelegation Report” will be developed for transmittal to the Administrator. Sample reports can be found in **Appendix B**. This report will identify at a minimum the following elements:

- The TLD string
- The identity of the organization seeking delegation or redelegation of the string
- The identity of the proposed administrative and technical contacts for the string
- When the delegation or redelegation request to ICANN was lodged

For delegation requests for gTLDs resulting from the New gTLD Program, there will be additional considerations that will be identified in the Report. ICANN will: (i) identify in the Report all relevant processes in place at the time of the proposed delegation; (ii) verify that those processes were followed; and (iii) provide documentation of how the processes were followed.

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ICANN will finalize the checklist and format of the Reports prior contracting with any registry operators resulting from the New gTLD Program. ICANN will review the format and details of the checklist with the NTIA COR before implementation.

#### 1.2.9.2.d.3 Submitting a Delegation and Redelegation Report

Upon completion of the review for sufficiency, the Delegation and Redelegation Report will be finalized for transmittal to the Administrator. See **Appendix B** for a sample Delegation Report for new gTLDs. Any such changes to the template will be agreed with NTIA in accordance with the appropriate change control process.

#### 1.2.9.2.e Root Zone Automation

Since 2006, ICANN has — in its role as the incumbent IANA Functions Operator — collaboratively worked with the TLD management community, Verisign as the Root Zone Maintainer, and NTIA as the Administrator, to develop and deploy an automated workflow management system for the Root Zone Management tasks. The system automated all practicable steps of the workflow while not impeding the ability of the parties to execute the established Root Management workflow. ICANN, NTIA, and Verisign completed the deployment in July 2011. Today, the majority of root zone change requests are lodged through this online system with the remainder manually entered into the system by ICANN staff. TLD managers that use the system have been overwhelming in their feedback that the new system has greatly improved their interactions with the Root Zone Management functions.

#### ***Understanding the Requirement***

ICANN recognizes the significant benefits of an automated root zone management system. It has championed the deployment of such a system and, since 2006, led the deployment of a system that meets the various criteria of C.2.9.2.e.

In developing the system, ICANN focused on a comprehensive set of requirements that delivered on the wishes of TLD managers, Verisign, and NTIA:

- **Speed of processing.** A key focus of the system was to improve processing times as much as possible, without compromising the integrity of the process or the system. Some of the key methods of improving processing time was the automated system sending emails and processing tasks that previously were manually performed by ICANN Staff. The ability of TLD managers to submit their requests and get immediate automatic feedback from the system regarding any errors on their submission also reduces the amount of time taken to process a request.
- **Elimination of unnecessary manual effort.** While some of the steps of the process require manual review, many of the process steps can be objectively performed in a fully automated fashion. ICANN sought to identify all such steps, and then implemented automated approaches for all of them.
- **Accuracy.** The system had to maintain accuracy of the process, and in fact enhances accuracy. The details of a request are only entered into the system once, by the requestor at the beginning of the process. This is an improvement on the previous process that involved re-entry of the data by ICANN, Verisign, and potentially others. By ensuring data is

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automatically transmitted between the parties, a class of potential errors associated with mis-transcription is eliminated.

- **Real-time status.** Historically, TLD managers who wish to enquire regarding the status of an ongoing request would need to consult with ICANN. ICANN felt functionality was critical to allow TLD managers to log in at any time to review the current status of a request, without needing to talk to staff.
- **Ease of use.** ICANN modeled user interactions with the system by creating an experience that was intuitive and did not require training to use. As such, TLD managers that utilize the system are presented with a straight-forward and easy-to-use interface that greatly reduces the amount of explanation required. The interface allows TLD managers to prepare requests effortlessly, review them before submission, and then track them after submission through to completion. The system also allows TLD managers to test their proposed changes and receive immediate feedback on any technical check issues prior to processing.
- **Integration.** As there are multiple parties involved in the Root Management workflow, the system focuses on cleanly integrating the ICANN components of the workflow, with those conducted by NTIA and Verisign. Notably, ICANN developed a system that uses the established EPP protocol to communicate with Verisign. In tandem with this, ICANN co-developed with Verisign an application for NTIA to use to interact with the system according to NTIA's specific requirements.
- **Security.** It is important to preserve and enhance the security associated with the Root Zone Management function so that trusted representatives of the TLD Manager are able to perform functions, but unauthorized actors are not. The system was designed to use established secure protocols such as SSL for security, and is extensible to allow for future security additions such as two-factor security. The software operational model is designed so that the public customer-facing component is isolated from the internal workflow management component, reducing security exposure of the core management systems.

### **Technical Approach**

The current system comprises multiple components that interconnect to form a cohesive functioning Root Zone Management system. These components are as follows:

- **"ICANN User Application"** — A user facing application, available on the web at <https://rzm.iana.org/>, which allows TLD managers to log in through a secure protected interface and manage their delegations in the root zone. Functionality of this application includes reviewing current details for their TLD in the Root Zone and ICANN's IANA WHOIS Database, lodging a Change Requests to these details through an interactive and intuitive process, testing any proposed technical changes for defects in accordance with the various technical requirements, monitoring the status of the request through the lifetime of the change, and reviewing a history of changes that have been conducted.
- **"ICANN Administrative Application"** — This interface is provided to ICANN staff to perform their roles in the administration of change requests. ICANN staff roles include lodging requests that have been tendered through means other than the ICANN User Application (e.g., those submitted via email, facsimile, telephonic, or postal means), reviewing and

processing in-process requests, checking system status, and obtaining relevant statistics for various reporting requirements.

- **“ICANN Backend Application”** — The internal application that manages the business logic and lifecycle of a Root Zone or Root Database change request. This system performs workflow management on any given change request. The application is also responsible for communication with the other systems (i.e., the User Application, Administrative Application, the NTIA Application, and the Verisign Application).
- **“ICANN Ticketing Application”** — The internal application is responsible for keeping a record of all email, facsimile, and postal communication ICANN receives and transmits in executing IANA Functions. Its functions include recording unique reference numbers for particular requests, storing a complete audit trail of each request, and facilitating management of the various queues of ICANN work. The ICANN Ticketing Application is integrated with the ICANN Administrative Application, such that the two systems are fully informed of Root Zone Change Requests. The Ticketing Application is used for other aspects of performance of the IANA Functions, such as protocol parameter assignments and number resource allocations.
- **“NTIA Application”** — A dedicated application, jointly developed and managed by ICANN and Verisign, to provide NTIA with a Dashboard of requests outstanding that require NTIA’s authorization in accordance with the workflow. NTIA staff has secure access to the system, and can use it to authorize change requests and perform other functions associated with their role on specific change requests. This system was developed in accordance with NTIA’s requested functionality, and will be updated in the future in accordance with new system requirements.
- **“Verisign Application”** — A dedicated workflow management system for accepting proposed root zone change requests from ICANN after they are validated, performing Verisign’s internal processing on the request, and updating the contents of the DNS Root Zone. The ICANN Backend Application communicates with the Verisign Application via a secure pathway using the Extensible Provisioning Protocol (EPP), with custom extensions to accommodate the unique root zone workflow.

In addition to the benefits conferred by the automation system, ICANN understands the importance of preserving all legacy methods of interaction with its customers. Customers will be able to submit requests via email, for example, using this traditional methodology. The system has been designed to provide full flexibility in this regard.

For changes to the Root Zone File, Verisign is required to implement the changes to the file itself. ICANN’s systems will monitor status of this process using the EPP protocol to provide timely updates to the requestor on the status of their request. ICANN’s systems will recognize what the resulting root zone will look like once a change is conducted. Once Verisign’s systems indicate via EPP that the root zone file change has been implemented, ICANN’s systems will automatically obtain the revised file and cross-verify its contents with what ICANN’s systems expect will be the product of the change. Only once ICANN’s and Verisign’s systems concur on the correct implementation of a change will it be deemed implemented and complete.

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**Technical Approach**

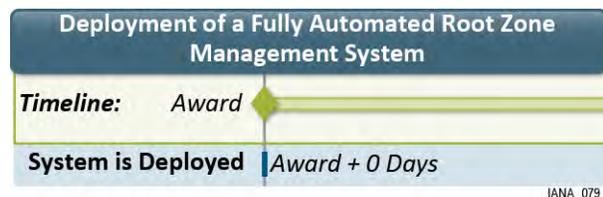
ICANN describes our technical approach to meeting this requirement below.

1.2.9.2.e.1 Deployment of a Fully Automated Root Zone Management System

ICANN will deploy a fully automated root zone management system on the first day.

ICANN will do this by continuing to operate the deployed automated root zone management system it co-developed with NTIA and Verisign and will deploy incremental updates to the system to accommodate changes to the management workflow and requirements. The system as deployed today meets and exceeds the requirements described in the RFP.

As this system is in place and functioning, it will therefore be available at the time of the award of the contract (see **Figure 1.2-59**). This is in full conformance with the requirement that the system be deployed within nine months. ICANN will continue to develop and refine the system in light of customer feedback, in adherence with the requirements of this contract.



**Figure 1.2-59. Root Zone Management System Deployed at Award of Contract**

1.2.9.2.e.2 Secure (Encrypted) System for Customer Communications

ICANN will continue to provide the secure and encrypted mechanisms that are in place in its current automation systems. All TLD operators have been, and will continue to be, provided with access to a secure web-based portal that is encrypted via the HTTPS protocol and requires authentication using a unique username and password for each TLD contact.

ICANN will also explore with the TLD operator community adding new methods for secure communication. In particular, ICANN will investigate with the various parties adding two-factor authentication mechanisms to the existing systems. This will be available for TLD managers on an opt-in basis and, once chosen, will require the execution of additional security protocols before a Root Zone Change Request can be made. Its introduction must be carefully considered in liaison with TLD managers to ensure the correct procedures are in place to make certain unauthorized requests are not executed, while not unduly impeding requests from parties that have lost or misplaced their security credentials.

1.2.9.2.e.3 Automated Provisioning Protocol for Customers

ICANN will continue to provide a secure, fully automated web-based interface for customers (i.e., TLD managers) to interact with the root zone management system to submit their requests. The interface was developed in conjunction with users to fully support the needs they had expressed to ICANN as the incumbent IANA Operator in previous years. ICANN will continue to solicit feedback from users of the system to inform future upgrades and feature improvements to improve the system’s utility and easy of use.

1.2.9.2.e.4 Online Database of Change Requests

ICANN will continue to provide secured access to the history of user-submitted requests to the Root Zone Management system. This system allows for credentialed users to login and review

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both pending and historical root zone change requests. The interface provides significant detail of the request, including exactly what was requested, and the numerous events that occurred in the lifecycle of a request. For example, when the request was lodged, when confirmations were performed and by whom, and when the request was implemented.

#### 1.2.9.2.e.4 Test System for Checking Technical Requirements

ICANN will continue to provide an interface for TLD managers to enter in their proposed technical changes to the root zone and obtain immediate feedback on what technical errors ICANN's systems detect with their configuration. This interface will allow TLD managers to immediately remedy any technical defect, or commence a dialogue with ICANN to better understand the issues that have been identified. **Figure 1.2-60** shows a sample of the diagnostic output a user will see.

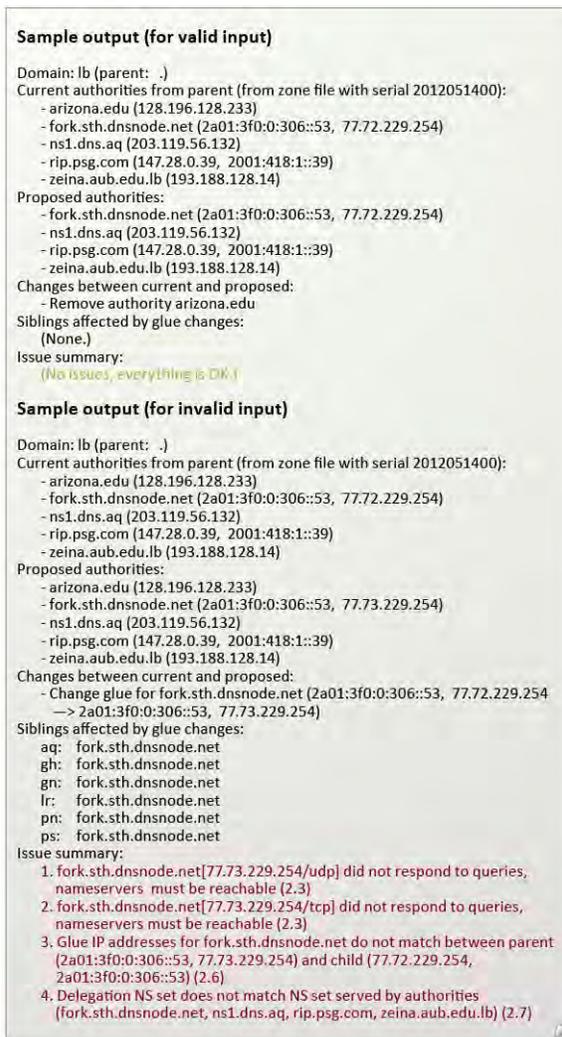
ICANN recognizes the importance of ensuring technical errors to not enter the root zone, while continuing to provide a responsive and accountable service to TLD managers. In addition to providing this tool, ICANN openly will publish a detailed explanation of the technical checks it performs, which will allow for third parties to independently perform the checks without being dependent on ICANN's systems. In order to provide a safeguard for the root zone management process, Verisign has already independently re-implemented the checks published by ICANN in order to be satisfied of the correctness of proposed root zone changes.

ICANN will also consult with its user communities about further refinements to the interface for performing technical checks.

As the incumbent manager, ICANN has received feedback on how the interface for conducting checks could be improved and will implement revisions to reflect these areas of improvement.

#### 1.2.9.2.e.5 Internal Interface for Secure Communications

ICANN will continue to operate and provide a secure communications interface between NTIA, Verisign and ICANN. This interface is currently deployed and is composed of the multiple components described earlier.



```
Sample output (for valid input)
Domain: lb (parent: .)
Current authorities from parent (from zone file with serial 2012051400):
- arizona.edu (128.196.128.233)
- fork.sth.dnsnode.net (2a01:3f0:0:306::53, 77.72.229.254)
- ns1.dns.aq (203.119.56.132)
- rip.psg.com (147.28.0.39, 2001:418:1::39)
- zeina.aub.edu.lb (193.188.128.14)
Proposed authorities:
- fork.sth.dnsnode.net (2a01:3f0:0:306::53, 77.72.229.254)
- ns1.dns.aq (203.119.56.132)
- rip.psg.com (147.28.0.39, 2001:418:1::39)
- zeina.aub.edu.lb (193.188.128.14)
Changes between current and proposed:
- Remove authority arizona.edu
Siblings affected by glue changes:
(None.)
Issue summary:
(No issues, everything is OK.)

Sample output (for invalid input)
Domain: lb (parent: .)
Current authorities from parent (from zone file with serial 2012051400):
- arizona.edu (128.196.128.233)
- fork.sth.dnsnode.net (2a01:3f0:0:306::53, 77.72.229.254)
- ns1.dns.aq (203.119.56.132)
- rip.psg.com (147.28.0.39, 2001:418:1::39)
- zeina.aub.edu.lb (193.188.128.14)
Proposed authorities:
- arizona.edu (128.196.128.233)
- fork.sth.dnsnode.net (2a01:3f0:0:306::53, 77.72.229.254)
- ns1.dns.aq (203.119.56.132)
- rip.psg.com (147.28.0.39, 2001:418:1::39)
- zeina.aub.edu.lb (193.188.128.14)
Changes between current and proposed:
- Change glue for fork.sth.dnsnode.net (2a01:3f0:0:306::53, 77.72.229.254
  -> 2a01:3f0:0:306::53, 77.72.229.254)
Siblings affected by glue changes:
aq: fork.sth.dnsnode.net
gh: fork.sth.dnsnode.net
gn: fork.sth.dnsnode.net
lr: fork.sth.dnsnode.net
pn: fork.sth.dnsnode.net
ps: fork.sth.dnsnode.net
Issue summary:
1. fork.sth.dnsnode.net[77.72.229.254/udp] did not respond to queries,
nameservers must be reachable (2.3)
2. fork.sth.dnsnode.net[77.72.229.254/tcp] did not respond to queries,
nameservers must be reachable (2.3)
3. Glue IP addresses for fork.sth.dnsnode.net do not match between parent
(2a01:3f0:0:306::53, 77.72.229.254) and child (77.72.229.254,
2a01:3f0:0:306::53) (2.6)
4. Delegation NS set does not match NS set served by authorities
(fork.sth.dnsnode.net, ns1.dns.aq, rip.psg.com, zeina.aub.edu.lb) (2.7)
```

Figure 1.2-60. Sample Diagnostic Output

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Fundamentally, the internal interface between the parties involves transmissions using the standardized Extensible Provisioning Protocol (EPP) between the components of the system operated by ICANN and Verisign. The EPP protocol will avoid potential errors in communication between the parties by using a standardized way of expressing the nature of a requested change and its status. The EPP protocol also will provide inherent mechanisms for ensuring the integrity and authenticity of the communications.

ICANN, in partnership with Verisign, also provides the “NTIA Application,” which allows for authorized NTIA personnel to execute many of their functions by logging into the system. When logged into the system, the NTIA personnel will review requests that are pending for NTIA action and perform those actions. This application was developed through consultation with NTIA on what their requirements were.

In addition to the online interfaces, it is recognized that there has been, and will continue to be occasions where there needs to be formal communications that are beyond the scope of the automation system. Such scenarios include requests that have unique concerns such as questions to be resolved between the various parties. ICANN will secure its communications using PGP email signing using known keys that have been mutually shared between NTIA personnel, Verisign personnel and ICANN. These transmissions will be conducted using dedicated email addresses devoted to the purpose of secured communications relating to Root Zone Management between NTIA, Verisign and ICANN. This method will also be retained for use in the unlikely event a major outage of the automation system necessitates the use of more manual processing.

#### **1.2.9.2.f Root Domain Name System Security Extensions (DNSSEC) Key Management**

ICANN has been a leader in the deployment of DNSSEC in the Authoritative Root Zone, including an inclusive project that saw publication of a signed DNS Root Zone starting in July 2010 after a successful collaboration between ICANN, Verisign (acting as Root Zone Maintainer) and NTIA. This process involved implementing and having ICANN’s processes deemed compliant with the requirements specified by NTIA in 2009, which match those specified in Appendix 2 of the RFP. ICANN has been responsible for the management of the root zone Key Signing Key (KSK), including generation, publication and use for signing the Root Keyset since deployment, and ICANN commits to continue performing this role.

A major component of this deployment was developing processes and systems to support the secure generation and management of the KSK. The systems, procedures and policies used in the performance of this function have been subject to extensive external review and include the following:

- U.S. Department of Commerce NTIA
- U.S. Department of Commerce NIST
- Attendees at numerous technical conferences
- Subscribers of various technical e-mail lists
- All Root Server Operators
- The general public, via a dedicated website for the project

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Comments on the proposed implementation were solicited from these stakeholders before deployment, and all the concerns communicated to ICANN were addressed. The public part of the KSK key-pair (the root zone trust anchor) was published in accordance with documented procedures on July 15, 2010.

The generation and use of the KSK for signing the Root Keyset has occurred at regular, scheduled Key Ceremonies. All Key Ceremonies have been executed successfully. A Key Ceremony Script is in **Appendix A**. See **Figure 1.2-61**.

**Figure 1.2-61. Key Ceremonies**

| CEREMONY | LOCATION       | DATE       | ACTIONS  |
|----------|----------------|------------|--|
| 1        | Culpeper, VA   | 2010-06-16 | Initialization, enrollment, key generation, KSR processing (Q3/2010) |
| 2        | El Segundo, CA | 2010-07-12 | Initialization, enrollment, key delivery, KSR processing (Q4/2010)   |
| 3        | Culpeper, VA   | 2010-11-01 | KSR processing (Q1/2011)   |
| 4        | El Segundo, CA | 2011-02-07 | KSR processing (Q2/2011)   |
| 5        | Culpeper, VA   | 2011-05-11 | KSR processing (Q3/2011)   |
| 6        | El Segundo, CA | 2011-07-20 | KSR processing (Q4/2011)   |
| 7        | Culpeper, VA   | 2011-09-30 | KSR processing (Q1/2012)   |
| 8        | El Segundo, CA | 2012-02-02 | KSR processing (Q2/2012)   |

Ceremonies are for ongoing key management functions, including key generation and use of the KSK for signing the Root Keyset as appropriate.

ICANN’s execution of the systems, procedures and policies used in the performance of this function have been subject to extensive external review and include the following:

- Trusted Community Representatives (all ceremonies)
- External Witnesses (all ceremonies)
- Representatives of the Root Zone Maintainer (all ceremonies)
- The general public via archived video footage, logs, software, and annotated scripts (all ceremonies)
- The general public, via live Internet video stream (starting with ceremony three and including all subsequent ceremonies)
- PricewaterhouseCoopers, acting as SysTrust auditors

As part of this initiative, ICANN has established a comprehensive array of procedures for managing the KSK. Central to this is ICANN’s “DNSSEC Practice Statement for the Root Zone KSK Operator” (DPS). No concerns have been communicated to ICANN, NTIA or the Root Zone Maintainer relating to the accuracy with which published procedures have been followed by ICANN in Key Ceremonies.

ICANN’s processes have been reviewed for availability, processing integrity and security objectives, and this has resulted in ICANN being awarded SysTrust certification by

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PricewaterhouseCoopers. This certification means that ICANN's processes passed a rigorous independent review and provides assurance that ICANN's systems are reliable and the procedures have been followed accurately. ICANN has been certified with this certification for both its first and second year of operation.

### ***Understanding the Requirement***

ICANN understands that it is required to be responsible for the management of the root zone KSK, including generation, publication and use for signing the Root Keyset. ICANN further understands that the technical approach used to perform such management functions must comply with the document included as Appendix 2 in the Scope of Work. ICANN understands the requirement to work collaboratively with NTIA and the Root Zone Maintainer in the performance of this function.

### ***Technical Approach***

ICANN describes our technical approach to meeting this requirement in the following sections.

#### ***1.2.9.2.f.1 Management of the Root Zone Key Signing Key***

The key management methodology used in the Root Zone Key Signing Key operations will be based on standards such as ISO 21188 and ANSI X9.79: 2001. These represent best practices for key management in the industry and are adopted by financial institutions and commercial Certification Authorities (CAs). Every element of key management will be rigorously documented and executed in a highly secure and fully auditable manner. In addition, ICANN will demonstrate the transparency of the process by making ceremony footage, ceremony scripts and signing software publicly available after the ceremony.

##### ***1.2.9.2.f.1.1 Root Zone Key Signing Key Generation and Signing Operations***

Root Zone Key Signing Key (KSK) key pair generation and the Key Signing Request (KSR) signing will be performed by multiple pre-selected, trained and trusted individuals using Trustworthy Systems and processes that provide for the security and required cryptographic strength for the generated keys.

All KSK related operations are executed in pre-planned Key Ceremonies in accordance with the requirements of the Key Ceremony Reference Guide. The activities performed in each key ceremony are recorded, dated and signed by the Ceremony Administrator and the Internal Witness.

##### ***1.2.9.2.f.1.2 Publication of the Root Zone Key Signing Key***

ICANN will publish the public component of the Root Zone Key Signing Key using a number of secure methods, consistent with the published specification for trust anchor publication. The Trust Anchor set will be published in two formats:

1. In DS record format (i.e., as the hashes of corresponding individual DNSKEY resource record sets in DS format)
2. As Certificate Signing Requests (CSRs) in PKCS#10 format for further processing by Certificate Authorities and validation of proof of possession of each corresponding private key

Paper-copy representations of trust anchors will be distributed to Key Generation Ceremony participants when the corresponding keys are generated. These participants may attest to the generated key in any way they find suitable.

Trust anchor sets and shorthand representations thereof will be distributed among the Key Generation Ceremony participants. These participants may attest to the generated key in any way they find suitable.

In addition, the Trust Anchor set will be transported to the ICANN Trust Anchor signing infrastructure (separate from the DNSSEC signing infrastructure) in a secure manner to preclude substitution attacks. These signed Trust Anchor sets will then be published with these signatures along with the original Certificate Signing Request.

Signed key sets will be made available by HTTP. The various components will be published as:

- The Uniform Resource Locator (URL) for retrieving the CSR will be *<http://data.iana.org/root-anchors/<key-label>.csr>*.
- The URL for retrieving the ICANN signed Certificate will be *<http://data.iana.org/root-anchors/<key-label>.crt>*.
- The URL for retrieving the complete trust anchor set will be *<http://data.iana.org/root-anchors/root-anchors.xml>*.
- The URL for a detached S/MIME signature for the current trust anchor set will be *<http://data.iana.org/root-anchors/root-anchors.p7s>*.
- The URL for a detached OpenPGP signature for the current trust anchor set will be *<http://data.iana.org/root-anchors/root-anchors.asc>*.

The current root zone trust anchor set is published using the mechanisms described above. All future new trust anchor sets will be published using compatible mechanisms.

The methodology used by ICANN to publish the Key Signing Key is supported by vendors that have implemented DNSSEC in their software. The methodology used was reviewed by the community of stakeholders as part of the process to design to Root Zone Key Signing Key management process.

#### 1.2.9.2.f.2 Collaborating with NTIA and the Root Zone Maintainer

ICANN will continue to collaborate with NTIA and the Root Zone Maintainer as it has during the design and development of its RZ KSK system as advancements in technology, processes and procedures necessitate. For instance, ICANN will work closely with both parties to perform business continuity exercises to test the effectiveness of the business continuity plan and improve the resiliency of the overall Root Zone operation.

#### 1.2.9.2.f.3 Requirements outlined in Appendix 2

ICANN's technical approach to the specific requirements in Appendix 2 of the Scope of Work is enumerated below. ICANN will fully adhere to these requirements.

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#### *1.2.9.2.f.3.1 Overall Security Lifecycle*

ICANN has developed and will continue to maintain an Information Security Management System (ISMS) based on ISO 27001 to manage the lifecycle of the overall security for the Root DNSSEC operations.

#### *1.2.9.2.f.3.2 Technical Security Controls required by a HIGH IMPACT system*

As per the original baseline requirements, ICANN's RZ KSK root operations are designed to meet technical security controls described in NIST 800-53 for HIGH IMPACT systems. These Special Publications documents represent guidelines and recommendations to establishing a viable IT security policy.

#### *1.2.9.2.f.3.3 Security Authorization and Management Policy*

ICANN will develop, implement and maintain a series of security policies that will cover all aspects of the Root Zone KSK operation. The primary purpose is to get management's commitment to reserve the resources required to maintain and enhance the secure operation. ICANN recognizes that proper policy settings are extremely significant in case an unplanned event, such as when incidents and disasters occur.

The security policies for the Root Zone KSK operations will include but are not limited to the following:

- Root Zone KSK Operator Function Information Security Policy
- Root Zone KSK Operator Function Audit and Accountability Policy
- Root Zone KSK Operator Function Key Management Policy
- Root Zone KSK Operator Function Physical Security Policy
- Root Zone KSK Operator Function Policy Management Authority Charter
- Root Zone KSK Operator Function Personnel Security Policy
- Root Zone KSK Operator Function Business Continuity Policy
- Root Zone KSK Operator Function Incident Response Policy
- Root Zone KSK Operator Function Document Management Policy

All documents are, and will be, managed in accordance with the Root Zone KSK Operator Document Management Policy, which is a document designed to ensure that the processes are properly documented and are compliant with the requirements. This policy encompasses all range of requirements including but not limited to regulatory, technical and consistency with the governing document. The aim of this policy is to make sure the actual operation reflects what is documented and vice versa, so either the process or the document can be corrected. All documents will be reviewed, updated and approved as appropriate to maintain its effectiveness and practicality.

#### *1.2.9.2.f.3.4 IT Access Control*

The signer system that includes the ceremony laptop, HSM and the OS/DVD will be completely offline and will never be connected to the Internet. Because of this, it is virtually impossible to perform a cyber attack on the signer system; therefore, it is only protected by rigorous the physical countermeasures described in 1.2.9.2.f.3.7.

Communication of ZSK Key Signing Requests (KSR) from the Root Zone Maintainer/Zone Signing Key (ZSK) Operator will be done using a separate TLS client-side authenticated web server that resides on ICANN's production network. Transfer of a KSR from the web server to the signer system is performed manually using removable media.

ICANN's production network will be logically separated from other components. This separation will prevent network access except through defined application processes. ICANN will use firewalls to protect the production network from internal and external intrusion. These firewalls will limit the nature and source of network activities that may access production systems that are related to key signing activities.

#### *1.2.9.2.f.3.5 Security Training*

ICANN will develop and implement a training program that covers all personnel involved in the Root Zone KSK Operation. This training will take the form of an on-the-job training that will be provided to the personnel to perform their job responsibilities adequately, competently and satisfactorily. ICANN will periodically review and enhance its training programs upon necessity.

The training will be tailored for each role and responsibility listed below:

- Ceremony Administrator
- Internal Witness
- Safe Security Controller
- ICANN KSK Operations Security
- Crypto Officer
- Recovery Key Share Holder

The topics covered by the program will include but are not limited to the items below:

- Basic DNS/DNSSEC concepts
- Job responsibilities
- Use and operation of deployed hardware and software
- Key management concepts and principles
- Security and operational policies and procedures
- Incident and compromise reporting and handling procedures
- Disaster recovery and business continuity procedures

#### *1.2.9.2.f.3.6 Audit and Accountability Procedures*

ICANN will establish an Audit and Accountability policy in order to define the types of audit data and how it must be handled. ICANN recognizes that an Audit and Accountability policy is essential to assess the effectiveness of the implemented security controls and countermeasures. This content of the policy will include but are not limited to the following:

- Roles and responsibilities
- Scope of the audit
- Types of events recorded
- Frequency of processing log
- Retention period

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- Protection of audit log
- Audit log backup

The policy will be reviewed at least once a year to maintain its applicability and effectiveness.

The types of events that will be recorded for the annual security audit include but are not limited to the following:

- Specific auditing events related to KSK key lifecycle management
  - Key generation, backup, storage, recovery, archival, and destruction
  - Exporting of public key components
- KSK signing and management events
  - Key activation
  - Receipt and validation of public key material (i.e., from the ZSK holder)
  - Successful or unsuccessful signing requests
- Security related events
  - Assignment and revocation of credentials
  - Successful and unsuccessful system access attempts
  - Key and security system actions performed by trusted personnel
  - Security sensitive files or records read, written or deleted
  - Security profile changes
  - System crashes, hardware failures and other anomalies
  - Facility visitor entry and exit
  - System changes and maintenance / system updates
  - Incident response handling
- Log entries
  - Date and time of entry
  - Identity of the entity making the journal entry

If ICANN detects an event that has lead to, or could have lead to, a security compromise of any of the security mechanisms, an investigation will be performed to determine the nature of the incident. If the incident is suspected to have compromised the private component of an active KSK, the Emergency KSK rollover procedure will be executed.

Otherwise, the risk of the incident will be assessed and a remediation plan will be developed and executed. The plan will include additional countermeasures to prevent the event from repeating. The incident handling procedures include reporting of all events to ICANN KSK Operations Security (IKOS), which in turn reports to the Policy Management Authority (PMA). Depending on the severity of the event, it will be reported to the U.S. Department of Commerce (DoC) in a timeframe and format mutually agreed by the DoC, IANA Functions Operator and the Root Zone Maintainer.

An audit report will be created in collaboration with the COR and delivered monthly. Besides the periodical generation and submission of this report, ICANN will maintain the capability to generate ad-hoc audit reports. The audit reports will be made publicly available.

*1.2.9.2.f.3.7 Physical Protection Requirements*

All Root KSK operations will be conducted within a physically protected environment that is designed to deter, prevent and detect any unauthorized use, access, or disclosure of sensitive information and systems, whether covert or overt.

ICANN will maintain disaster recovery capabilities for its DNSSEC operations by maintaining more than one site with comparable physical security. The signer systems will be protected by a minimum of four tiers of physical security with access to lower tiers required before gaining access to higher tiers. Progressively more restrictive physical access controls to each tier are applied. Unauthorized access becomes increasingly difficult as one reaches higher tiers. Sensitive DNSSEC operational activity and any activity related to the lifecycle of the RZ KSK occur within these restrictive physical tiers.

Physical access will be automatically logged and video recorded. All tiers enforce individual access control through the use of two-factor authentication. Unescorted personnel, including visitors or employees without specific authorization, will not be allowed into such secured areas. The physical security system includes additional controls for tiers used for key management activity that serves to protect storage of Hardware Security Modules (HSMs) and keying material.

Areas used to create and store cryptographic material will enforce dual access control, each through the use of two-factor authentication. HSMs will be protected through the use of tamper-evident bags, locked safes, cabinets, and containers. Access to HSMs and keying material will be restricted in accordance with ICANN's segregation of duty requirements. The opening and closing of cabinets or containers in these tiers will be logged for auditing purposes.

ICANN's key management facilities are equipped with primary and backup power systems to ensure continuous, uninterrupted access to electric power and backup heating/ventilation/air conditioning systems to control temperature and relative humidity. ICANN will also take reasonable precautions to prevent and extinguish fires or other damaging exposure to flame or smoke. ICANN's fire prevention and protection measures have been designed to comply with local fire safety regulations.

*1.2.9.2.f.3.8 Maintenance and Update Procedures*

The signer system will be designed to require a minimum of maintenance. Updates critical to the security and operations of the signer system will be applied after formal testing and approval. The origin of all software and firmware will be securely authenticated by available means.

Critical hardware components of the signer system will be procured directly from the manufacturer and transported in tamper-evident bags to their destination in the secure facility. Any hardware will be decommissioned well before the specified life expectancy.

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ICANN's Software Development Life-Cycle (SDLC) procedures for the Root Zone KSK key generation and signer software will implement relevant parts of NIST SP 800-64 for incorporating security and trustworthiness into the SDLC.

In addition, all critical parts of the signers modules developed by ICANN will be subject to external code review. The code review is required to certify the following:

- There is a documented architectural design describing the security domains and functions maintained by the signer.
- The architectural design demonstrates that the signer system prevents bypass of the security-enforcing functionality.
- There is a functional specification completely representing the signer system and all operations associated with it.
- There is a modular design description and a one-to-one correspondence with the modular decomposition of the implementation.
- The implementation representation completely and accurately implements the security-enforcing functions.

The software developed by ICANN, when first loaded, will provide a method to verify that the software on the system originated from ICANN, has not been modified prior to installation and is the version intended for use.

#### *1.2.9.2.f.3.9 Requirements for Root Zone Key Signing Key (KSK) Holder*

ICANN acknowledges that the responsibility as the Root Zone KSK Holder is to generate and protect the private component of the RZ KSK, securely export or import any public key components, authenticate and validate the public portion of the RZ Zone Signing Key, and sign the Root Zone DNSKEY record.

The requirements that are specific to the Root Zone KSK holder are described in the following sections.

##### *1.2.9.2.f.3.9.1 Cryptographic Requirements*

The Root Zone KSK pair managed by ICANN is currently an RSA key pair with a modulus of 2048 bits. ICANN will generate all future Root Zone KSK pairs as RSA key pairs with a modulus not less than 2048 bits.

RSA Key Generation of the current Root Zone KSK met the requirements specified in FIPS 186-3, in particular the FIPS 186-3 requirements for exponent size and preliminary testing.

The current Root Zone KSK was generated and is stored on four FIPS 140-2 level 4 hardware cryptographic modules (HSM). All future Root Zone KSKs will be generated and stored on FIPS140-2 level 4 validated HSMs.

All signatures generated using the Root Zone KSK to date have used SHA-256. All future signatures generated using the current or future Root Zone KSKs will use SHA-256.

All cryptographic functions involving the private component of the Root Zone KSK to date have been performed within an HSM. All future such functions will be performed only within an HSM.

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The private component of the Root Zone KSK has only ever been exported from an HSM with appropriate controls (FIPS 140-2) for the purpose of key backup. The private component of the current Root Zone KSK or any future Root Zone KSK will only be exported from an HSM with the same controls for the same purpose.

*1.2.9.2.f.3.9.2 Multi-Party Control*

ICANN will implement technical and procedural mechanisms that require the participation of multiple trusted individuals to perform sensitive cryptographic operations.

The activation data needed to make use of the RZ KSK private key will be split onto separate smartcards controlled by Crypto Officers selected from members of the Internet community that are not part of root zone management operations. Specifically, organizationally separate parties, not affiliated with ICANN, the Root Zone Maintainer or the DoC. A threshold number of smartcards (m) out of the total number of smartcards created and distributed for a particular hardware security module (n) will be required to activate a RZ KSK private key stored on the module. The threshold number of cards required to sign an object out using the RZ KSK is three out of seven. A key possessed by the cardholder physically protects the smartcards.

The RZ KSK will be backed up on a total of four HSMs that are FIPS 140-2 level 4 overall compliant in two locations. In addition, encrypted copies of the RZ KSK private key will be backed up onto a smartcard. The key used to encrypt the private key will be backed up using a five-out-of-seven threshold scheme with smartcards distributed to trusted Recovery Key Share Holders that will be selected from members of the Internet community not already part of root zone management operations. Specifically, organizationally separate parties, not affiliated with ICANN, the Root Zone Maintainer or the DoC. The Recovery Key Share Holders will keep the cards in tamper-evident bags, stored in geographically dispersed location under their control.

Trusted personnel will be selected using the approach documented for selected Trusted Community Representatives (TCRs). ICANN's approach involves assessing TCRs based on the following attributes:

1. Persons of integrity, objectivity, and intelligence, with reputations for sound judgment and open minds
2. Persons with an understanding of the domain name system and the potential impact of DNSSEC operations on the global Internet community
3. Persons who can help ICANN represent the broadest cultural and geographic diversity consistent with meeting the other criteria set forth in this Section
4. Persons who, in the aggregate, have personal familiarity with the operation of gTLD and ccTLD registries and registrars; with IP address registries; with Internet technical standards and protocols; with policy-development procedures, legal traditions and the public interest; and with the broad range of business, individual, academic, and non-commercial users of the Internet
5. Persons who are willing to serve as volunteers without compensation other than the reimbursement of certain expenses
6. Persons who are able to work and communicate in written and spoken English

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ICANN KSK Operations Security (IKOS) will maintain a list of contact information for all personnel involved in the Root KSK operations.

#### *1.2.9.2.f.3.9.3 Root Zone KSK Rollover*

Root Zone KSK rollover will be executed as required or after five years of operation. Cryptographic algorithm rollover will also be taken into account when planning a RZ KSK rollover.

The RZ KSK rollover will be scheduled to facilitate automatic updates of the Trust Anchors in the DNS resolvers as described in RFC 5011 [RFC5011]. This rollover will allow seamless transition from the old Trust Anchor to the new Trust Anchor without jeopardizing the chain of trust. After a RZ KSK has been removed from the key set, it will be retained after its operational period until the next scheduled key ceremony, which is when the private component will be destroyed in a secure manner.

#### *1.2.9.2.f.3.9.4 Contingency Planning*

ICANN will develop, implement and maintain a Business Continuity Plan to mitigate the effects of natural, man-made or technological disasters or other disasters that requires temporary or permanent cessation of operations from any of ICANN's facilities. The Business Continuity Plan will be deployed to address the restoration of information systems services and key business functions. The plan will address the following:

- Roles and responsibilities in the event of a disaster
- Fallback procedures for restoring business-critical processes within acceptable times
- Resumption procedures for restoring normal operations
- The criteria for activating the plan

At a minimum, ICANN will maintain the capability to restore or recover essential operations within 48 hours following a disaster with support for the following functions:

- Public communications
- Ability to import KSRs and export SKRs
- Generation of KSK
- Processing and signing of KSR contents
- Publishing the Trust Anchor

The Business Continuity Plan will be designed to provide full recovery within one week at the alternative site following any incident or disaster occurring at any of ICANN's sites. When possible, operational status will be restored as soon as possible following any incident or disaster.

The plan will be periodically tested, validated and updated to be operational in the event of any incident or disaster. Results of such tests will be reviewed and kept for audit and planning purposes.

ICANN will also preserve the capability to generate and publish an interim Trust Anchor within 48 hours. This interim Trust Anchor will be used to facilitate an orderly RFC 5011 [RFC5011]

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automatic KSK rollover to a new and sanctioned Trust Anchor generated at an appropriately planned key ceremony held within a reasonable timeframe.

#### *1.2.9.2.f.3.9.5 DNS Record Generation*

The RZ ZSK public keys within the KSR will be self-signed by the Root Zone Maintainer with SHA-256 with RSA encryption to provide proof of possession of the corresponding private key.

The signature embedded in the KSR and the parameters will be automatically validated when the Root Zone Maintainer posts the KSR to a dedicated online system to exchange the KSR and SKR. Access to this system is protected with TLS client-side authentication. The signer software that will be used during the ceremony also performs the identical validation prior to processing the KSR during the key signing ceremony.

In addition, the RZ KSK Operator will verify the authenticity and integrity of the KSR by performing an out-of-band verification (verbally over the phone, by fax or by another appropriate and available method) of the hash of the KSR before processing the KSR in the key ceremony.

#### *1.2.9.2.f.3.9.6 Audit Generation and Review Procedures*

An independent accounting firm that is accredited by the American Institute of Certified Public Accountants (AICPA) will be selected to perform annual security compliance audits for the Root KSK operations. This accounting firm will not participate in the multi-person control for the RZ KSK or RZ KSK and will be a different accounting firm from the firm the Root Zone Maintainer has engaged.

ICANN will back up electronic archives of its audit information to an off-site secure facility after each key ceremony. Copies of paper-based records are also stored off-site and are maintained in the same manner. In addition, audit logs will be kept off-line and secured in accordance with an Audit Logging Procedure that describes the mechanisms to protect the log files from unauthorized viewing, modification, deletion, or other tampering.

ICANN will ensure that all audit data will be available for the CO and COR within a reasonable timeframe upon request. The audit data is considered confidential, thus it will be sent through encrypted channels.

#### *1.2.9.2.f.3.9.7 RZ KSK Public Key Distribution*

ICANN will publish the public component of the Root Zone Key Signing Key using a number of secure methods, consistent with the published specification for trust anchor publication. The Trust Anchor set will be published in two formats:

7. In DS record format (i.e., as the hashes of corresponding individual DNSKEY resource record sets in DS format)
8. As Certificate Signing Requests (CSRs) in PKCS#10 format for further processing by Certificate Authorities and validation of proof of possession of each corresponding private key

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Paper-copy representations of trust anchors will be distributed to Key Generation Ceremony participants when the corresponding keys are generated. These participants may attest to the generated key in any way they find suitable.

Trust anchor sets and shorthand representations thereof will be distributed among the Key Generation Ceremony participants. These participants may attest to the generated key in any way they find suitable.

In addition, the Trust Anchor set will be transported to the ICANN Trust Anchor signing infrastructure (separate from the DNSSEC signing infrastructure) in a secure manner to preclude substitution attacks. These signed Trust Anchor sets will then be published with these signatures along with the original Certificate Signing Request.

Signed key sets will be made available by HTTP. The various components will be published as the following:

- The URL for retrieving the CSR will be `<http://data.iana.org/root-anchors/<key-label>.csr>`.
- The URL for retrieving the ICANN signed Certificate will be `<http://data.iana.org/root-anchors/<key-label>.crt>`.
- The URL for retrieving the complete trust anchor set will be `<http://data.iana.org/root-anchors/root-anchors.xml>`.
- The URL for a detached S/MIME signature for the current trust anchor set will be `<http://data.iana.org/root-anchors/root-anchors.p7s>`.
- The URL for a detached OpenPGP signature for the current trust anchor set will be `<http://data.iana.org/root-anchors/root-anchors.asc>`.

The current root zone trust anchor set is published using the mechanisms described above. All future new trust anchor sets will be published using compatible mechanisms.

The methodology used by ICANN to publish the KSK is supported by vendors that have implemented DNSSEC in their software. The methodology used was reviewed by the community of stakeholders as part of the process to design to Root Zone Key Signing Key management process.

#### *1.2.9.2.f.3.10 Requirements for Root Zone Zone Signing Key (RZ ZSK) Holder*

ICANN understands that this section of the requirements is intended for the Root Zone Maintainer; therefore, none of these requirements are applicable to the IANA Functions Operator.

ICANN will continue the technical dialogue with the Root Zone Maintainer as established during the deployment of DNSSEC in the root zone and will continue to verify that the systems and processes documented by the Root Zone Maintainer meet the corresponding requirements as set forth in Appendix 2 of the Scope of Work.

#### *1.2.9.2.f.3.11 Transition Planning*

ICANN will establish and implement a Root Zone KSK Operation Function Termination Plan that specifies the steps that ICANN will take if required to securely transition its duties and

responsibilities as the Root Zone KSK Operator to another entity in case ICANN is required to relinquish its role and associated duties as the Root Zone KSK Operator.

ICANN will be responsible for cooperatively transferring the Root Zone KSK Operator role and providing the successor with the relevant logs and audit information necessary to continue the operations.

The termination and transition process will be carefully planned and carried out in collaboration with the DoC.

Circumstances that may trigger a transition of duties may include, but are not limited to, a corporate merger, acquisition, bankruptcy, catastrophic disaster, or other situations that would require a permanent termination of the Root Zone KSK operations.

#### *1.2.9.2.f.3.12 Personnel Security Requirements*

ICANN has developed and will continue to maintain a Personnel Security Policy that sets the requirements for the background checks, segregation of duties matrix, training requirements, role assignment process, and other personnel security related provisions.

Tasks requiring separation of duties include, but are not limited to, the generation, use and destruction of Root Zone DNSSEC key material. Personnel holding a role in the multi-party access to the RZ KSK will not hold a role in the multi-party access to the RZ ZSK or vice versa. The auditor will not participate in the multi-person control for the RZ KSK or RZ ZSK. ICANN will assign a third-party auditor that is not selected by the Root Zone Maintainer.

All personnel that have access to the sensitive cryptographic materials are trained in accordance with section 1.2.9.2.f.3.5.

#### *1.2.9.2.f.3.13 Root Zone Maintainer Basic Requirements*

ICANN understands that this section of the requirements is intended for the Root Zone Maintainer; therefore, none of these requirements are applicable to the IANA Functions Operator.

ICANN will continue the technical dialogue with the Root Zone Maintainer that was established during the deployment of DNSSEC in the root zone and will continue to verify that the systems and processes documented by the Root Zone Maintainer meet the corresponding requirements as set forth in Appendix 2 of the Scope of Work.

#### *1.2.9.2.f.3.14 IANA Functions Operator Interface Basic Functionality*

Publishing a signed Delegation Signer (DS) resource record in the root zone forms the chain of trust in DNSSEC from the Root Zone to a Top Level Domain (TLD). The DS record is a cryptographic shorthand representation, or hash, of the TLD generated and controlled KSK.

The TLD manager will submit the DS record to request activation of DNSSEC. The identity and authority of the TLD manager will be verified using the appropriate method for that specific TLD. The DS resource record provided by the TLD Manager is authenticated and processed by the IANA Functions Operator and incorporated into a change request, requesting authorization from the DoC to make the change in the root zone.

The DS resource record must be valid and submitted in the DS RR Presentation Format as described in RFC 4034. As part of the vetting process, the DS record is checked against the TLDs DNSKEY keyset and signatures. After Root Zone Administrator authorization, the DS resource record is incorporated into the Root Zone and signed by the Zone Signing Key held by the Root Zone Maintainer.

The IANA Functions Operator will also take efforts to ensure the availability and integrity of the TLD by validating the DS resource record to the currently published Domain Name System Key (DNSKEY) Resource Record Signatures (RRSIGs). If a DS resource record does not validate, there will be an out-of-band process in order to confirm the authenticity and intention of publishing the DS resource record.

Only a TLD manager can request removal of DS resource records. DS removal requests will also be authenticated and processed by the IANA Functions Operator and authorized by the Root Zone Administrator like any other changes to the Root Zone file.

#### *1.2.9.2.f.3.15 Root Zone Management Requirements*

ICANN will manage the DS Resource Record sets for TLD delegations in accordance with its commitments described in section 1.2.9.2.a. The methodology used for management of DS records is part of the process for Root Zone File Change Request Management.

This process will provide for the ability and process to store TLD delegations and DS RRs, according to the process described in 1.2.9.2.a.1.2.

ICANN will support the ability to store multiple keys with different algorithms. The DNS Root Zone currently has a number of TLDs using both multiple keys and different algorithms that were submitted using the processes that ICANN will implement under this proposal.

ICANN will maintain a history of DS records used for a given TLD. This history is maintained in the system as described in 1.2.9.2.e.4.

ICANN will provide procedures and guidance to TLD managers regarding how to roll over TLD key materials, using the procedures described in 1.2.9.2.a.1.2. Further, ICANN will provide 24x7 operations as described in 1.2.9.2.2, which provides TLD managers with a 24x7 emergency contact number in order to reach the IANA Functions Operator to conduct an emergency key roll over.

ICANN will provide procedures and the ability for a TLD to be moved from signed to unsigned status, through the execution of a change in accordance with the process described in 1.2.9.2.a.1.2. To move to an unsigned status, the TLD manager makes a DS record change request to remove all DS records currently listed in the DNS Root Zone.

ICANN will provide procedures and the ability for the revocation of DNSSEC capability from the DNS Root Zone, which will return the root zone to its pre-signed state. To move to unsigned status, the process will include removing the DNSKEY records from the DNS Root Zone. ICANN recognizes this process involves coordination with the Root Zone Maintainer, which is responsible for the process of ceasing signing of the root zone itself.

**Experimental Use**

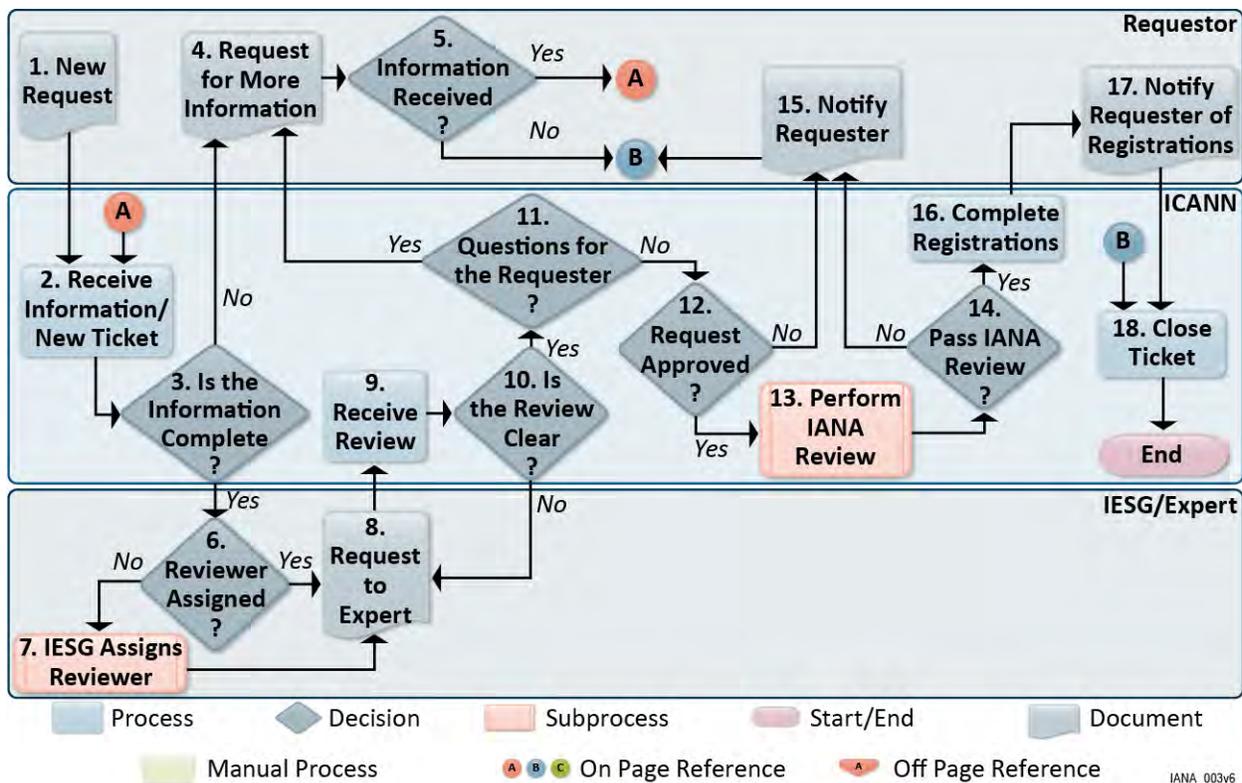
ICANN will register the Experimental Use policy in the appropriate registry in-line with instructions received from the IETF. These instructions will normally be in the form of a document approval and follow the process detailed in the Draft Approval process described previously.

**Expert Review (or Designated Expert)**

ICANN will register assignments made under the Expert Review policy in line with the Expert Review process described in the following section. Multicast addresses are assigned using the Expert Review process. Application templates for multicast IPv4 and IPv6 addresses are in **Appendix C**.

**Expert Review Process**

In the process shown in **Figures 1.2-75 and 1.2-76**, a potential registrant lodges a request via ICANN’s IANA website. ICANN reviews the request for completeness and addresses any deficiencies in that area with the registrant. Complete requests are forwarded to the IESG Designated Expert for review. Questions and comments are passed on to the requester and, based on the responses; the expert decides whether to approve the request. This is the process ICANN will follow for registries the IETF has designated with an Expert Review policy.



**Figure 1.2-75. Expert Review Process**

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# Internet Assigned Numbers Authority (IANA)

U.S. Department of Commerce,  
National Telecommunications and  
Information Administration

## Volume I – Technical Proposal

Solicitation Number: SA1301-12-RP-0043  
May 31, 2012



Submitted to:  
Ms. Mona-Lisa Dunn  
U.S. Department of Commerce  
Office of Acquisition Management  
Commerce Acquisition Solutions, Room 6521  
14th and Constitution Avenue, NW  
Washington, D.C. 20230







May 31, 2012

Ms. Mona-Lisa Dunn  
Contracting Officer  
United States Department of Commerce  
Office of Acquisition Management  
Commerce Acquisition Solutions, Room 6521  
14<sup>th</sup> and Constitution Avenue, N. W.  
Washington, D. C. 20230

Reference: Request for Proposal (RFP) Number SA1301-12-RP-0043

Subject: Submission of Proposal

Dear Ms. Dunn:

The Internet Corporation for Assigned Names and Numbers (“ICANN”) submits the enclosed proposal in response to the above-captioned solicitation to perform technical services known as the Internet Assigned Numbers Authority (“IANA”) Functions. The proposal is submitted in three (3) originals, i.e. one original proposal with three original signatures, and one (1) copy. This proposal is valid for ninety (90) days through August 29, 2012. As the incumbent contractor, ICANN has a strong knowledge and familiarity with the IANA Functions and has all the necessary technical personnel, materials, equipment and facilities to perform the requirements of the solicitation.

ICANN is a not-for-profit public benefit corporation organized under the laws of the State of California. The Headquarters of ICANN is currently located in 4676 Admiralty Way, Suite 330, Marina del Ray, California. As of June 18, 2012, ICANN’s Headquarters will move to 12025 Waterfront Drive, Suite 300, Playa Vista, CA 90094-2536. The IANA work will be performed at ICANN’s Headquarters under the resultant contact.

This proposal consists of two volumes and sections in binders with dividers clearly indicating each section. Volume 1, Technical Proposal, includes the technical and management approach to executing the IANA Functions; all certifications and documents that will be used to perform the IANA Functions requirements; and resumes of key personnel. Volume II, Financial Information and Project Funding Strategy, includes the partially executed Standard Form 33, Solicitation, Offer and Award, Standard Form 30, Amendment of Solicitation, Representations, Certifications and Other Statements Of Offerors from Section K of the RFP; the audited financial statements; and a project funding plan that describes the sources of funds that will be used to cover the costs of providing the IANA Functions

|                       |   |                             |            |                          |                          |
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requirements. Each volume includes all certifications, documents, reports and/or templates that ICANN proposes to use in fulfilling the requirements of the contract as well as the resumes of the ICANN key personnel that will perform and/or manage the requirements of the contract.

All primary operations of the IANA requirement will be performed within the continental United States at the above address for the entire life cycle of the resultant contract and at no cost to the Federal Government. ICANN is the incumbent contractor under contract number SA131-06-C-N0048. We have performed those requirements well and have received several complimentary evaluations. ICANN intends to use the same personnel on the resultant contract to continue its exemplary performance. ICANN will not charge any fees to the users of the IANA services for the life cycle of the contract.

ICANN is and will be a responsible contractor to the Federal government because (1) it has adequate financial resources to perform the contract; (2) it has the experience and capabilities to provide the required services in a timely and satisfactory manner to users under the contract; (3) it has a demonstrated record of performance; (4) it has performed the IANA functions with integrity and according to sound business ethics; and (5) it has the organization, experience, technical skills, accounting, and system of internal controls to provide quality service to third parties under a resultant contract.

ICANN certifies that it does not have an Organizational Conflict of Interest (“OCI”). Notwithstanding its’ incumbency, ICANN has not obtained nor has it been exposed to unequal access to nonpublic information. ICANN has a competitive advantage by reason of its work on the current contract but it has not been furnished nor had access to any proprietary or source selection sensitive information because it did not participate in any way in the development of the reference RFP. Furthermore, ICANN did not provide any information to the government that would ensure an award of a resultant contract to itself. In addition, there are no covered employees who are performing an inherently governmental function requiring a financial disclosure statement, so there is no personal conflict of interest. Finally, ICANN has not provided any biased information to the government.

ICANN has prepared a list of Assertions that identify the Intellectual Property that was developed exclusively at private expense that will be used in the resultant contract and to which ICANN will retain title. In the event that ICANN develops a subject invention during the course of performance of the resultant contract, it will furnish written disclosure to the Contracting Officer within 60 days of the date of conception of the invention.

ICANN is a responsible contractor that is providing a proposal in compliance with the Solicitation. ICANN has the expertise and qualifications to provide the highest quality IANA services

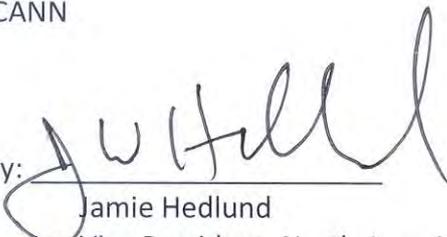


representing the best value to the Federal government and to the third party users of the services. ICANN is keenly aware of its responsibility and accountability to the global Internet community and is constantly working to affirm this obligation, and will continue to do so under the resultant contract. ICANN continues to invest in a Business Excellence Program, based on the globally recognized standard EFQM, to assess what it is doing well and where improvement in the performance of the IANA functions may be achieved.

The Standard Form 33 Solicitation, Offer, and Award, and the Standard Form 30, Amendment of Solicitation, signed by Mr. Rod Beckstrom, President and CEO of ICANN, who is authorized to bind and commit the company, is included in Volume II, immediately following this cover letter.

Thank you for your consideration of the enclosed proposal. Should you have any questions or concerns, please do not hesitate to contact me at (202) 570-7240, or by e-mail at [jamie.hedlund@icann.org](mailto:jamie.hedlund@icann.org).

Best regards,  
ICANN

By:   
\_\_\_\_\_  
Jamie Hedlund  
Vice President, North America



**Internet Assigned Numbers Authority (IANA)  
U.S. Department of Commerce, National Telecommunications  
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Washington, D.C. 20230

Submitted by:  
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VP, North America  
The Internet Corporation for Assigned Names and Numbers (ICANN)  
1101 New York Avenue, Suite 930  
Washington, DC 20005



This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed—in whole or in part—for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of—or in connection with—the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in all sheets of this proposal.





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## Acronym List

|         |  |
|---------|--|
| AC      | Advisory Committees  |
| AD      | Actions for the Document   |
| AfNOG   | African Network Operators Group                                      |
| AFRINIC | Internet Numbers Registry for Africa                                 |
| AfTLD   | African Top Level Domains  |
| AICPA   | American Institute of Certified Public Accountants                   |
| ALAC    | At Large Advisory Committee  |
| ANSI    | American National Standards Institute                                |
| AoC     | Affirmation of Commitments   |
| APNIC   | Asia Pacific Network Information Center                              |
| APTLD   | Asia Pacific Top Level Domain  |
| ARIN    | American Registry for Internet Numbers                               |
| ARPA    | Address and Routing Parameter Area                                   |
| AS      | Address Space  |
| ASN     | Address Supporting   |
| ASO     | Address Supporting Organization                                      |
| CA      | Certification authorities  |
| ccNSO   | Country Code names Supporting Organization                           |
| CCOP    | Contingency and Continuity of Operations Plan                        |
| CENTR   | Council of European National Top Level Domain Registries             |
| CEO     | Chief Executive Officer  |
| CISSP   | Certified Information Systems Security Professional                  |
| CO      | Contract Office  |
| COR     | Contracting Officer's Representative                                 |
| CSCR    | Customer Service Complaint Resolution Process                        |
| CSR     | Certificate Signing Requests   |
| DNCRI   | Division of Networking and Communication Research and Infrastructure |
| DNS     | Domain Name System   |
| DNSSEC  | Domain Name System Security  |
| DoC     | Department of Commerce   |
| DPS     | DNSSES Policy Statement  |
| DS      | Delegation Signer  |
| DoC     | Department of Commerce   |
| DPS     | DNSSES Policy Statement  |
| ECML    | Electronic Commerce Language   |
| EPP     | Extensible Provisioning Protocol                                     |
| ETNO    | European Telecommunications Network Operators                        |
| ETSI    | European Telecommunications Standards Institute                      |
| FAR     | Federal Acquisition Regulation                                       |
| FCFS    | First Come First Served  |
| FISMA   | Federal Information Security Management Act                          |

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|        |   |
|--------|---|
| FNOI   | Further Notice of Inquiry                           |
| GAC    | Government Advisory Committee                       |
| GNSO   | Generic Names Supporting Organization               |
| GSI    | Generic Signing Infrastructure                      |
| HSM    | Hardware Security Modules                           |
| HTML   | Hyper Text Markup Language                          |
| HTTPS  | Hypertext Transfer Protocol Suite Secure            |
| I-D    | IPS Documents                                       |
| IAB    | Internet Architecture Board                         |
| IANA   | Internet Assigned Numbers Authority                 |
| IAOC   | IETF Administrative Oversight Committee             |
| IASA   | IETF Administrative Support Activity                |
| IC     | Internet Corporation                                |
| ICANN  | Internet Corporation for Assigned Names and Numbers |
| ICP    | Internet Coordination Policy                        |
| ID     | Internet Draft                                      |
| IDN    | Internationalized Domain Names                      |
| IESG   | Internet Engineering Steering Group                 |
| IETF   | Internet Engineering Task Force                     |
| IKOS   | ICANN KSK Operations Security                       |
| INR    | Internet Number Resource                            |
| IP     | Internet Protocol                                   |
| IPS    | IANA Project Specialist                             |
| IRSG   | Internet Research Steering Group                    |
| IRTF   | Internet Research Task Force                        |
| ISC    | Internet Systems Consortium                         |
| ISMS   | Information Security Management System              |
| ISO    | International Organization for Standardization      |
| ISOC   | Internet Society                                    |
| ISP    | Internet Service Providers                          |
| ITAC   | Internet Technical Advisory Committee               |
| ITAD   | Internet Technical Advisory                         |
| ITU    | International Telecommunication Union               |
| KPI    | Key Performance Indicators                          |
| KSK    | Key Signing Key                                     |
| KSR    | Key Signing Request                                 |
| LACNIC | Latin American Network Information Center           |
| LACTLD | Latin American and Caribbean TLD Association        |
| MENOG  | Middle East Network Operators Group                 |
| MIME   | Multipurpose Internet Mail Extensions               |
| MOU    | Memorandum of Understanding                         |
| N/A    | Not Applicable                                      |
| NANOG  | North American Network Operations Group             |

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|        |  |
|--------|--|
| NCC    | Network Coordination Center                                |
| NIST   | National Institute of Standards and Technology             |
| NOI    | Notice of Inquiry  |
| NRM    | Number Resources Manager                                   |
| NRO    | Number Resources Organization                              |
| NS     | Name Server  |
| NSF    | National Science Foundation                                |
| NSFNET | National Science Foundation Network                        |
| NSRC   | Network Startup Resource Center                            |
| NTIA   | National Telecommunications and Information Administration |
| NTT    | Nippon Telegraph and Telephone Corporation                 |
| OECD   | Organization for Economic Co Development                   |
| OFAC   | Office of Foreign Assets Control                           |
| PCH    | Packet Clearing House                                      |
| PDF    | Portable Document Format                                   |
| PDP    | Policy Development Program                                 |
| PEN    | Private Enterprise Number                                  |
| PGP    | Pretty Good Privacy  |
| PM     | Program Manager  |
| PMA    | Policy Management Authority                                |
| POC    | Point of Contact   |
| PPM    | Protocol Parameter Manager                                 |
| QNAME  | Qualified Name   |
| RALO   | Regional at Large Organizations                            |
| RFC    | Requests for Comments                                      |
| RFP    | Request for Proposal                                       |
| RIR    | Regional Internet Registries                               |
| RR     | Registries   |
| RRSet  | Resource Record Set  |
| RRSIG  | Resource Record Signature                                  |
| RSSAC  | Root Server System Advisory Committee                      |
| RT     | Requester Time   |
| RZ     | RZ ZSK   |
| RZM    | Root Zone Management                                       |
| S/MIME | Secure/Multipurpose Internet Mail Extension                |
| SANOG  | South Asian Network Operators Group                        |
| SDLC   | Software Development Life Cycle                            |
| SHA    | Secure Hash Algorithm                                      |
| SKR    | Signal Key Response  |
| SLA    | Service Level Agreement                                    |
| SO     | Supporting Organizations                                   |
| SOA    | Statement of Authority                                     |
| SOW    | Statement of Work  |

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|        |   |
|--------|---|
| SSAC   | Security and Stability Advisory Committee                 |
| SSL    | Secure Sockets Layer                                      |
| TCP    | Transmission Control Protocol                             |
| TCR    | Trusted Community Representative                          |
| TLD    | Top Level Domain  |
| TLG    | Technical Liaison Group                                   |
| TLS    | Technical Liaison   |
| U.S.   | United States   |
| UDP    | User Datagram Protocol                                    |
| UK     | United Kingdom  |
| URI    | Uniform Resource Identifier                               |
| URL    | Uniform Resource Locator                                  |
| VP     | Vice President  |
| VPN    | Virtual Private Network                                   |
| WEIRDS | WHOIS-based Extensible Internet Registration Data Service |
| WG     | Working Group   |
| WGC    | Working Group Chair                                       |
| ZSK    | Zone Signing Key  |

### Cross Reference Matrix

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| 1   | 1.7.3                   | Transition to Successor Contractor                          | C.7.3         | L.6             | M.8             |
| 1   | 1.8                     | Performance Exclusions                                      | C.8           | L.6             | M.8             |
| 1   | 1.9                     | Special Contract Requirements                               | H             | L.6             | M.8             |
| 2   | 2.0                     | Management Approach-Factor 2                                | 1.2.12        | L.6             | M.8             |
| 2   | 2.1                     | Brief History of ICANN                                      |               | L.6             | M.8             |
| 2   | 2.2                     | Management Plan   |               | L.6             | M.8             |
| 2   | 2.3                     | Resumes   | C.1-C.8       | L.6             | M.8             |
|     |                         |   |               |                 |                 |
| 3   | 3.0                     | Past Performance-Factor 3                                   | C.1-C.8       | L.6             | M.8             |
| 3   | 3.1                     | ICANN Contract  | C.1-C.8       | L.6             | M.8             |
| 4   | 4.0                     | Documentation Demonstrating Fulfillment of Mandatory Factor |               | L.6             | M.3             |

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## EXECUTIVE SUMMARY

For more than a decade, the Internet Corporation of Assigned Names and Numbers (ICANN) has performed the Internet Assigned Numbers Authority (IANA) Functions on behalf of the National Telecommunications and Information Administration (NTIA), an agency within the U.S. Department of Commerce (DoC). A major NTIA activity is promoting the stability and security of the Internet's Domain Name System (DNS) through its management of the IANA Functions Contract.

In seeking an organizational partner to perform the IANA Functions, the NTIA requires an established and trusted contractor with existing close and constructive relationships with the multistakeholder community, and a contractor relied on by the stakeholders to bring IANA Functions' experienced personnel to support this program. Importantly, NTIA requires a contractor that presents the lowest possible risk.

Only ICANN offers NTIA a demonstrated track record of contributing professional support to all IANA Functions.

ICANN was established in 1998 as a not-for-profit, public benefit corporation organized under the laws of the State of California. ICANN has two primary functions: (1) to coordinate, at the top level, the global Internet's systems of unique identifiers (names, numbers and protocol parameters) and (2) to operate as the private sector-led, multistakeholder organization responsible for bottom-up policy development reasonably and appropriately related to these technical functions. ICANN is dedicated to keeping the Internet secure, stable and interoperable.

ICANN has successfully performed the IANA Functions since December 24, 1998. Beginning in February 2000, and, most recently, in August 2006, the DoC entered into four successive agreements with ICANN to perform the IANA Functions. Over the past 13 years, ICANN enhanced the IANA Functions capabilities to include 11 assigned staff, a redundant systems infrastructure and incorporating improvements recommended by DNS stakeholders and our own internal experts.

The multistakeholder community supports ICANN's selection and has indicated that we are highly competent in our provision of the IANA Functions. More than 70 of the responses to NTIA's Notice of Inquiry (NOI) and Further Notice of Inquiry (FNOI) urged ICANN's continued performance of the IANA Functions contract. Many invoked the benefits of the close relationship between the successful administration of the IANA Functions and the other

### WHY CHOOSE ICANN?

- ✓ **PROVEN AND UNIQUE CAPABILITY:** ONLY CONTRACTOR WITH 13+ YEARS PERFORMING IANA SUPPORT TO NTIA, PROVIDING ALL PERSONNEL, MATERIALS, EQUIPMENT, SERVICES AND FACILITIES
- ✓ **SHARED GOALS:** TRUSTED PARTNERSHIP ESTABLISHED BETWEEN NTIA AND ICANN ON IANA FUNCTIONS PROGRAM OVER FOUR CONTRACTS AND 20 AMENDMENTS
- ✓ **PRIME CONTRACTOR PERFORMING AT NO:** COST TO GOVERNMENT AND DELIVERING SECURE AND STABLE MANAGEMENT OF GLOBAL INTERNET'S SYSTEMS OF UNIQUE IDENTIFIERS
- ✓ **CONTINUITY:** ICANN LEVERAGES COMPETENCIES GARNERED UNDER CURRENT IANA FUNCTIONS CONTRACT
- ✓ **PM AND KEY PERSONNEL:** SUPPORTED BY STAFF WITH AN AVERAGE OF 5+ YEARS OF EXPERIENCE PERFORMING IANA FUNCTIONS IN ALL EIGHT SOW FUNCTIONAL AREAS

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capabilities within ICANN. The ICANN community support strongly attests to ICANN’s success in fulfilling the IANA Functions and believes it is the best choice moving forward.

As the Prime Contractor, ICANN will perform all IANA Functions, providing a single Point of Contact (POC) to NTIA with ultimate accountability for successful contract execution and completion. ICANN will continue to bring NTIA competent organizational oversight, strong central contract management, and excellence in execution – all essential for successful contract performance. We have a demonstrated track record of providing practical solutions in performance of current IANA Functions Contract. ICANN is committed to retaining the skills and expertise garnered from the current IANA Functions staff, and to bringing new and relevant technology to all interested and affected parties.

For this IANA Functions Contract, ICANN will provide highly qualified professionals to maintain the continuity and stability in the performance of the Functions, we will meet all Statement of Work (SOW) requirements and schedules, and we will respond in a timely manner to all requests. **Figure ES-1** summarizes NTIA’s requirements in the SOW with a brief description of the salient features of our offer, and the benefits that will accrue to NTIA and the multistakeholder community with an award to ICANN.

**Figure ES-1. ICANN Approach. NTIA benefits from continuity and stability brought by experienced personnel.**

| NTIA’S NEEDS  | ICANN PROPOSED APPROACH  | GENUINE, VALUE-ADDED BENEFITS TO NTIA AND STAKEHOLDERS   |
|---|--|--|
| <p><b>Continuity –</b><br/>                     Experienced team with proven technical expertise and in-depth understanding of IANA Functions</p>                                 | <ul style="list-style-type: none"> <li>• ICANN provides highly competent support to the IANA Functions Contract with same/similar SOW requirements; ICANN will continue to provide same level of competence</li> <li>• ICANN will capitalize and leverage on our extensive experience of over 13 years’ continuous performance of IANA Functions.</li> </ul>   | <ul style="list-style-type: none"> <li>• High quality, responsive performance on day one</li> <li>• No transition and performance risk</li> <li>• Deep institutional knowledge</li> <li>• Resident technical experts in DNS, Internet numbering, Domain Name System Security (DNSSEC), and Root Server Operations</li> </ul> |
| <p><b>Relationships –</b><br/>                     Established close, constructive working relationships with all interested and affected parties, including all stakeholders</p> | <ul style="list-style-type: none"> <li>• ICANN will continue to meet monthly with the Internet Engineering Steering Group (IESG) and IANA Working Group.</li> <li>• ICANN will continue to attend and participate annually in ten regularly scheduled meetings of the Regional Internet Registries (RIRs).</li> <li>• Twice annually, ICANN will continue to participate in a workshop with the leadership of Internet Society (ISOC), American Registry for Internet Numbers (ARIN), The Internet Numbers Registry for Africa (AFRINIC), Latin American and Caribbean Internet Addresses Registry (LACNIC), Asia-Pacific Network Information Center (APNIC), Réseaux IP European Network</li> </ul> | <ul style="list-style-type: none"> <li>• Quality</li> <li>• Superior performance</li> <li>• Existing high-quality relationships on day one</li> <li>• Well-established communication channels with the multistakeholder community</li> </ul>   |

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| NTIA'S NEEDS  | ICANN PROPOSED APPROACH   | GENUINE, VALUE-ADDED BENEFITS TO NTIA AND STAKEHOLDERS   |
|---|---|--|
|   | <p>Coordination Center (RIPE NCC), Internet Architecture Board (IAB), Internet Engineering Task Force (IETF), and World Wide Web Consortium (W3C).</p> <ul style="list-style-type: none"> <li>• ICANN will continue to facilitate regular teleconferences of the Country Code Name Supporting Organization (ccNSO), Generic Name Supporting Organization (GNSO), At-Large Advisory Committee (ALAC), and Governmental Advisory Committee (GAC).</li> <li>• ICANN will continue to host face-to-face international public meetings annually where all interested and affected parties are invited to participate (currently three per year).</li> <li>• ICANN will attend the three meetings that are held annually by the IETF.</li> <li>• ICANN will meet regularly with the Root Zone Maintainer on technical matters and to support the end-to-end root zone process.</li> </ul> |  |
| <p><b>Stability –</b><br/>Ability to quickly place seasoned and qualified personnel to fill positions</p> | <ul style="list-style-type: none"> <li>• Experienced personnel will continue to support the contract.</li> <li>• Effective recruiting and employee retention programs; access to excellent personnel worldwide</li> <li>• Very low turnover</li> </ul>  | <ul style="list-style-type: none"> <li>• Full customer satisfaction</li> <li>• No risk transition</li> <li>• No loss of productivity</li> <li>• No learning curve</li> </ul> |
| <p><b>Quality –</b><br/>Proven, reliable management practices and procedures</p>                          | <ul style="list-style-type: none"> <li>• Led by proven IANA Functions PM, Elise Gerich, with 23 years of experience</li> <li>• Field-tested quality and management plans</li> </ul>   | <ul style="list-style-type: none"> <li>• Timely submission of deliverables</li> <li>• High quality performance</li> <li>• Quality management of team and products</li> </ul> |
| <p><b>Smooth Transition –</b><br/>Low risk, smooth transition</p>   | <ul style="list-style-type: none"> <li>• Already tested IANA Functions PM</li> <li>• Incumbent experienced staff in place</li> <li>• Established close and constructive relationships with stakeholders</li> <li>• Established headquartered in Los Angeles, California, where all IANA Functions are performed</li> </ul>  | <ul style="list-style-type: none"> <li>• Management continuity</li> <li>• Continuity – no learning curve</li> </ul>  |

Transitioning responsibilities as complex as the IANA Functions Contract adds risk. NTIA will have a truly seamless and low risk delivery of service, lacking any disruptions to the multistakeholder community by selecting an experienced operator. ICANN stands ready to continue and enhance support we currently provide.

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**PERFORMANCE CAPABILITY**

*ENHANCED BY ICANN'S IANA FUNCTIONS TEAM WITH SPECIALIZED SKILLS AND CORE COMPETENCIES HONED TO THE IANA FUNCTIONS CONTRACT STATEMENT OF WORK*

For more than 13 years, ICANN has performed the IANA Functions, delivering continuity, stability and expertise for every task and SOW requirement. We are ready to continue providing the dependable, high-quality support we currently deliver. We offer continuity and retention of institutional knowledge as we continue our close partnership with NTIA. ICANN possesses an intimate understanding of IANA Functions processes and procedures, and we have an in-depth understanding of the SOW requirements. We will leverage our experience and expertise to avoid mistakes, reduce program risks and fulfill the objectives of this contract in a timely and efficient manner achieving full customer satisfaction.

Our strong IANA Functions team has significant experience in the technical aspects of this contract and will continue to add value on the new contract. ICANN's IANA Functions Program Manager (PM), Liaison for Technical Protocol Parameters Assignment, Liaison for Root Zone Management, and Liaison for Internet Number Resource Management developed strong and healthy relationships with the interested parties identified in Section C.1.3 for more than six years on average. The Liaison for Technical Protocol Parameters does and will continue to meet monthly with the IETF-IANA Working Group. This group comprises the leaders of the Internet Technical community. Three times annually, the IANA Functions PM as well as the Liaison for the Technical Protocol Parameters Assignment meet and will continue to meet with the IAB Chair, Bernard Aboba; the IETF Chair, Russ Housley; IETF Administrative Director, Ray Pelletier; and other leaders of the Internet Engineering Steering Group (IESG). These regular meetings have forged a strong and collaborative working relationship between ICANN and this important technical stakeholder, the IETF.

The Liaison for Root Zone Management regularly attends and will attend regional Top-Level Domain meetings like CENTR and APTLD. In addition, the ccNSO has invited the Liaison for Root Zone Management to participate in meetings on a variety of topics. The invitations are a measure of the mutual respect between the leadership of the ccNSO, Lesley Cowley, Keith Davidson and Chris Disspain, and ICANN's Liaison of Root Zone Management. At the three annual ICANN meetings, the Liaison for Root Zone management has and will continue to meet with the ccNSO and to report on the status of the IANA Functions activities.

The Liaison for Internet Number Resource Allocation and the IANA Functions PM represent and will continue to represent ICANN at the ten annual meetings hosted by the five RIRs. At these meetings, the IANA Functions PM will attend face-to-face meetings with the CEOs of the RIRs. The CEOs with whom ICANN has established excellent relationships include John Curran, ARIN; Adiel Akplogan, AFRINIC; Axel Pawlik, RIPE NCC; Paul Wison, APNIC; and Raul Echeberria, LACNIC. In addition to the regular meetings with the leadership of the RIRs, ICANN today presents and will continue to present updates on the IANA Functions to the RIR membership at each of these ten meetings per year. The Address Supporting Organization (ASO) is one of ICANN's supporting organizations, and it is composed of members nominated by the RIRs. The

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Liaison for Internet Number Resource Allocation participates and will continue to participate in the monthly ASO teleconferences as an invited and respected subject matter expert.

*PAST PERFORMANCE*

*AN INDICATOR OF THE FUTURE EXCELLENCE: MORE THAN 13 YEARS OF EXPERIENCE AND QUALITY PERFORMING IANA FUNCTIONS*

ICANN is proud of our historical record supporting the IANA Functions since 1998 under the Transition Agreement with the University of Southern California and the subsequent agreements with the Department of Commerce entered in 2000, 2001, 2003, and 2006.

Since September 2006, ICANN has been managing the current IANA Functions with renewals on each anniversary through the term of five years. ICANN has performed the IANA Functions since 1998 on a no-fee basis. In recognition of ICANN's success in this endeavor, more than 70 responses to the NOI and FNOI supported ICANN's IANA Functions Contract renewal. ICANN will bring this accumulated wealth of experience, long-standing relationships with the IANA Functions stakeholders, and key expertise in the IANA Functions areas into the new contract and continue to perform this job with excellence. The experience of this seasoned team is shown in more detail in Section 3 Factor 3 Past Performance of this proposal. ICANN provides the best option for a no risk transition by retaining our experts in the relevant SOW areas.

In summary, ICANN eagerly anticipates continuing our partnership with the DoC and NTIA under the IANA Functions Contract. We are confident our technical approach, management plan and past performance—along with experienced, incumbent personnel—will provide value-added expertise to exceed the goals of providing the continuity and stability of the IANA Functions. We will continue to perform in a flexible and responsive manner to implement evolving policies and procedures. ICANN looks forward to bringing our proven capability to support NTIA and the IANA Functions in the future.

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## 1.0 Technical Approach, Factor 1 [L.6; M.8; C.1-8; Appendices 1,2; B.; E.2; F; H.8,9]

### ICANN'S TECHNICAL APPROACH FOR 1.0 EXCEEDS EVALUATION FACTORS

**Quality:** Results from the April 2012 Customer Survey indicates strong satisfaction with how ICANN provides the IANA Functions: 94% are very satisfied/satisfied with how we provide accurate registries, 93% are very satisfied/satisfied with how courteous we are in providing the services, 90% are very satisfied/satisfied with the ease of the registration process, 87% are very satisfied/satisfied with the quality of process documentation, and 84% are very satisfied/satisfied with the speed with which the requests are handled. In 2010, Assistant Secretary for Communication and Information, Larry Strickling, sent a letter of commendation to ICANN for our successful deployment of DNSSEC. In the letter Mr. Strickling said: "The dedicated and methodical approach taken by you and your team in effecting the implementation is commendable and a testament to the success of the deployment. Congratulations for seeing this effort through so effectively."

**Completeness:** ICANN carefully analyzed the programmatic and technical requirements of the IANA Functions effort. Accordingly, we addressed in this proposal all requisite areas of the SOW and Instructions. Throughout our discussion below, we present our thorough understanding of the tasks and offer a comprehensive complete approach and response to meeting or exceeding all evaluation criteria.

**Responsiveness:** ICANN's responsiveness during the term of the 2006 contract has shown continuous improvement, and ICANN will continue to bring high-quality and courteous delivery of the IANA Functions. ICANN has reported monthly on the delivery of the IANA Functions to the NTIA since 2006 and will continue to report on its performance of the IANA Functions. ICANN has delivered on its Service Level Agreements with the IETF as defined in the MoU between ICANN and the IETF.

**Relevance:** The IANA Functions are integral to maintaining a stable and interoperable Internet. ICANN initiated a Business Excellence Program for the IANA Department three years ago based on the internationally recognized European Standard EFQM. This program has introduced a systemic and sustainable process for continuous improvement. ICANN has adopted this methodology for the IANA Functions operations and will continue to follow this methodology for quality management.

**Credibility:** ICANN has demonstrated its reputation for effectiveness in building consensus for new programs. Examples of areas where ICANN has built consensus and was effective in the implementation are the Fast Track IDN Program and the Signing of the Root Zone (DNSSEC). The IDN Fast Track Program was a cooperative activity with the ccNSO and the GAC to introduce Top-Level Domain names in non-Latin scripts. The deployment of DNSSEC was the result of cooperation between ICANN, IETF, NTIA, and Verisign. ICANN is recognized for our technical expertise and has been selected to chair IETF working groups. Being chosen as a Working Group Chair (WGC) demonstrates the respect shown by the technical community to ICANN. ICANN has been invited to speak at GOIPv6, RSA conferences, Regional Internet Registry meetings, Network Operator meetings such as NANOG and MENOG, and as technical advisors at ITU IPv6 and IDN meetings. A partial list of ICANN's employees who have been invited speakers at the various events include: Elise Gerich, Jeff Moss, Whit Diffie, Joe Abley, Kim Davies, Leo Vegoda, Michelle Cotton, Naela Sarras, and Mehmet Ackin.

The Internet Corporation for Assigned Names and Numbers (ICANN) offers the National Telecommunications and Information Administration (NTIA) and the multistakeholder community the demonstrated capabilities to successfully maintain continuity and stability of the Internet Assigned Numbers Authority (IANA) Functions. We are the only organization that fully understands the unique operational characteristics of IANA Functions.

ICANN has served as the Prime Contractor on the current IANA Functions contract since September 2006. The Department of Commerce (DoC) and NTIA have demonstrated their full

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confidence in ICANN with renewals on each anniversary through the term of five years. Additionally, the DoC granted two extensions to ICANN in 2011 and 2012 as the current solicitation process was underway. Including the 2006 contract, ICANN has provided continuous and stable technical and management support for the IANA Functions since 1998 on a no-fee basis. In recognition of ICANN's success, more than 70 positive responses from international governments and other organizations to the Notice of Inquiry (NOI) and Further Notice of Inquiry (FNOI) urging ICANN's continued performance of the IANA Functions Contract. ICANN will bring this accumulated wealth of experience and long-standing relationships with the IANA Functions customers and stakeholders and key expertise in the IANA Functions areas into the new contract and continue to perform this job with excellence.

We are also the only organization with the experience and knowledge necessary to ensure continuity of service with no disruption. Our past performance demonstrates a strong emphasis on stakeholder satisfaction. ICANN remains prepared to provide the highest quality support by continuing our constructive working relationships with all interested and affected parties. ICANN is proficient in implementing policies, operational doctrine, techniques, and procedures related to the IANA Functions. ICANN is well positioned to continue providing NTIA the technical support specified in the SOW, is intimately familiar with these requirements and demonstrates a success record executing all requirements under the current contract. We are prepared to continue our successful record of compliance with all the general requirements of the contract.

Per Section M.8, Factor 1, ICANN will comply with the instructions to maintain the current services and not to expand the scope of the IANA Functions.

The following sections of the proposal describe in detail (step-by-step) ICANN's ability to understand and perform all the SOW requirements (SOW C.1 through C.8) and achieve the objects of the IANA Functions contract.

## 1.1 Background [L.6; M.8; C.1]

ICANN was incorporated in September 1998 as the not-for-profit organization responsible for coordinating, at the overall level, the global Internet's systems of unique identifiers and ensuring the stable and secure operation of the Internet's unique identifier systems. ICANN has two primary functions: The first is to coordinate, at the top level, the global Internet's systems of unique identifiers (names, numbers and protocol parameters). The second is to operate as the private sector-led, multistakeholder organization responsible for bottom-up policy development reasonably and appropriately related to these technical functions. For a detailed discussion of ICANN's history, please see Section 2.3 of this proposal.

ICANN's Bylaws limit activities to those matters within ICANN's mission requiring or significantly benefiting from global coordination and, to the extent feasible and appropriate, delegating coordination functions to or recognizing the policy role of other responsible entities that reflect the interests of affected parties. The Bylaws also direct ICANN to seek and support broad, informed participation reflecting the functional, geographic and cultural diversity of the Internet at all levels of policy development and decision-making.

Two important indicators of satisfaction with ICANN's performance are our follow-on work and commendations to the organization. NTIA has demonstrated full confidence in our performance by entrusting the IANA Functions to ICANN through four contracts and 20 amendments. We work hard to develop trusted and lasting relationships with our many stakeholders. ICANN regularly receives kudos from customers and stakeholders:

*"We congratulate ICANN on the very impressive performance of the IANA function, the steady progress on DNSSec and the overall improvements to the ICANN process especially the better organization of meetings and associated preparatory papers."*

– Richard Currey, CEO of InternetNZ, in a letter to Rod Beckstrom, October 2009

*"The [IETF IANA WG] monthly calls were once quite important and had a lot to do. Nowadays, there are any fewer issues, and the calls are shorter and often have few participants. I view that as a sign of goodness. People presumably feel like things are generally in good shape and there isn't a need to discuss such. In short, the IETF is largely happy with the reports and the information they contain. And more importantly, with the overall quality of IANA service to the IETF."*

– Thomas Narten, IETF Liaison to the ICANN Board,  
in e-mail to the Board IANA Committee, December 2009

*"The IAOC [IETF Administrative Oversight Committee] extends its thanks and appreciation for the exceptional performance of IANA on behalf of the IETF over the last few years. This performance has been marked by its professionalism, cooperation, open communications and can-do spirit. Your capable staff and ongoing investment in improving the robustness of your infrastructure have contributed to our successful partnership."*

– Ray Pelletier in e-mail to Elise Gerich and Rod Beckstrom, November 2010

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*"I am taking this opportunity to place on record my sincere gratitude for an excellent experience in the handling by your Root Management Team of our recent request for nameserver changes for .DM [...] The first acknowledgement of our submission and all communications thereafter were professional, clearly instructional and most remarkably, expeditiously handled."*

– H.E. Jennifer M. Aird in e-mail to Kim Davies, August 2011

### **1.1.1 Collaboration with Interested and Affected Parties [C.1.3]**

No one person, organization or government controls the Internet. Like an ecosystem, the Internet has many different interested and affected parties and multi-layered interdependencies. ICANN will continue to play a high-level, important but limited role in how the Internet is organized. ICANN will continue to coordinate its efforts with several other independent entities or groups that also play important roles in the Internet ecosystem and are dependent on satisfactory performance of the IANA Functions. These independent entities are as follows:

- **Internet Architecture Board (IAB):** The IAB is a committee of the Internet Engineering Task Force (see definition below). Its responsibilities include oversight of the architecture for protocols and procedures used by the Internet. IAB's major role is long-range planning and coordination between different areas of IETF activity.
- **Internet Engineering Steering Group (IESG):** A management committee of the Internet Engineering Task Force (see definition below).
- **Internet Engineering Task Force (IETF):** The IETF develops and designs standards for the Internet system. It is international and decentralized and has many different working groups on various technical issues.
- **Internet Research Steering Group (IRSG):** A management committee of the Internet Research Task Force.
- **Internet Research Task Force (IRTF):** An unincorporated association overseen by the Internet Architecture Board.
- **Internet Service Providers (ISPs):** ISPs are companies that provide subscribers with access to the Internet.
- **Internet Society (ISOC):** ISOC operates the .org top-level domain registry and does Internet capacity development in developing countries. It supports the IETF.
- **Number Resources Organization (NRO):** The Regional Internet Registries (see definition below) formed the NRO to protect the unallocated Number Resource pool, to promote and protect the bottom-up policy development process and to act as a focal point for Internet community input into the RIR system.
- **Regional Internet Registries (RIRs):** These non-profit organizations distribute Internet Number Resources regionally to Internet service providers and local Internet registries. There are currently five RIRs: African Network Information Centre (AfriNIC), Asia Pacific Network Information Centre (APNIC), American Registry for Internet Numbers (ARIN), Latin American and Caribbean Internet Addresses Registry (LACNIC), and Réseaux IP Européens Network Coordination Centre (RIPE NCC).

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- **Registrars:** Companies that assist individuals and organizations in registering a new domain name within higher-level domain spaces. Registrars sell domain name registrations for the registries.
- **Registries:** Each registry has a listing of each domain name registered in that registry. There are two types: generic top-level domain registries (such as .COM or .INFO) and country code top-level domain registries (such as .DE for Germany or .JO for Jordan).
- **Root Server Operators:** The root server operators publish the list of all top-level domains and respond to queries of what the proper network address is for each name. ICANN operates the L-root server, one of 13 domain name system root servers in the world.

As manager of Internet names and addresses, ICANN will continue to support and encourage broad representation from industry, governments, registries, registrars, commercial users, non-commercial users, and individual Internet users into its policy-making processes. This “multistakeholder model,” allows issues to develop from the “bottom-up” and resolve through consensus.

### ***Understanding the Requirement***

ICANN fully understands that close, constructive working relationships with all interested and affected parties is and will continue to be critical to the successful implementation of the IANA Functions and the continued evolution of the Domain Name System toward the goals of ensuring stability, competition, private bottom-up coordination and representation. ICANN will leverage and continue to grow strong, collaborative relationships with the IANA Functions stakeholders.

### ***Technical Approach***

Broadly stated, ICANN collaborates with these interested and affected parties as listed above—sometimes called the Internet community—in two key ways.

First, ICANN will continue to work with other Internet organizations, such as IETF, IAB and the RIRs as well as regional TLD operators’ groups, like the Council of European National Top-Level Domain Registries (CENTR). ICANN will also continue to implement the policies and standards developed by those groups. In some cases, a Memorandum of Understanding (MoU) details the parameters of the relationship. For example, ICANN has an MoU with the IETF that specifies that ICANN will assign and register Internet protocol parameters only as directed by the criteria and procedures specified in the Requests for Comments (RFCs), including proposed, draft and full Internet Standards and Best Current Practice documents and any other RFC that calls for ICANN assignment. The MoU between ICANN and IETF also specifies that ICANN will work with the IETF to develop any missing criteria or procedures over time and that ICANN will adopt these when approved by the IESG.

The second way ICANN will continue to collaborate with interested and affected parties is in facilitating the development of policies regarding matters within the scope of our mission. Following the bottom-up, consensus-driven policy development process, ICANN will remain a forum for all who share an interest in the IANA functions and the domain name system, including top-level domain operators and managers, governments and the Internet user community.

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ICANN's decentralized governance model will continue to place citizens, industry and governments on an equal level. Unlike more traditional top-down governance models, the multistakeholder model mimics the structure of the Internet itself—borderless and open to all. This ensures that everyone who uses the Internet has a voice in how it is governed.

**Close Constructive Working Relationship.** Part of the broader Internet ecosystem, ICANN as the IANA Functions provider will have a limited but important role in ensuring the stability and security of the Internet's domain name system. It is critical that the IANA Functions provider has close and constructive relationships with all affected and interested parties. ICANN, as the incumbent, has established and will maintain these relationships in performance of the IANA Functions. ICANN will implement policy developed by other organizations, such as employing technical protocol parameters policy developed by the IETF or policies for the operation of .ARPA developed by the IAB. ICANN will also facilitate the development of pertinent policy as it relates to our own mission through a bottom-up, consensus-driven process with interested and affected parties.

Working Groups will form around an issue and consider it from all angles, making decisions by consensus wherever possible. As in the past, these Working Groups will be open to everyone in ICANN's volunteer community. All Working Group discussions will be recorded and transcribed so that the public has full access to discussions and debate. Major documents and executive summaries will typically be translated into the five non-English United Nations languages.

Public comments will be sought at several stages in the policy development process to let interested community members provide their views on policy proposals and to ensure policy recommendations reflect the concerns and perspectives of the broader Internet community. Working Groups' decisions or recommendations will be considered first by each relevant Supporting Organization and then by the ICANN Board of Directors. The ICANN Board will have ultimate authority to approve or reject policy recommendations.

**ICANN Liaisons.** In addition to the strong working relationships already in existence between ICANN and the relevant groups, ICANN will appoint liaisons to the IETF, IAB, RIRs, and top-level domain operators and managers. Relationships will be fostered through face-to-face meetings, Working Groups and various forms of online collaboration. For example, ICANN has established and will continue to support an IETF-IANA Working Group that meets monthly to review service-level agreements and Requests for Comments that impact ICANN's performance of the IANA Functions. ICANN will continue to employ an integrated, multi-threaded approach towards maintaining constructive working relationships, taking time to hear each group's needs for operational support and other assistance they need in relation to effectively accessing the IANA Functions.

The IANA Functions stakeholders, broadly understood, include everyone who uses the Internet. In addition to the Internet stakeholders who are part of the ICANN structure, ICANN also maintains a strong working relationship with ISOC. In cooperation, ICANN and ISOC provide workshops to less developed regions, engage with government representatives to address key Internet governance issues, and coordinate announcements on key Internet milestones of importance to everyday users of the Internet. Many ISOC chapters have joined ICANN's At-

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Large community as At-Large Structures, further supporting the relationship between the two organizations.

ICANN will continue to attend operator meetings, such as African Network Operators Group (AfNOG) and South Asian Network Operators Group (SANOG), to liaise with ISPs and promote discussions of technical implementation issues that require community cooperation.

#### **1.1.1.1 ICANN model**

ICANN's consensus-driven, bottom-up, policy-making governance model is built on transparency, accountability, openness, inclusion, trust, and collaboration. It serves the global public interest. When all voices are heard, no single voice can dominate an organization. We will continue to support the multistakeholder model as the best means for engaging with the many parties both interested and affected by the performance of the IANA Functions.

The ICANN model comprises Supporting Organizations and Advisory Committees, which encompass communities directly benefiting from ICANN's management of the IANA Functions:

- ccTLD managers
- gTLD managers
- Internet engineers engaged in standards development
- Regional Internet Registries
- Root server operators
- Hardware, software, and routing engineers who rely on the unique identifiers in their day-to-day work
- ISP operators
- End users through At-Large and ALAC

Each of these groups will have a place in ICANN's policy development process—either through their own standards development organization that has agreements with ICANN or in one of ICANN's Supporting Organizations or Advisory Committees.

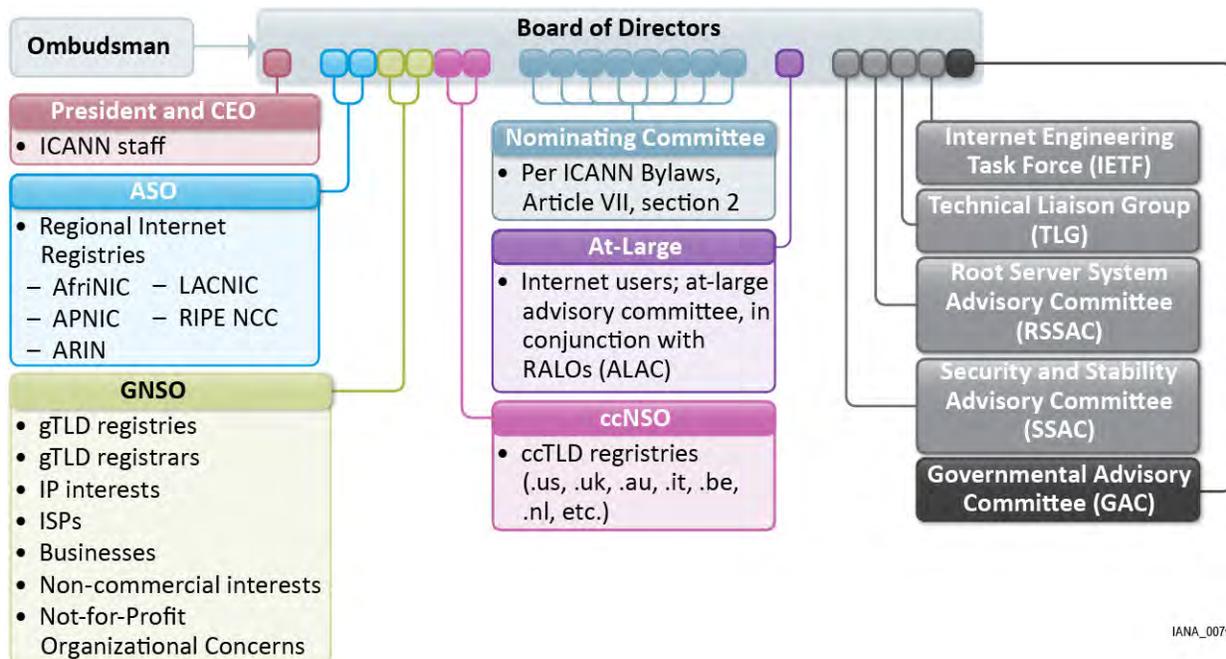
A key component of the model is the Ombudsman, an independent, impartial and neutral officer of ICANN. As an alternative dispute resolution practitioner for the ICANN community, the Ombudsman is available to help in disputes about fairness and process. This person has jurisdiction over problems or complaints about decisions, actions or inactions by ICANN, the Board of Directors or unfair treatment of a community member by ICANN, the Board or a constituency body.

Illustrating the importance of full participant involvement, ICANN's Board of Directors consists of 21 members, many drawn from the community directly. In addition to the voting role of ICANN's President and CEO, this includes seven voting members selected by the following ICANN Supporting Organizations and Advisory Committees:

- Two voting Board members are selected by the Address Supporting Organization (ASO), which comprises members of the Regional Internet Registries.

- Two voting Board members are selected by the Country Code Names Supporting Organization (ccNSO), which comprises those members representing country code top-level domain operators.
- Two voting members are selected by the Generic Names Supporting Organization (GNSO), which includes those members representing stakeholder groups and constituencies with business and policy interests in generic top-level domains.
- One voting member is selected by the At-Large, the primary organizational home within ICANN for individual Internet users.

Eight voting members of ICANN’s Board are selected by ICANN’s Nominating Committee, which comprises members of each of the ICANN stakeholder communities. See **Figure 1.1-1**.



**Figure 1.1-1. ICANN’s Multistakeholder Model**

The Board also has one non-voting Liaison from each of the following:

- Internet Engineering Task Force represents the engineers and developers engaged in protocol-parameter standards development.
- ICANN’s Governmental Advisory Committee (GAC) represents governments and economies as recognized by the UN ISO 3166 Maintenance Agency.
- ICANN’s Root Server System Advisory Committee (RSSAC) represents the root server operators.
- ICANN’s Security and Stability Advisory Committee (SSAC) is a group of DNS experts who provide guidance to ICANN on issues that may threaten the stability or security of the DNS system.
- The Technical Liaison Group (TLG) consists of four organizations: the European Telecommunications Standards Institute (ETSI), the International Telecommunications

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Union’s Telecommunication Standardization Sector (ITU-T), the World Wide Web Consortium (W3C), and the Internet Architecture Board (IAB). Annually, in rotation, one TLG organization appoints one non-voting liaison to the Board and one non-voting member to the Nominating Committee. (The IAB does not take a role in this rotation due to the participation of an IETF liaison.)

ICANN will work with each of these groups to facilitate their participation in the ICANN processes and to meet their IANA Functions requirements.

Certain issues regarding management of the IANA Functions are covered by formal agreements with the IETF or NRO or by an RFC (like the management guidelines and operational requirements for .ARPA as detailed in RFC 3172). For issues outside of those agreements and RFCs, ICANN-specific policy recommendations will be formed and refined through ICANN’s Supporting Organizations (SOs) and influenced by Advisory Committees (ACs)—all composed of volunteers from over 130 countries and territories—in a bottom-up, open and transparent process. Members of any SO and AC as well as the ICANN Board may raise an issue they believe requires policy development.

#### **1.1.1.2 Internet Engineering Task Force (IETF) and Internet Architecture Board (IAB)**

ICANN will continue to operate under the existing MoU with the IETF. This MoU sets out technical requirements for use in performance of the IANA function in assigning and registering Internet protocol parameters only as directed by the criteria and procedures specified in Requests for Comments (RFCs), including Proposed, draft and full Internet Standards and Best Current Practice documents and any other RFC that calls for IANA Actions. If there is no documentation for an existing registry, then ICANN will continue to assign and register Internet protocol parameters that have traditionally been registered, following past and current practice for such assignments, unless otherwise directed by the IESG. If in doubt or in case of a technical dispute, ICANN will seek and follow technical guidance exclusively from the IESG. Where appropriate the IESG will appoint an expert to advise ICANN. ICANN will work with the IETF to develop any missing criteria or procedures over time, which ICANN will adopt when so instructed by the IESG. In the event of a technical dispute between the ICANN and the IESG, both will seek guidance from the IAB, whose decision will be final.

Regarding Internet Number Resources policies, ICANN will continue to operate under the existing MoU with the Numbers Resource Organization (NRO), a group comprising five Regional Internet Registries. The MoU defines the NRO’s role in global policy development, providing recognition of other registries. The MoU also establishes that the NRO will fulfill the role, responsibilities and functions of the Address Supporting Organization (ASO) in advising the ICANN Board on Internet number resource allocation policy. This agreement ensures that the RIRs, an affected and interested party, have a voice in shaping relevant policy.

The IETF will continue to appoint a representative as a non-voting liaison to the ICANN Board of Directors. Thomas Narten has served as the IETF’s liaison to the ICANN Board for several years and actively participates in the IETF community as well as with the RIR communities.

As ICANN’s IANA Functions Liaison for Technical Protocol Parameters Assignment, Michelle Cotton will continue to lead the development of the excellent relationship ICANN maintains

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with the IETF. Ms. Cotton will continue as the IANA Liaison to the IESG and, as such, will participate in the IESG's fortnightly telechats and facilitate the relationship between ICANN and the IETF. Ms. Cotton will continue to build the trust she has developed over time with the IETF community by ensuring ICANN performs its protocol-parameter and Internet Draft (ID) review tasks ably, by making ICANN's IANA functions staff available at IETF meetings for consultation on open issues, and by working directly with the Request for Comment (RFC) Editor to provide introductory guidance to those who are new to writing RFCs.

ICANN's IANA Functions Program Manager and IANA Function Liaison to the IESG will discuss issues of common interest during regular meetings with the IAB chair, the IETF chair and the IETF Liaison to the ICANN Board, usually taking place during the three annual IETF meetings. The relationship between ICANN and the IETF is and will continue to be governed by a formal MoU from June 2000, published as RFC 2860. It is supplemented with an ICANN-IETF MoU Supplemental Agreement and includes a Service Level Agreement (SLA), which ICANN has met or exceeded 51 of the last 54 months, reviewed each year by the IETF's Administrative Oversight Committee. Finally, ICANN will continue to participate in the annual "I\*" (I-star) meeting of the senior leaders from the IAB, IETF, Internet Society (ISOC), NRO, RIRs, and W3C at which shared strategic issues are discussed.

#### **1.1.1.3 Regional Internet Registries (RIRs)**

In 2007, the five RIRs formed the NRO to conserve the unallocated Number Resource pool, promote and protect the bottom-up policy development process and act as a focal point for Internet community input into the Regional Internet Registries system. Each RIR conducts regional meetings where the participants develop number resource policy. ICANN's ASO brings the global number policy to the ICANN Board and community. Kuo-Wei Wu and Ray Plzak are the current ICANN Directors selected by the ASO.

Kuo-Wei Wu served on Asia-Pacific Network Information Center's executive council for 11 years and now chairs ICANN'S Board IANA Committee, which will continue to provide oversight of ICANN's performance of the IANA functions. Ray Plzak was President and CEO for nine years of the ARIN and the RIR for the United States, Canada and parts of the Caribbean and has served on ICANN's Board IANA Committee.

As ICANN's IANA Functions Liaison for Internet Number Resource Allocation, Leo Vegoda will maintain the excellent relationship ICANN maintains with the RIRs and NRO. He and other ICANN staff members will attend RIRs' open policy development meetings; attend the ASO Address Council's monthly meetings as observers; provide staff implementation impact analyses of global policy proposals on request; and engage in joint technical development work of interest to the RIRs, domain registries and others, such as the IETF WHOIS-based Extensible Internet Registration Data Service (WEIRDS) work towards developing a more versatile registration information system than the current WHOIS protocol. Being present at these meetings will allow ICANN to fully recognize the needs of the number resource community regarding the IANA Functions.

The relationship between ICANN and the NRO was formalized in November 2007 with an exchange of letters in which both parties reaffirmed their commitment to each other. This

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exchange of letters has been renewed and the strength of the relationship is evident in the statement of support the NRO offered on the 2007 Midterm Review of the United States Department of Commerce and the Internet Corporation for Assigned Names and Numbers Joint Project Agreement in which it described ICANN as “a stable and trustworthy organization.” In the 2009 NOI on the Assessment of the Transition of the Technical Coordination and Management of the Internet’s Domains Name and Addressing System, the NRO stated its “commitment to continue to work closely with ICANN through the ASO MoU and other agreements, to ensure and safeguard the bottom-up policy development process that has proven highly successful as the foundation of an open and transparent management of Internet numbering resources.” Finally, the March 2011 letter from the NRO to ICANN expresses the strongest possible faith in both ICANN and the model multistakeholder model ICANN implements.

These statements of support arise from the strong sense of satisfaction at the way in which the allocation of Internet Protocol (IP) address space and Autonomous System (AS) numbers has been handled over the period of the current IANA Functions contract. Clear request templates have been agreed to by RIRs and turnaround times are typically very fast and far exceed the RIRs’ operational needs.

#### **1.1.1.4 TLD Operators/Managers**

Two ICANN Supporting Organizations represent Top Level Domain (TLD) operators and those with a business or policy interest in TLDs within ICANN policy development: the Country Code Names Supporting Organization (ccNSO) for country code top-level domains and the Generic Names Supporting Organization (GNSO) for generic top-level domains.

The GNSO consists of four stakeholder groups, each with an interest in gTLD activities and policy.

- Registries Stakeholder Group representing all gTLD registries under contract to ICANN.
- Registrars Stakeholder Group representing all registrars accredited by and under contract to ICANN.
- Commercial Stakeholder Group representing the full range of large and small commercial entities of the Internet.
- Non-Commercial Stakeholder Group representing the full range of non-commercial entities of the Internet.

The ccNSO and GNSO are the ICANN Supporting Organizations that will continue to be responsible for, among other things, initiating development of the policies governing the management of top-level domain names. This includes the policies governing their delegation and redelegation, as well as the policies governing registration within the TLD space.

As ICANN’s IANA Functions Liaison for Root Zone Management, Kim Davies will continue to lead the work that has seen the strengthening of the relationship between ICANN and the TLD operators. This is partly a result of the way processing times for Root Zone Management requests have improved over the period of the current contract through implementing new

documentation, systems and methods. This has been done while demand for services has doubled.

On behalf of ICANN and as the IANA Functions Liaison for Root Zone Management, Mr. Davies has participated in technical capacity development work that is meant to spread the technical knowledge of the root zone and DNS to the broader Internet community. Mr. Davies will participate in this outreach to the TLD community both through attending regional TLD operators' groups, like CENTR and APTLD, and through teaching at DNS workshops. Workshops that are held in less developed regions are often done in cooperation with the Network Startup Resource Center (NSRC) as well as the African Network Operators Group (AfNOG). Collaboration with NSRC and AfNOG is another example of how ICANN has and will continue to work with other interested parties in fulfilling ICANN's purpose to improve the management of Internet names and numbers.

While gTLD operators have a contractual relationship with ICANN, no contractual relationship is or will be required for the operation of ccTLDs, which currently form the overwhelming majority of TLDs. Many ccTLD operators have voluntarily entered into accountability frameworks, exchanges of letters and other formal agreements with ICANN. As of May 15, 2012, 130 ccTLD operators have joined the ccNSO, the ICANN Supporting Organization for ccTLDs. In March 2011, in response to NTIA's Notice of Inquiry on the IANA Functions, the ccNSO wrote the following:

*IANA's work in managing the root zone is an essential part of ICANN. It is key to the interests and engagement of a large number of ccTLDs and is equally significant to many governments and stakeholders in the gTLD space. As such, ICANN's multistakeholder model and processes could be significantly undermined if the IANA functions were to be removed and managed by an entirely unrelated entity.*

Members, like auDA, supported the ccNSO's comments:

*auDA has been closely involved in the formulation of the ccNSO's response to the NTIA's call for comments on the IANA functions and fully supports the observations and recommendations contained within that submission.*

Similarly, the European Telecommunications Network Operators Association (ETNO), wrote the following:

*ETNO believes that management of the Internet Assigned Numbers Authority (IANA) functions should transition from a Government oversight contractual responsibility to that of the Internet Corporation for Assigned Names and Numbers (ICANN), as an independent organization, such transition taking place with the understanding that ICANN complies with the obligations set out under the Affirmation of Commitments.*

*ETNO believes that ICANN is the best placed body to oversee these functions, assuming that ICANN continues to comply with the obligations set out in the Affirmation of Commitments.*

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*ETNO agrees with the NTIA that policies and procedures developed by technical Internet communities, such as the Regional Internet Registries and the country code top-level domain (ccTLD) operators, have an impact on the performance of the IANA functions. These technical communities are fully represented within ICANN through the appropriate bodies (such as the Country Code Names Supporting Organisation). This representation demonstrates that the IANA function is an integral part of ICANN and that the necessary co-operation and co-ordination of a variety of technical groups is already in place.*

Bill Graham and Bruce Tonkin are the serving ICANN Board Directors selected by the GNSO; Chris Disspain and Mike Silber are those selected by the ccNSO. Bruce Tonkin is currently Chief Strategy Officer for Melbourne IT Limited, which was the first commercial administrator for the COM.AU namespace and one of the first five test-bed registrars when ICANN established registrar competition for the existing .COM/.NET/.ORG registry. Director Chris Disspain has been the Chief Executive Officer of .AU Domain Administration Ltd (auDA), a non-profit company that is the independent governing body/manager of the Australian Internet domain name space (.AU) and the policy body governing the DNS in Australia since October 2000. Director Mike Silber is from the .ZA Domain Name Authority and has served as Director of the Authority since its formation in 2004.

#### **1.1.1.5 Governments**

ICANN will continue to interact with governments in a variety of ways. Three key approaches include involving governments in ICANN through the Governmental Advisory Committee (GAC), reaching out to governments in various inter-governmental organizations and one-on-one meetings with governments. ICANN will continue to regularly provide briefings on various aspects of ICANN's execution of the IANA Functions.

Under ICANN's Bylaws, the GAC considers and provides advice on Internet policy matters as they relate to the concerns of governments, particularly where there may be an interaction between ICANN's policies and various laws and international agreements or where they may affect public policy issues. In Article XI, section 2.1.j, it states:

"The advice of the Governmental Advisory Committee on public policy matters shall be duly taken into account, both in the formulation and adoption of policies. In the event that the ICANN Board determines to take an action that is not consistent with the Governmental Advisory Committee advice, it shall so inform the Committee and state the reasons why it decided not to follow that advice. The Governmental Advisory Committee and the ICANN Board will then try, in good faith and in a timely and efficient manner, to find a mutually acceptable solution."

The GAC has engaged in dialogue—and will continue to do so—with ICANN's Board on issues such as the New gTLD Program. The New gTLD Program Applicant Guidebook reflects a number of revisions resulting from the intensive collaboration between the GAC and the Board, including the development of procedures for the review of sensitive strings and the strengthening of many trademark and consumer protections. To engage with the larger ICANN community, the GAC holds face-to-face meetings with ICANN's Supporting Organizations and Advisory Committees about issues of mutual concern.

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The GAC selected Heather Dryden to serve as Interim Chair at the ICANN Brussels meeting in June 2010 until the conclusion of the first GAC meeting of 2011. Subsequently, she was elected to a two-year term (ending in 2013) as Chair of the GAC. Ms. Dryden currently serves as Senior Policy Advisor at the International Telecommunications Policy and Coordination Directorate at the Canadian Department of Industry (Industry Canada) and has worked for the Department since 2002. She also serves as a non-voting liaison to the ICANN Board.

ICANN will continue to work with governments through inter-governmental organizations, such as the International Telecommunication Union (ITU). The ITU's Telecommunication Standardization Sector is a member of ICANN's Technical Liaison Group (TLG) where it shares a non-voting Liaison seat on the ICANN Board in rotation with the other TLG members. ICANN participates as an invited expert in ITU meetings on key issues including IPv6 and Internationalized Domain Names (IDNs).

ICANN will continue to participate in the Organization for Economic Co-Development (OECD) as another means for interacting with governments. ICANN is a founding member of the OECD's Internet Technical Advisory Committee (ITAC), which assists the OECD's work on issues such as measuring IPv6 deployment. ICANN has been a key participant on these issues and will continue to participate in discussions.

ICANN Board members are closely involved in working with governments. For instance, both Chris Disspain and Bill Graham have been members of the Internet Governance Forum's Multistakeholder Advisory Group since its formation in 2006.

Finally, ICANN will continue to engage directly with individual governments around the world on a variety of matters related to ICANN's mission and the multistakeholder model.

#### **1.1.1.6 Internet Community**

Individual Internet users who participate in the policy development work of ICANN are part of ICANN's "At-Large" community. Currently, about 140 groups, or At-Large Structures, representing the views of individual Internet users are active in approximately 100 countries. ICANN will continue to expand the number of organizations certified as At-Large Structures to bring in more voices from the individual Internet user community. The At-Large Advisory Committee (ALAC) maintains a website, <http://www.atlarge.icann.org>, with information on how individual Internet users can join and participate in building the future of the global domain name system and other unique identifiers on which every Internet user relies every time they go online. The ALAC is selected from within these regional entities.

Sébastien Bachollet was the first Board member selected by the At-Large community. Mr. Bachollet has been a member of the Internet Society French Chapter since 2001, served on its Board since 2003 and was declared its Honorary President in 2009.

The Internet user community is broad, so ICANN will continue to use a number of approaches to develop and maintain close and constructive working relationships with this community. Primary among these strategies is encouraging membership in the At-Large community through Regional At-Large Organizations (RALOs). These are locally developed communities of Internet



users who have an interest in Internet governance and ICANN activities. ICANN often sees a large contingent of local At-Large participants in our regional meetings.

ICANN will continue to provide technical briefings for the ALAC and At-Large community on topical issues, when requested, such as IPv6 address allocation.

### **1.1.2 Confidential Information [C.1.4]**

ICANN acknowledges and agrees that we will inform the U.S. Government if we have been advised that data submitted in association with the IANA Functions is confidential.

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## **1.2 Contractor Requirements [L.6; M.8; C.2; E.2]**

ICANN reviewed the Contractor Requirements detailed in Request For Proposal (RFP) Section C.2 and we are confident that we can meet or exceed every requirement in the fulfillment of the IANA Functions. The global coordination of the domain name system root and Internet protocol addressing has remained an essential part of ICANN's responsibilities, since our formation in 1998.

### **1.2.1 Prime Contractor [M.8; C.2.1; E.2; H.1.f]**

ICANN has and will continue to perform the required services for this contract as a Prime Contractor, not as an agent or subcontractor. ICANN is incorporated and organized under the laws of the State of California and the United States. ICANN has no parent corporation, is wholly U.S. owned, and will directly perform the primary IANA Functions of the contract within the United States. ICANN is currently headquartered in Marina del Rey, Los Angeles, California. As of June 18, 2012, ICANN's corporate headquarters will be relocated a few miles away within the City and County of Los Angeles, California. The primary IANA Functions will be performed in the Los Angeles area headquarters.

#### ***Understanding the Requirement***

ICANN fully understands the requirement to perform all requisite services as a Prime Contractor incorporated and located within the United States. ICANN will be the Prime Contractor and will continue to perform the primary IANA Functions within the United States.

#### ***Technical Approach***

Since 1998, ICANN has performed the IANA functions. We will carry out the required services for this contract as a Prime Contractor, not as an agent or subcontractor. ICANN is a private sector, multistakeholder organization currently entrusted with the operation of the IANA Functions. ICANN's first MoU with the Department of Commerce's National Telecommunications and Information Administration (NTIA) contained provisions governing ICANN's performance of the IANA Functions. Shortly thereafter, ICANN and NTIA executed the first IANA Functions contract. As the only experienced and qualified contractor, ICANN has provided the IANA Functions efficiently and effectively, building trust and confidence among ICANN's many stakeholders.

In September 2009, the DoC and ICANN signed the Affirmation of Commitments (AoC), expressing the Government's support for the multistakeholder, private-sector, bottom-up policy development model for DNS technical coordination that acts for the benefit of global Internet users.

ICANN has affirmed to the Government via the AoC that it will remain a private, non-profit organization headquartered in the United States. Also, ICANN has affirmed it is independent and is not controlled by any one entity. The AoC commits ICANN to reviews performed by the global community. All of these facts are still true and are hereby reaffirmed.

### **1.2.1.1 ICANN and Subcontracts**

ICANN hereby affirms that it will not enter into any subcontracts for the performance of the services or assign or transfer any of its rights or obligations under the resultant contract, without the Government's prior written consent.

### **1.2.1.2 ICANN Profile**

ICANN is formally organized as a non-profit public benefit corporation under the Laws of the State of California. ICANN's mission is to coordinate, at the overall level, the global Internet's systems of unique identifiers and to ensure the stable and secure operation of the Internet's unique identifier systems.

### **1.2.1.3 ICANN Primary Operations and Systems**

At the time of this filing, ICANN's main office is located at 4676 Admiralty Way, Suite 330, Marina del Rey, California, 90292. As of June 18, 2012, ICANN's new main office will be 12025 Waterfront Drive, Suite 300, Los Angeles, California, 90094. Additional U.S. offices are located at 325 Lytton Avenue, Suite 300, Palo Alto, California, 94301 and 1101 New York Avenue NW, Suite 930, Washington, DC, 20005. ICANN also has data centers located in California and Virginia. ICANN has performed the primary IANA Functions within the United States since 1998 and will continue to do so in the future.

### **1.2.1.4 Contractor and Government Inspections [E.2; H.1.f]**

ICANN acknowledges the Government's right to inspect the premises, systems and processes of all security and operational components used for the performance of all contract requirements and obligations. In addition, ICANN will make available at its office at all reasonable times the records, materials and other evidence specified in Solicitation Section H.1 (Audit and Records) for examination, audit or reproduction until three years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. If the contract is completely or partially terminated, ICANN will make available the records relating to the work terminated until three years after any resulting final termination settlement. ICANN will make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation or claims are finally resolved.

In addition, ICANN will provide and maintain an inspection system acceptable to the Government covering the material, fabricating methods, work, and services under this contract. ICANN will maintain complete records of all inspection work it performs and make these available to the Government during contract performance and for as long afterwards as the contract requires.

If the Government performs inspection or tests on ICANN's premises, ICANN will furnish and require any subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

ICANN will disclose any corrective action taken to replace materials and services we have given to the U.S. Government. ICANN will comply with E.2.k when applicable.

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## **1.2.2 Personnel, Material, Equipment, Services, Facilities [M.8; C.2.2]**

ICANN has firsthand knowledge of the technical needs and more than a decade of experience in recruiting, staffing and retaining the appropriate personnel, material, equipment, services, and facilities for execution of the IANA Functions. Our current contract demonstrates that we have consistently maintained the appropriate personnel, material, equipment, services, and facilities to perform the IANA Functions, and we will continue to meet these resource requirements in our provision of these Functions. ICANN has and will continue to conduct due diligence in hiring, including full background checks. ICANN will furnish the necessary personnel, material, equipment, services, and facilities to perform the IANA Functions requirements without any cost to the Government. Both the Technical Approach in Section 1 and the Management Approach in Section 2 of this proposal describe in greater detail ICANN's established practices and procedures for ensuring the IANA Functions are well-resourced with personnel, materials, equipment, services, and facilities.

### ***Understanding the Requirement***

As the incumbent contractor for the IANA Functions, ICANN fully understands the requirement to furnish all necessary personnel, material, equipment, services, and facilities to perform the IANA Functions without any cost to the Government. As we have in the past and do currently, ICANN will continue to meet this requirement to full customer satisfaction.

### ***Technical Approach***

ICANN developed its IANA Functions capabilities to meet current and future operational needs efficiently and effectively. Today, ICANN's IANA Functions department includes 11 staff assigned to IANA Functions under the contract. The processes and procedures and a redundant systems infrastructure is designed to ensure continuation of the IANA Functions in the event of cyber or physical attacks, emergencies or natural disasters. ICANN affirms that it will continue to maintain that functional capability as well as the appropriate personnel, materials, equipment, services, and facilities.

As a division within ICANN, the IANA Functions department draws upon ICANN's organizational resources such as human resources and information technology for specialized expertise in recruiting, staffing, facility management, security, and network connectivity. As new generic top-level domains (gTLDs) are added to the root zone, ICANN will continue to evaluate the number of requests for root zone changes and delegation or redelegation and invest in the IANA Functions infrastructure as needed without cost to the Government. Security is of the utmost importance, and ICANN conducts full background checks on all new hires. ICANN affirms that it will continue to maintain any additional appropriate personnel, materials, equipment, services, and facilities that are required to perform the IANA Functions.

#### ***1.2.2.1 Personnel, Material, Equipment, Services, and Facilities at No Cost***

As the incumbent, ICANN has in place the necessary personnel, material, equipment, services, and facilities to perform the IANA Functions. Current personnel assigned to the IANA Functions are all located within the United States. Four are assigned to handling approximately 12,400 root zone change requests and PEN/Office of Foreign Assets Control (OFAC) requests per year, and one handles approximately 40 delegation/redelegation requests annually. In the future and

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as new gTLDs come online, ICANN will continue to evaluate staff requirements based on volume of requests and the time to process them, as well as the time needed to maintain registries. As part of ongoing efforts to improve efficiency and maintain optimal staffing levels, ICANN management conducts ongoing evaluations of existing resources, processes and tools and forecasts future needs. This ensures ICANN will continue to adapt to any changes in workload volume or deadlines quickly and nimbly. ICANN commits and affirms that it will obtain whatever additional personnel, material, equipment, services, and facilities necessary to perform the IANA Functions.

As stated above, ICANN will furnish the necessary personnel, material, equipment, services, and facilities in order to perform the IANA Functions at no cost to the Government. ICANN describes its project funding strategy and recent financial statements within Volume II of this proposal.

### **1.2.2.2 Due Diligence in Hiring**

ICANN has a professional human resources department that manages recruitment, background screening, hiring, and retention of a sophisticated, highly educated workforce that shares a legally compliant and global point of view. Please see Section 2 Management Approach of this proposal for a detailed discussion of our recruiting and retention plan.

New employees are guided through an “on-boarding process” that provides an introduction to ICANN, orientation to its policies and procedures, enrollment in benefits, and job training. As part of this process, each employee will continue to be required to read and agree to comply with company policies on such topics as Confidentiality, Conflicts of Interest and Disclosure of Outside Business Activities. Each employee working in the United States is and will continue to be required to provide proof of the right to work in this country.

ICANN will continue to perform background checks on individuals at the time of hire. Some countries restrict certain types of specific checks; however, to the extent laws allow, ICANN will continue to check identity (e.g., Social Security Number verification), driver record and criminal records. For individuals who have “bank account access” (i.e., prepare checks, release wires, etc.), ICANN also performs a credit check. ICANN will also continue to conduct reference checks on new hires, including those in management or in positions of confidence or security, contacting prior employers to both verify employment and obtain a subjective evaluation of the individual’s performance. For positions requiring a college degree ICANN verifies receipt of a college degree.

Regarding staff who have access to the L-Root, ICANN will continue to perform each of the checks above in accordance with the job type as described above. We will continue to check identity, driver record and criminal records on all, education for those positions requiring a degree, a credit check if the individual has access to bank accounts, and reference checks as appropriate.

### **1.2.3 Contractor Fees [M.8; C.2.3]**

ICANN has operated the IANA Functions without charging a fee to the United States Government since 1998. ICANN’s mission is to ensure the stable and secure operations of the Internet’s unique identifier systems. To that end, it has for more than 13 years offered the IANA Functions at no charge to the Government or to the users of the IANA Functions. ICANN has

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demonstrated with its continuous delivery of the IANA Functions since 1998 its support for the stability and security of the global Internet. ICANN's no cost support of the IANA Functions has served the identified interested parties defined in section 1.3 of this document by providing the underlying infrastructure for a stable Internet. ICANN will provide at no cost to the Government the delivery of the requirements to maintain the root zone, to administer the protocol parameter registries, manage the .ARPA and .INT domains, and allocate the Internet Numbers in a stable and secure way as we have done over many years. ICANN will collaborate with the interested parties by meeting with them in the regularly scheduled meetings hosted by IETF, RIRs, regional TLDs and ICANN. This approach for collaboration has proven effective in building a strong relationship with the interested and affected parties.

### ***Understanding the Requirement***

ICANN will not charge the United States Government for the performance of the requirements of the contract. Because ICANN has been performing the IANA Functions since 1998, we have a unique understanding of the associated costs to operate the IANA Functions, an understanding no other contractor possesses. As in the previous contracts with NTIA, ICANN will not charge the U.S. Government or third parties for the services and will not seek to make a profit from offering the services. The costs associated with performing the IANA Functions and developing tools to support the Functions are all borne by ICANN. Please refer to the financial section of Volume II for supporting detail on ICANN's funding strategy; our revenue and our assets that have successfully supported the operation of these services for more than 13 years.

### ***Technical Approach***

ICANN describes our technical approach to meeting the requirement below.

#### ***1.2.3.1 ICANN Will Not Charge the Government***

ICANN will not charge the United States Government for performance of the IANA Functions.

#### ***1.2.3.2 ICANN Will Not Charge Fees in First Year***

ICANN will not collect fees from the users of the IANA Functions services in the first year. ICANN understands that we are permitted to propose an interim fee for the first year, and we will not exercise that right.

#### ***1.2.3.3 Fees Beyond the First Year***

ICANN will not establish nor collect fees for any of the years of the contract; neither the first year nor subsequent years.

#### ***1.2.3.4 Submission of Proposed Fees***

ICANN will not charge fees in the first nor subsequent years of the contract.

### **1.2.4 Contractor Performance [M.8; C.2.4]**

ICANN has been performing the IANA Functions in a stable and secure manner for over 13 years, and we are committed to continuing the accurate and timely execution of the IANA Functions. ICANN will continue to seek feedback from the communities that the IANA Functions serve and will revise processes and procedures that incorporate this input. As ICANN has demonstrated over the preceding years of delivering the IANA Functions, ICANN will continue

to update and improve methods for streamlining the delivery of the service to maintain the stability and security of the Internet's core infrastructure.

ICANN will continue to be open to new technologies and new approaches that increase the stable and secure performance of the IANA Functions. ICANN demonstrated that willingness to deploy new technologies in our collaboration with the Root Zone Maintainer (Verisign) and NTIA in 2010 when the three parties deployed DNSSEC for the root zone.

### ***Understanding the Requirement***

ICANN understands the importance of maintaining accurate and timely information in the root zone, the protocol parameter registries, the Internet number allocation records, and the ARPA and INT domains. The maintenance of timely and accurate information is important to the security and stability of the global Internet.

The root zone is at the apex of the Domain Name System (DNS), and the information stored in the root zone file is used by almost all Internet applications. The role of the IANA Functions operator is to maintain and validate the information that is accepted into the root zone is in keeping with the established policies and technical criteria. ICANN has and will continue to provide the expertise necessary to evaluate potential change requests and ensure the integrity of the information that is approved for the root zone.

The technical protocol parameters and ARPA administration provides the technical standards and protocol registries which form the basis for creating products, applications and the core infrastructure of the Internet. ICANN has a proven track record in working closely with the Internet Engineering Task Force (IETF) to administer and maintain these important registries and domains, as documented in the monthly reports published on our website. ICANN will continue to meet the service level agreements documented in the MoU with the IETF for maintenance and administration of the technical protocol parameters and ARPA. We will continue to publish the monthly reports supporting our performance of the Technical Protocol Parameters IANA Function.

The allocation of Internet numbers such as IPv4, IPv6 and Autonomous System numbers are governed by the Global Policies that are defined and adopted by all five Regional Internet Registries and ICANN. These unique identifiers, like the root zone, are fundamental components of a smoothly working Internet. ICANN will continue to work in close collaboration with the Regional Internet Registries to administer the allocation of Internet numbers promptly and efficiently and will report on performance of the IANA Functions.

### ***Technical Approach***

ICANN describes our technical approach to meeting this requirement below.

#### ***1.2.4.1 ICANN Will Treat Each of the IANA Functions with Equal Priority Promptly and Efficiently***

The non-discriminatory procedure that ICANN will use to process requests related to the IANA Functions has been well-tested and refined over the more than 13 years that ICANN has been performing the IANA Functions. All requests for actions related to the IANA Functions will be logged in the IANA Functions' trouble ticket system in the order in which they were received

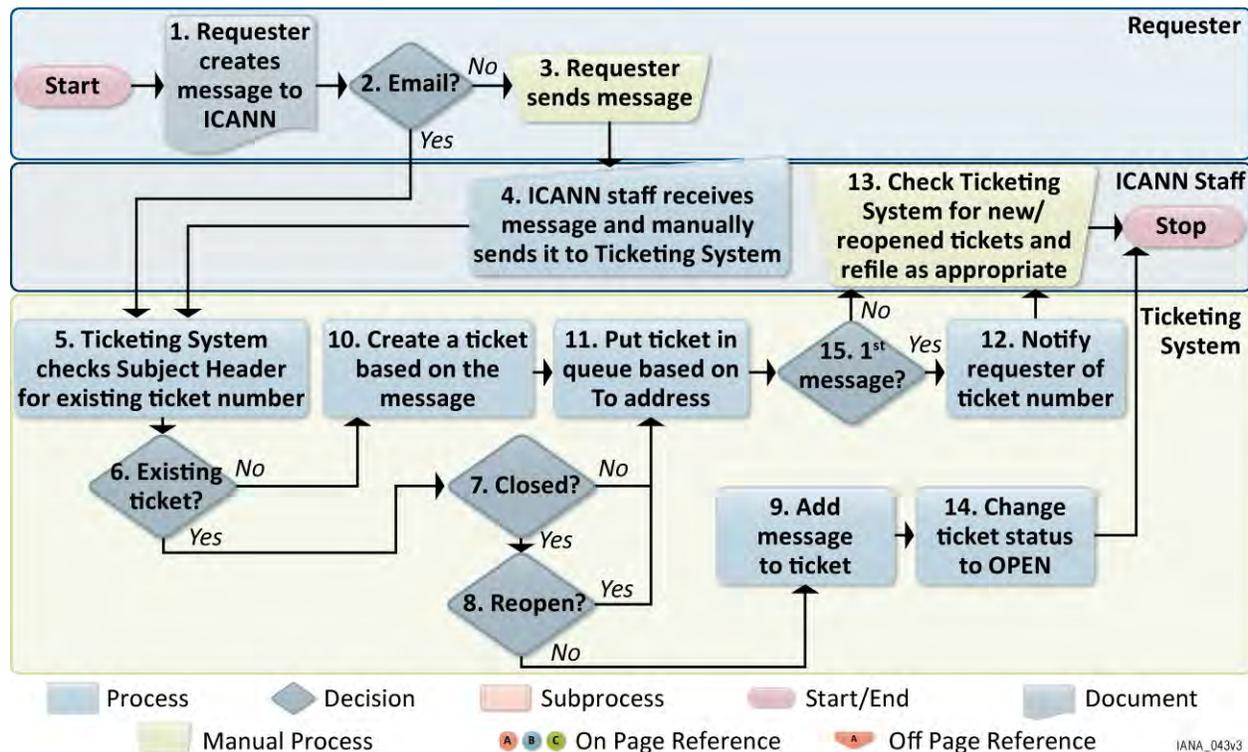
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and automatically sorted by the system into queues. The rules for sorting the incoming requests are based on the subject line of the request. ICANN will review the queues daily to confirm the system has correctly classified the incoming requests (Step 13 of the Trouble Ticketing Process Flow). Individual staff members will be assigned responsibility for handling the tickets in the various queues. ICANN will have weekly meetings to review the ticket queue and the volume and progress of open tickets. It is at the weekly meetings that ICANN will make adjustments in staffing assignments to address queue management. All tickets will be handled on a first come, first served basis. ICANN’s experience in performing the IANA Functions has taught us that sorting the tickets by functional area and assigning specific ticket queues to individual staff members is the most efficient way of processing the tickets in a fair and equal way. ICANN will strive to continuously evaluate the best way to process all requests in a timely and efficient way and will enhance the processes to reflect improved techniques for delivering the IANA Functions.

Figure 1.2-1 describes what the steps will be used for receiving IANA Functions requests and treating them with equal priority.



**Figure 1.2-1. Process for Treating IANA Functions Requests**

ICANN will follow well-defined processes to administer the IANA Functions for a consistent execution of policies and procedures. Adhering to a consistent execution of the defined policies will ensure a stable performance of the IANA Functions.

Below you will find the documented processes that ICANN will use to administer IANA Functions:

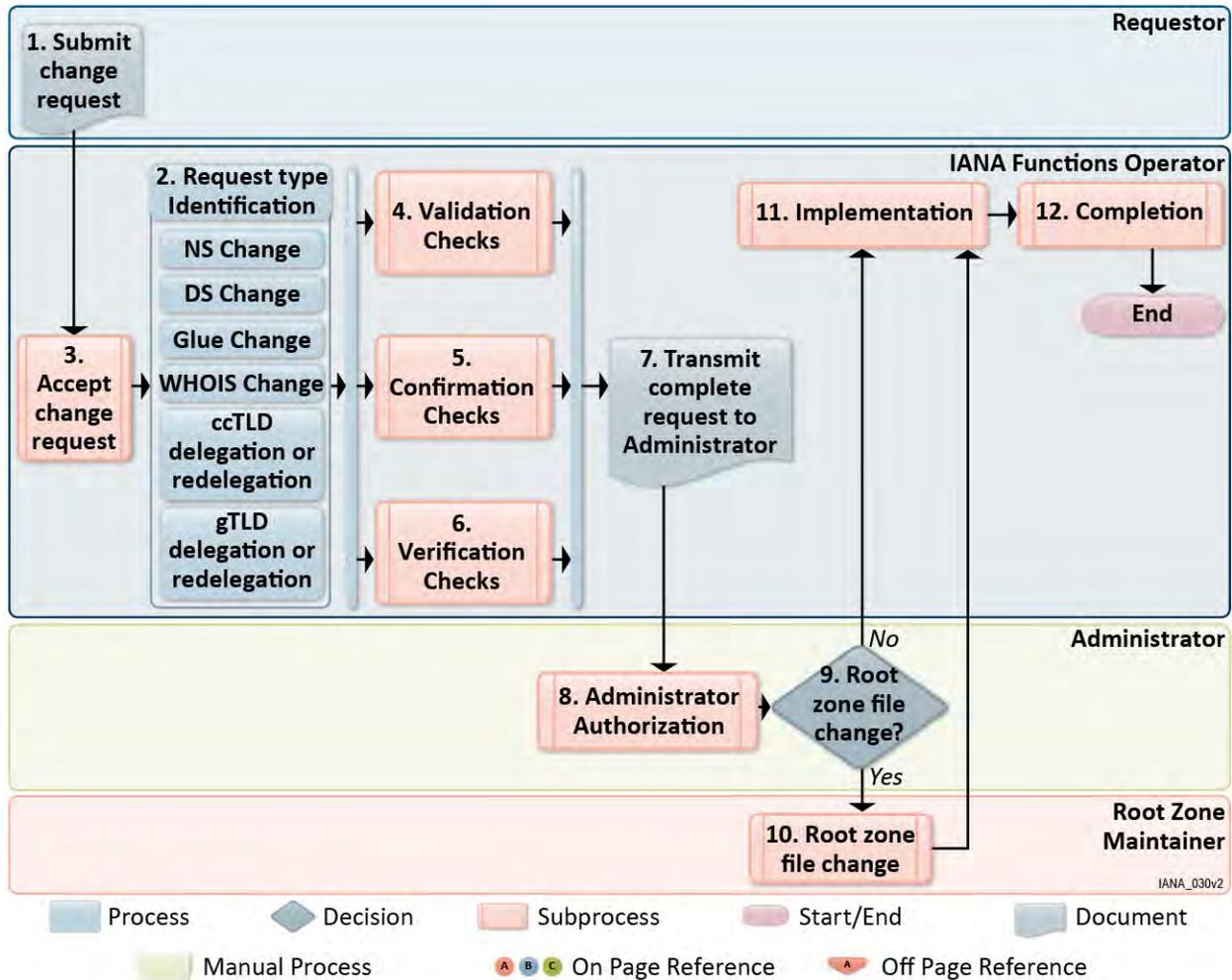
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- Root Zone Change Requests (important to the integrity and stability of the root zone)
- Autonomous System Number Allocation Process (associated with the Internet Number Function)
- IPv6 Number Allocation Process (associated with the Internet Number Function)
- Root Key Management Process (associated with DNSSEC for the root zone)
- Internet Draft Review Process (associated with the Technical Protocol Parameters function)
- Private Enterprise Number (PEN) New Application Process (associated with the Technical Protocol Parameters function)
- Expert Review Process (associated with the Technical Protocol Parameters function)
- Register New ARPA Domain Process (associated with the Technical Protocol Parameters function)

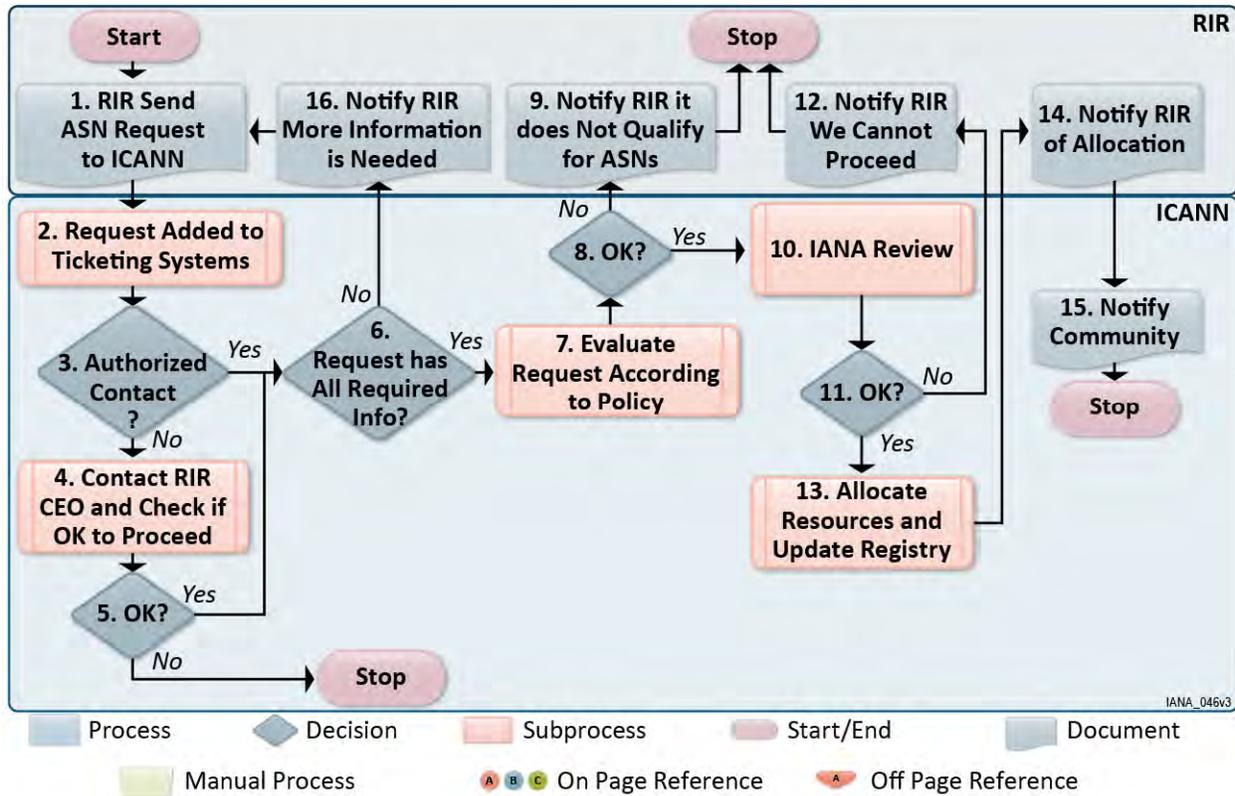
Recently a Policy for Allocation of IPv4 Addresses Post-Exhaustion has been adopted. Once the community agrees on an implementation plan for the policy, ICANN will define a process to execute the impemenation plan for this new Internet Number policy.

The Root Zone Change Requests Process will include evaluating a change request for eligibility, for compliance with technical criteria and confirming accuracy of information. ICANN will follow this process to ensure the integrity of the information in a stable and consistent manner. See **Figure 1.2-2.**



**Figure 1.2-2. Root Zone Change Request Process**

Autonomous System (AS) Number Allocation Process defines the process that ICANN will follow to allocate AS numbers to the Regional Internet Registries. The process is an implementation of the Global Policy for allocation of AS numbers that was adopted by the five RIRs and ICANN. See **Figure 1.2-3**.

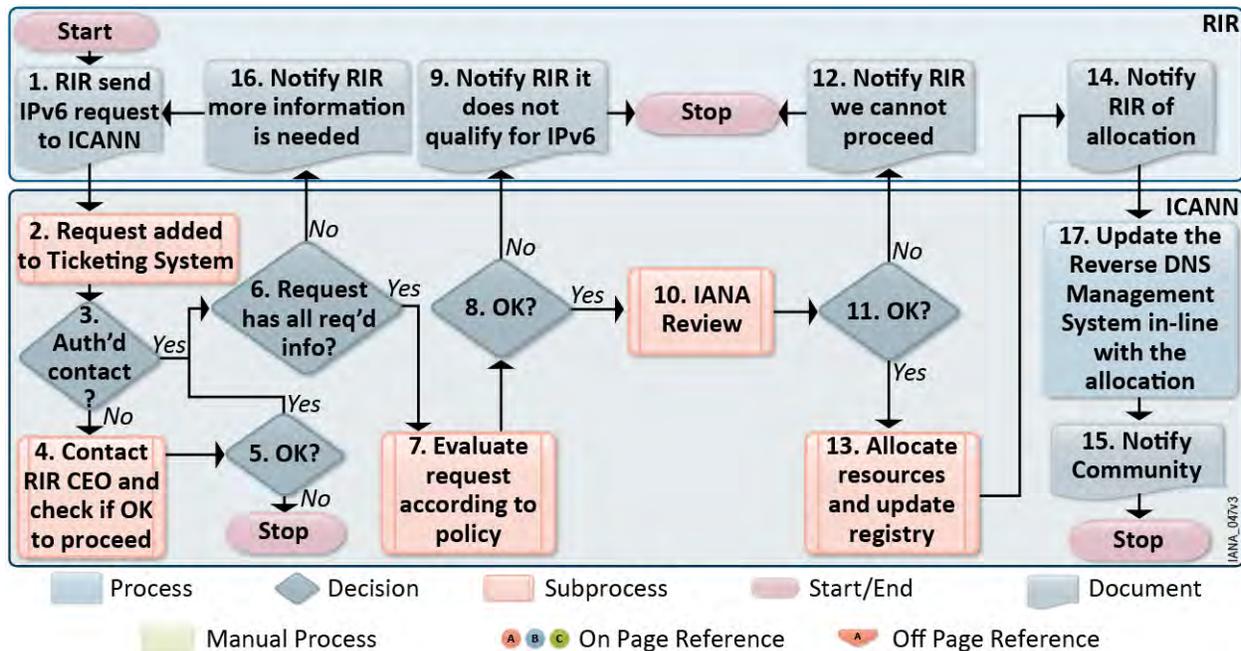


**Figure 1.2-3. Autonomous System (AS) Number Allocation Process**

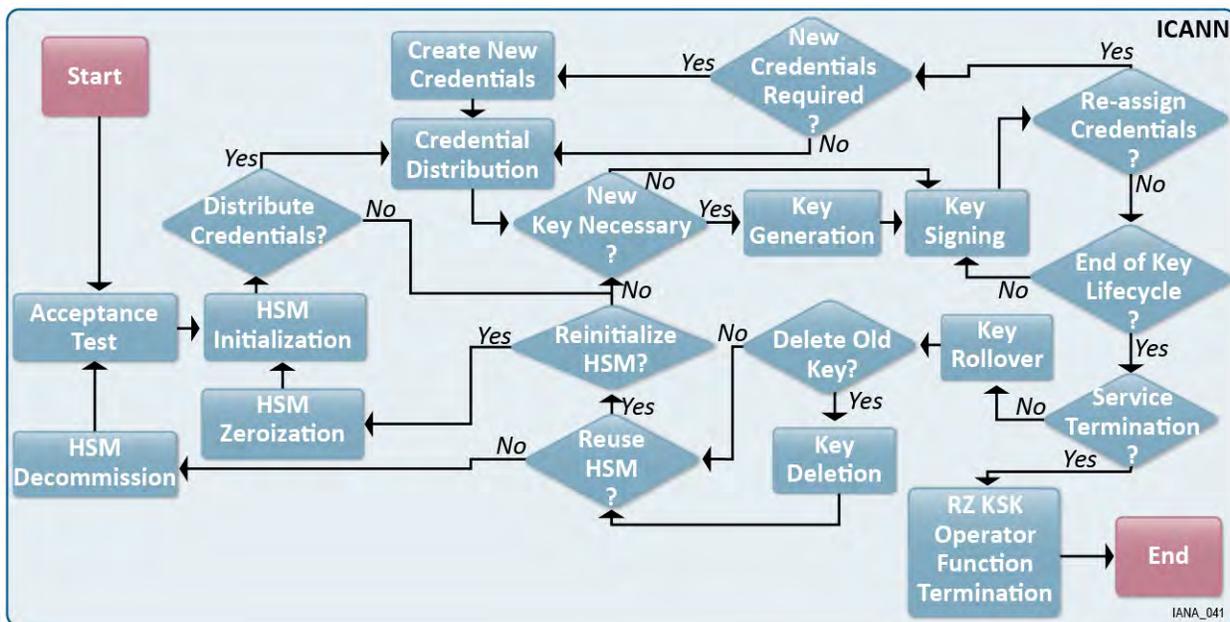
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The IPv6 Number Allocation Process implements the Global Policy for allocation of IPv6 addresses that was adopted by the five RIRs and ICANN. ICANN will follow this process to allocate IPv6 Addresses in a consistent and stable way. See **Figure 1.2-4**.

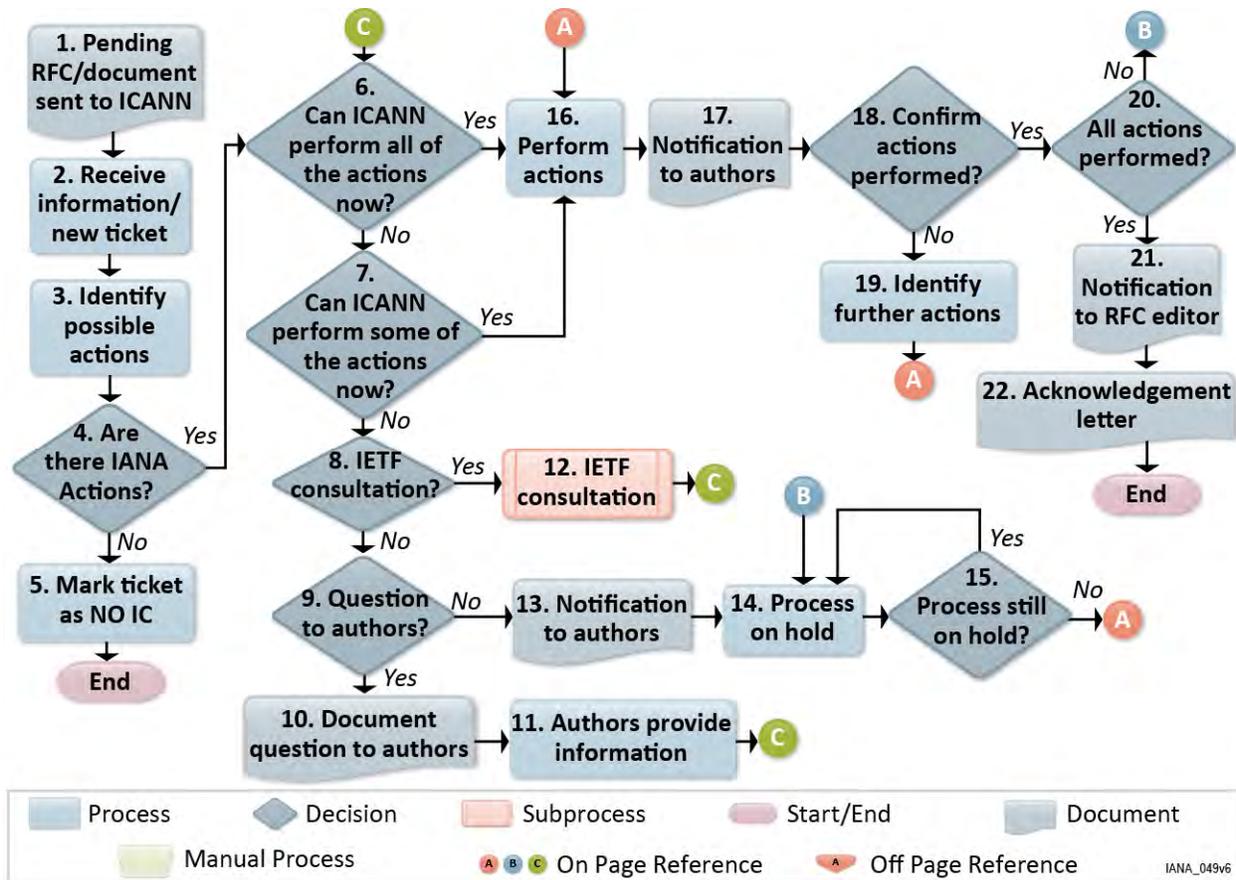


The process for maintaining a secure and stable DNSSEC deployment of the root is defined in the Root Key Management Process. ICANN will follow this process to ensure the integrity of the root key management in a consistent and stable way. See **Figure 1.2-5**. The DNSSEC Key Ceremony Script can be found in **Appendix A**.



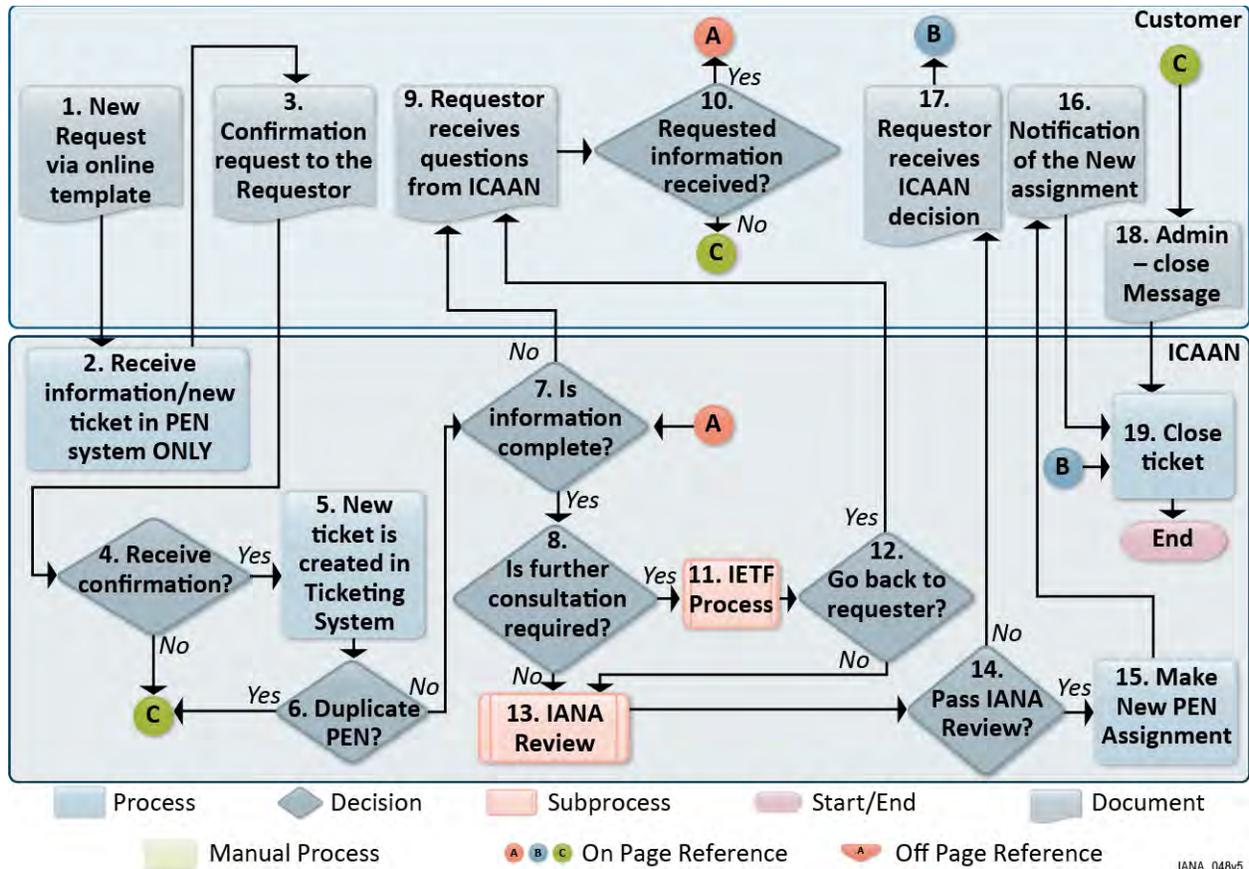
**Figure 1.2-5. Root Key Management Process**  
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The Internet Draft Review Process is defined in collaboration with the IETF and is in support of the Technical Protocol Parameters function. ICANN will follow this process in executing the responsibilities for the Technical Protocol Parameters function. See **Figure 1.2-6**.



**Figure 1.2-6. Internet Draft Review Process**

The Private Enterprise Number (PEN) New Application Process is defined in collaboration with the IETF and is in support of the Technical Protocol Parameters function. ICANN will follow this process in executing the responsibilities for the Technical Protocol Parameters function. See **Figure 1.2-7**. The templates for requesting a new PEN or modifying an existing one can be found in **Appendix A**.

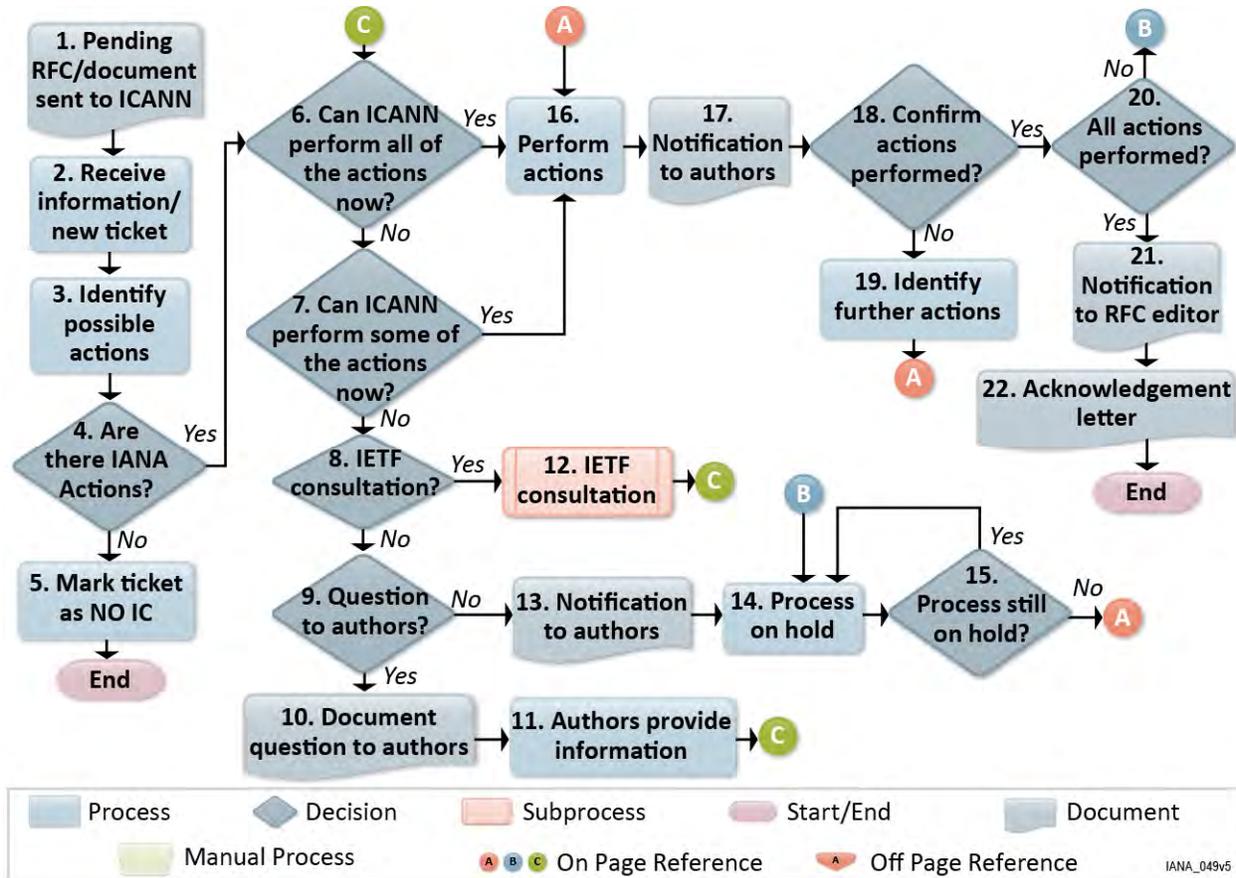


**Figure 1.2-7. PEN New Application Process**

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The Expert Review Process is defined in collaboration with the IETF and is in support of the Technical Protocol Parameters function. ICANN will follow this process in executing the responsibilities for the Technical Protocol Parameters function. See **Figure 1.2-8**.

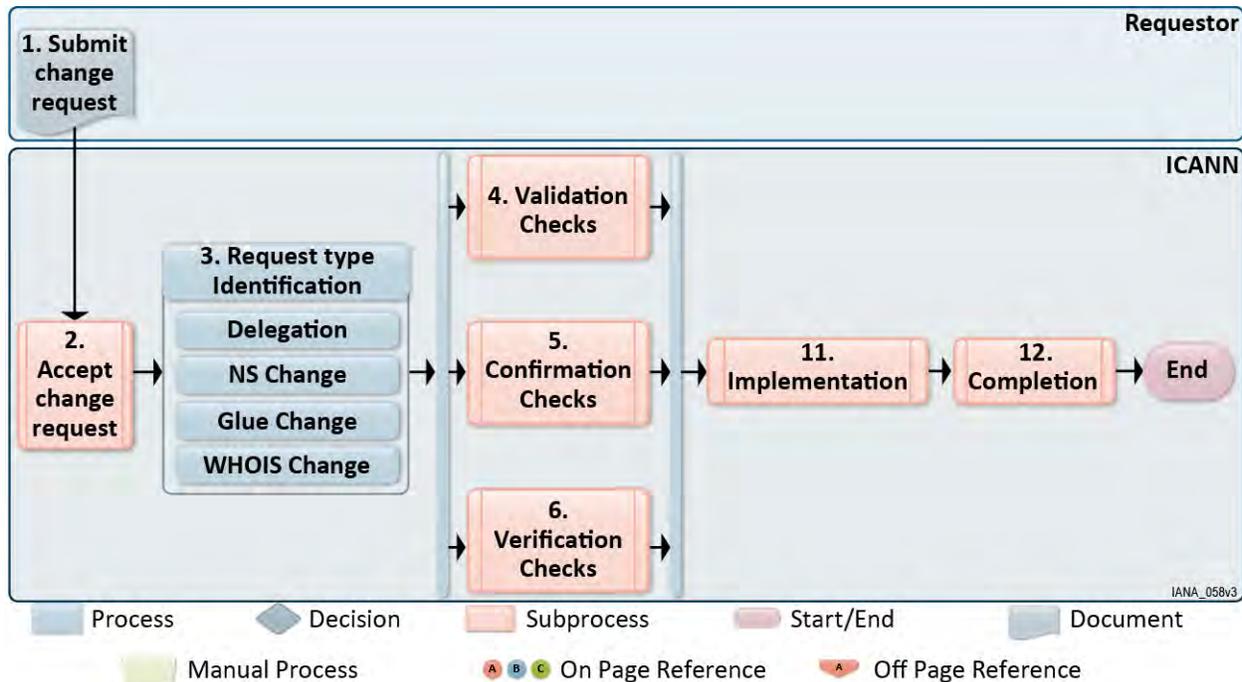


**Figure 1.2-8. Expert Review Process**

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The Register New ARPA Domain Process is defined in collaboration with the IETF and is in support of the Technical Protocol Parameters function. ICANN will follow this process in executing the responsibilities for the Technical Protocol Parameters function. See **Figure 1.2-9**.



**Figure 1.2-9. Register New ARPA Domain Process**

ICANN will implement methods to secure communications with relevant parties and secure the integrity of data required to perform the IANA functions. ICANN will follow the documented processes to demonstrate the stable and consistent performance of the IANA Functions.

### **1.2.5 Separation of Policy Development and Operational Roles [M.8; C.1.3; C.2.5]**

ICANN has an established track record of successfully managing IANA Functions while providing relevant information to the various policy bodies in the community to inform their work in developing relevant policy. We have done this while being careful to ensure staff performing IANA Functions are not engaged in initiating, advancing, or promoting any policy development relating to IANA Functions. ICANN will continue to strike this balance by focusing on performance of IANA Functions while providing appropriate support at the request of the policy development community.

A good example of this form of measured collaboration is our work over the last few years on the delegation and redelegation of country-code top-level domains (ccTLDs) within the Country-Code Names Supporting Organization (ccNSO) and the Governmental Advisory Committee (GAC). This collaborative work will conclude with refinements to the implementation of the policy with respect to the processing of ccTLD delegation and redelegation requests. ICANN’s IANA Functions staff members have participated in the

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community development work by providing expertise on how the current policy has been enacted and implemented, but has not been involved in initiating, advancing, promoting, voting on, or otherwise deciding upon specific proposals for new policies or to alter existing policies. Similarly, staff members have been involved in forums of Regional Internet Registries, the Internet Engineering Task Force, and other Internet Governance forums conveying experience on how existing IANA Functions are performed, in order to better inform policy makers' work.

Throughout ICANN's performance of the IANA Functions, countless RFC standards have been published through the IETF with "IANA Considerations" that prescribe how ICANN, in performing the IANA Functions, must conduct the ongoing operation of specific registries. In these cases, the IESG has communicated with ICANN to identify practical considerations concerning the proposed policy implementations. These consultations have resulted in timely and implementable policy directives that govern the IANA Functions' operations.

### ***Understanding the Requirement***

ICANN recognizes that central to the IANA Functions is the neutral execution of a set of agreed policies that have been developed by the multistakeholder community. These policies include those that are developed within the ICANN policy development processes, such as those developed within the Generic Names Supporting Organisation (GNSO) and the Country Code Names Supporting Organisation (ccNSO), and ratified by the ICANN Board of Directors. They also include addressing policies developed through the Regional Internet Registry (RIR) communities, and the various requirements of Internet Protocols published in technical specifications originating through the Internet Engineering Task Force.

ICANN recognizes that core to the IANA Functions is executing against these various established policies that are developed by relevant communities. In order to be trusted in neutrally executing against the policies, it will be inappropriate for IANA Functions staff to be simultaneously generating the policy that we will implement and under which we will operate.

While this is clear, the multistakeholder community also recognizes the value of leveraging the expertise and experience that rests within the IANA Functions staff to help inform ongoing policy work. Experience has shown that ICANN staff members have played important informational roles in the working groups that lead to policy development within ICANN. ICANN's IANA Functions staff members are uniquely placed to share expertise in how the IANA Functions have been performed on behalf of the multistakeholder community. This transparent sharing of information allows for interested and affected parties to be well informed when developing policy. Without this feedback into the process, there is a risk the community will develop policy that cannot be properly implemented due to the lack of understanding of the practical implications on how the IANA Functions will be executed. ICANN will work to ensure the process avoids these unintended consequences.

### ***Technical Approach***

ICANN will continue to maintain a clear separation between policy development and operational roles. ICANN staff involved in the IANA Functions will be trained to be fully aware of the limitations on their involvement. Such staff members will be counseled to refer items

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where the nature of staff participation is unclear to the IANA Functional Liaisons or IANA Functions Program Manager for review before participation.

Importantly, ICANN staff performing IANA Functions will continue to have no role on the ICANN Board of Directors — whose role is to ratify policy proposals for many of the IANA Functions — and no role on any of the councils that develop and vote on policy within the ICANN framework (i.e., the GNSO, CCNSO, ASO, etc.). Any roles for the IANA staff in bodies that develop policy will be either clearly in an advisory capacity — acting as subject matter experts conveying their experience — or relate to operations-level communication separate from policy development.

#### **1.2.5.1 Ensuring staff will not initiate, advance, or advocate policy**

To ensure that staff will not initiate, advance, or advocate policy, ICANN will adopt policies in its employee handbook and train IANA Functions staff that no IANA Functions staff may participate in any policy development work related to the IANA Functions. In the event that a request for staff participation may violate the separation requirement, ICANN will consult with NTIA to obtain a determination on whether staff shall participate, and on what basis. IANA Functions staff that violate these policies will be subject to sanctions, up to and including termination.

#### **1.2.5.2 Responding to requests for information from interested and affected parties**

In the ordinary course of business, ICANN will respond to enquiries relating to how IANA Functions are performed. This includes requests from interested and affected parties asking what the procedures are for certain aspects of the IANA Functions, and answering questions relating to how certain aspects of the Functions operate.

ICANN will track all requests for information through a tracking system when they are lodged through ICANN's advertised methods of communication (such as through the established email addresses for the various functions). The tracking system will lodge the entire history of the request, including all communications that occur and the precise timestamps when they occur.

Upon receipt of a request, staff managing the appropriate request queue in the ticketing system will review its particulars. Once identified as a request for information from an interested and affected party, it will be assigned in the ticketing system to the relevant Subject Matter Expert for a response.

The ticketing system will generate regular internal reports, and will form the basis for weekly meetings within the IANA Functions staff. At these meetings, staff will review all outstanding requests and ensure all such requests have received a response or have an appropriate path to timely resolution. A key metric that is and will be used by ICANN is the amount of time that has elapsed since there has been activity on the request. Requests that have not had progress within the prior business week will be escalated for discussion to ensure any impediments to their timely resolution will be identified and ameliorated.

The ICANN Board also has a standing Board IANA Committee that will review at a high level IANA Functions staff participation in a variety of forums. Issues that warrant consideration by ICANN's Board will be escalated to this committee for review.

### **1.2.5.3 Requesting guidance or clarification from interested and affected parties**

In executing IANA Functions policies and procedures, staff members who encounter issues in implementing policies that are not adequately covered in existing documentation will refer the issue to the IANA Functional Liaison as the subject matter expert. This expert will be responsible for evaluating the issue to identify if guidance or clarification on the policies or procedures may be required from interested and affected parties.

In the event it is deemed that external clarification will be required from interested and affected parties, the IANA Functional Liaison will coordinate with the IANA Functions Program Manager to develop a plan to request the necessary guidance or clarification. Where possible, existing channels for communication with relevant interested and affected parties will be used. The IANA Functions Program Manager will also communicate the issue to the Contracting Officer's Representative.

### **1.2.6 Transparency and Accountability [M.8; C.1.3; C.2.6]**

Developing and sharing user instructions for each IANA Function is essential to developing trust with the community regarding how IANA Functions are performed, and aids in the constructive review of policies that govern the Functions. During the term of the current contract, ICANN developed drafts on an increased range of user documentation related to IANA Functions. ICANN looks forward to the publication of these drafts for community review, and the opportunity to work with interested and affected parties in developing and publishing such documentation under the terms of the new contract.

An illustration of ICANN's accomplishments in thoroughly detailing ICANN's methods of operation is the work that has gone into the management of the Root Zone Key Signing Key. Documentation of these processes is provided as comprehensive documentation on how the processes will be conducted. This documentation is augmented by comprehensive audit materials that are posted afterward, including archival documentation, video, and audio that allow for later scrutiny.

#### ***Understanding the Requirement***

ICANN knows that transparency of the IANA Functions is foundational to the successful and credible operation of the Functions. Community confidence that the IANA Functions are being executed in a correct and accountable way is key to meeting the needs of the interested and affected stakeholders. ICANN will live up to its commitments to transparency and accountability by sharing clear documentation on the procedures and processes used for executing the IANA Functions. Such information will allow interested and affected parties to become fully informed about the performance of the Functions, which in turn will enable them to evaluate ICANN's performance. The accessible information will help in the community's future work on policy development, and will also help in the day-to-day performance of the IANA Functions. The absence of clear user documentation can lead to confusion with respect to how requests will be processed and what information is required. Availability of complete user documentation will allow for critical analysis on the suitability of the various requirements of the existing processes, including relevant technical requirements.

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ICANN will enhance its documentation with input from the relevant stakeholders and will strive to improve customer satisfaction. Currently, a customer may not be aware how a process is conducted when ICANN informs them of a defect in a particular request. These defects are typically resolved after various back-and-forth communications with the applicant. The delay resulting from the time taken to explain the various requirements reduces customer satisfaction and introduces additional costs for all of the parties. Having complete, accessible, and up-to-date documentation readily available will reduce such problems.

### ***Technical Approach***

ICANN describes our technical approach to meeting this requirement below.

#### ***1.2.6.1 Developing user instructions***

ICANN will review all of the various services provided in connection with this contract and, based on the existing corpus of both documentation and procedural descriptions, will define a complete list of operational procedures for which user documentation should be published.

ICANN will then develop user instructions for each identified item, including any technical requirements associated with specific procedures, based on existing operational procedures. Much of this documentation is already developed, and some is already published on ICANN's IANA website. For example, the technical requirements for authoritative name servers — used in evaluating changes to the DNS Root Zone and for .INT domain registrations — are posted online after consultative development with the affected community.

ICANN's goal in developing user instructions will be to make the documentation as clear as possible, reducing the risk that procedures are not communicated in an easy to understand fashion. While much of the work of ICANN is highly technical and necessarily involves conveying complex technical concepts, ICANN will seek to make the descriptions as easy to understand as possible without sacrificing technical accuracy. ICANN recognizes many of the users of the IANA Functions are not technically-minded, and also come from countries where English is not the primary language. We will therefore develop documents that consider this wide range of potential readers.

ICANN will post this documentation, clearly marked as draft, and solicit input from interested and affected parties. The primary mechanism to solicit feedback will be ICANN's own institutional mechanism for conducting public comment periods. ICANN regularly employs this process to review most aspects of our operation including draft policy changes, and it is well suited for reviewing the draft IANA documentation. Once posted, the availability of the documentation for review will be posted via ICANN's standard communication channels by posting a notice on ICANN's IANA website, and notifying others in the user community through presentations given by ICANN at conferences.

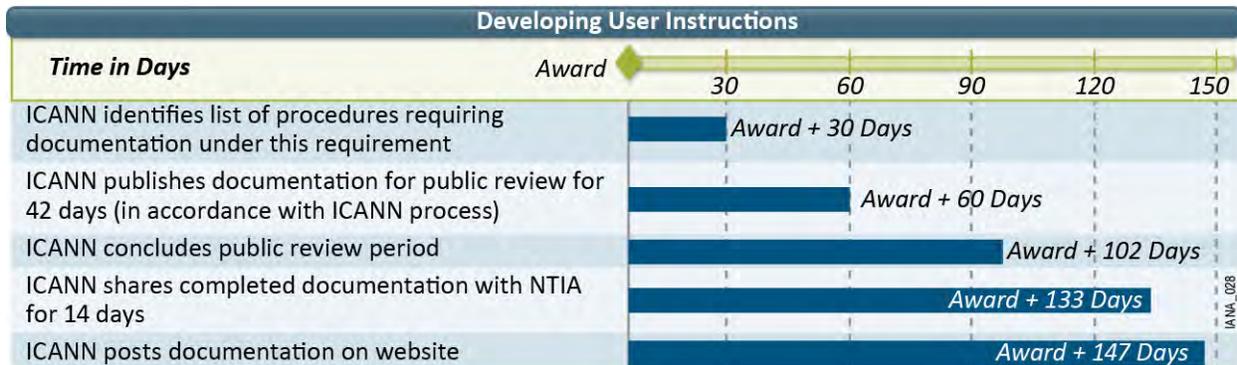
During this process, it will be clearly noted that the goal is not to alter the policies upon which the procedures are based, but rather to solicit feedback on making the documentation as clear and as useful as possible. It would not be appropriate to alter procedures based on community feedback as a mechanism of altering the underlying policy.

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Following this review process, ICANN will then appropriately revise the draft documentation and ready it for ultimate publication. ICANN will share this revised documentation with NTIA prior to general publication. Please see timeline in **Figure 1.2-10**.



**Figure 1.2-10. Timeline for Developing User Instructions**

ICANN’s timeline will meet the requirement that the process be concluded within six months of the date of contract award. The specific milestones within the timeline may be modified by the scheduling of events such as ICANN, IGF and other Internet Governance meetings. It is important that considered review of these documents is conducted by the community of interested and affected parties, and they have a meaningful opportunity to review these documents. Therefore, this timeline may be altered slightly to properly provide adequate time for consideration while not conflicting with these other commitments. The timeline leaves enough additional time to accommodate any such changes and unexpected contingencies, while still adhering to the requirement that the process be concluded within six months of the date of award. ICANN will consult with NTIA on any such revisions.

**1.2.6.2 Posting on a website**

Following the development of user instructions in accordance with Section 1.2.6.1, and approval by the COR, ICANN will post the procedures on ICANN’s IANA website, the primary website on which ICANN maintains information relevant to IANA Functions. These procedures will be hyperlinked from the relevant focus areas for individual functions, which will make them easy to identify and find for those interested in a particular topic.

As described in Section 1.2.6.1, ICANN anticipates posting will occur approximately 148 days after award. While this is subject to change to ensure maximum input from the community, ICANN will post the documentation within six months of the date of award.

**1.2.6.3 Collaboration with Stakeholders**

As described in Section 1.2.6.1, ICANN’s approach to developing user instructions is focused on public review using ICANN’s public comment process. The review process involves collaboration with the various stakeholders identified in C.1.3. This review will assist in developing user instructions that best suit the needs of these parties.

## **1.2.7 Responsibility and Respect for Stakeholders [M.8; C.1.3; C.2.7]**

ICANN is well placed to work with the community on identifying the source of the policy and procedures used in executing the IANA Functions. ICANN has historically sought review by interested and affected parties for material changes to the IANA Functions' operational procedures. As the operator of the IANA Functions for over 13 years, ICANN has accumulated significant experience in performing the current operational processes.

Through the years, ICANN has worked with the community to refine implementation guidance, providing explanations of historical contexts and other factors that have resulted in the IANA operational environment. ICANN's experience in this area has facilitated informed review by the interested and affected parties in the community.

### ***Understanding the Requirement***

Much of the policy that defines much of ICANN's performance of the IANA Functions is documented in technical standards documents published by the Internet Engineering Task Force (IETF) known as "Request for Comments" (RFCs). Today, ICANN already publishes a tabular index of the hundreds of registries it maintains and references the relevant RFCs that are the determinants of the policies and procedures that govern each specific registry. In 2010, ICANN concluded a complete audit of over 4,000 RFCs to ensure accurate implementation of the procedures contained within.

For the Root Zone Management function, the history is complex, and a process will need to be developed that is careful to consider this history. ICANN's ccNSO and GAC have been grappling to identify much of this work, and this work continues after over three years of intensive discussion.

Those who have performed the IANA Functions have a long history of publishing updated operational practices as circumstances have evolved. In 1984, the then IANA Functions staff at the University of Southern California published RFC 920, which documented the structure of the root zone and its operational practices. In 1994, this was revised and published as RFC 1591. In 1997, IANA Functions staff published the first in a series of "ccTLD Memos" providing further clarification on how operational practices had evolved. In 1999, the IANA Functions staff again updated the documentation to reflect contemporary practices and published it as Internet Coordination Policy (ICP)-1. None of these documents is considered to be definitive descriptions of the current policies and procedures that are applicable today, but they represent an evolution of the processes over time. They will act as important input into the review processes to be developed.

ICANN recognizes that certain issues may be more complex and necessitate more dialogue or multiple rounds of iteration. For changes relating to stewardship of the Protocol Parameter Registries, ICANN recognizes that the community of interested and affected parties already has in-place mechanisms for reaching consensus on how the registries should be maintained. These mechanisms are the product of the IETF, and ICANN implements the registries in accordance to guidance from the IESG.

### **Technical Approach**

ICANN understands that the scope of work in connection with this requirement will involve multiple aspects. It will involve developing an approach to documenting the existing practices as they are in practice today, as well as developing an approach for how future changes to policy will be reflected in updates to the IANA Functions processes and procedures.

ICANN will leverage its extensive network of community members and relationships, as well as its unique knowledge of the history that lead to the current procedures, to develop an appropriate process by which all parties will follow to develop an agreeable process. The process is described in detail below.

#### **1.2.7.1 Developing Processes for Documenting the Source of Policies and How They Are Applied**

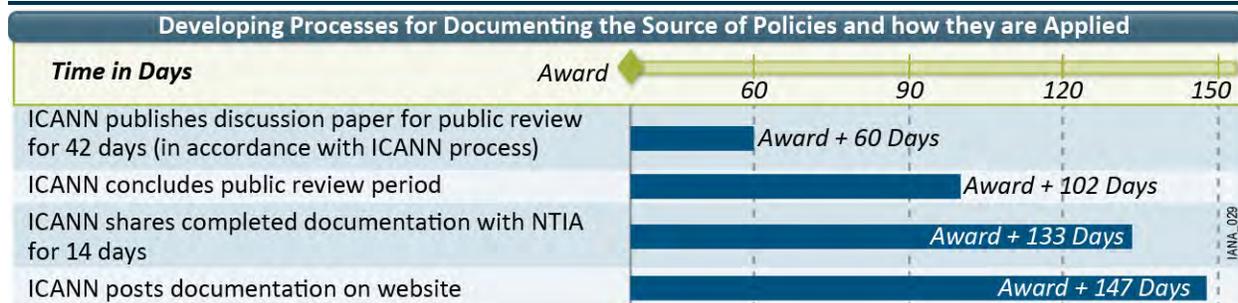
In conjunction with the work to be performed as described in 1.2.6.1, ICANN will use its historical understanding of the evolution of the IANA Functions procedures to document the policies that have informed the various procedures and identify them for each process. We will then develop a draft discussion paper that describes the scope of the policies and procedures for which documentation needs to be produced under this requirement.

ICANN will then post the discussion paper and solicit input from interested and affected parties on what the appropriate process(es) by which the identified procedures should be reviewed and documented in a way that satisfied the requirements of C.2.6. The primary mechanism to solicit feedback on the discussion paper will be ICANN's own institutional mechanism for conducting public review. ICANN regularly engages this process to review most aspects of its operation, including draft policy changes, and is well suited for reviewing the draft IANA documentation. The discussion paper will be available for review and posted via ICANN's standard communication channels, including a notice on ICANN's IANA website. We will notify other members of the user community through presentations given by ICANN at conferences and various events.

During this process, it will be clearly noted that the goal is not to alter the policies upon which the procedures are based, but rather to solicit feedback on what the community recommends as the appropriate process for documenting the source of the policies and procedures and how ICANN will apply the relevant policies and procedures for the corresponding IANA Function.

Following this review process, ICANN will then appropriately revise the draft documentation and ready it for ultimate publication. ICANN will share this revised documentation with NTIA prior to general publication.

Finally, on the basis of the agreed procedures for documenting the source of the policy and procedures and how they will be applied, ICANN will undertake a new effort in conjunction with NTIA to develop a timeline for executing the procedures. How this will be conducted can only be determined once the community has agreed on the relevant approaches and timelines. See timeline in **Figure 1.2-11**.



**Figure 1.2-11. Timeline for Developing Processes for Documenting the Source of Policies and How Applied**

It is important that the community of interested and affected parties conduct a review of these documents. Their availability is often dictated by the timing of significant Internet Governance related events (such as ICANN meetings, IGF meetings, etc.). Therefore, this timeline may be adapted slightly to provide adequate time for consideration while not conflicting with these meetings. The proposed timeline will leave enough additional time to accommodate any such changes, while still adhering to the requirement that the process be concluded within six months of the date of award. ICANN will consult with NTIA on any such adaptations to ensure full concurrence with the final timeline based on the ultimate date of award.

**1.2.7.2 Posting Processes on a Website**

ICANN will produce a proposal for NTIA at the conclusion of the consultation process planned with the interested and affected parties listed above for each of the IANA Functions. Upon acceptance by NTIA, ICANN will publish the document on the *www.iana.org* website in a section dedicated to processes. ICANN will publish the accepted document within a week of NTIA’s notification that it has been accepted. ICANN will notify the interested and affected parties that the document has been published using its established links with each of the key stakeholders. These links include dedicated private mailing lists for announcements and discussions and regularly scheduled meetings.

**1.2.7.3 Post via Website**

Following the development of the processes and procedures in accordance with 1.2.7.1 and 1.2.7.2 and after receiving required approvals from the COR, ICANN will post the procedures on ICANN’s IANA website, the primary website on which ICANN maintains information relevant to the IANA Functions.

**1.2.7.4 Collaboration with Stakeholders**

ICANN will collaborate closely with each of the relevant stakeholder groups to develop a process for documenting the source the policies and procedures ICANN will implement for each of the IANA Functions. ICANN will make sure that the stakeholder will be able to contribute text and comment on drafts prior to seeking approval and publishing the documentation, which will explain how ICANN will apply the relevant policies and procedures for each IANA Function.

## **1.2.8 Performance Standards [M.8; C.1.3; C.2.8; C.2.9]**

ICANN has engaged in a multi-year Business Excellence activity based on the globally recognized EFQM model, which is widely used in Europe, the Middle East and Africa. The EFQM model is structurally similar to the U.S. Baldrige Award and the Japanese Deming Prize models. It is focused on providing systematic, sustainable, continuous improvement, and ICANN has brought this analysis to its delivery of the IANA Functions since 2009. In 2011, ICANN conducted a thorough review of our business processes and documented Key Performance Indicators (KPIs) for our most important core processes. For each KPI, ICANN identified measurements and set internal performance targets. ICANN will use these KPIs and internal performance targets as the starting point for discussions with the interested and affected parties.

### ***Understanding the Requirement***

ICANN understands that within six months of the award, we must develop performance standards for each of the IANA Functions in collaboration with the interested and affected parties for each of those functions. ICANN further understands that the agreed performance standards must be posted on ICANN's IANA website. ICANN understands that the interested and affected parties include the ICANN Supporting Organizations; the IETF community, including the IAB; the RIRs; TLD operators; governments; and the Internet user community. ICANN understands that this offer must include a detailed narrative of how we intend to work with the interested and affected parties to develop the required performance standards.

### ***Technical Approach***

ICANN has established processes for proposing documents, discussing them with key stakeholders and then publicly reviewing them before reaching a final version. ICANN will use these established processes, in the manner described below, to work with the interested and affected parties for each of the IANA Functions to develop performance standards.

ICANN will work with the key stakeholder group for each IANA Function when developing performance standards. ICANN has identified the key stakeholder groups, the interested and affected parties:

- **ccTLDs** – the ccNSO (an ICANN Supporting Organization) and regional ccTLD operator groups, including but not limited to CENTR, Latin American and Caribbean TLD Association (LACTLD) and African Top Level Domain (AfTLD); Verisign, the root zone maintainer; ICANN's Government Advisory Committee; and NTIA.
- **gTLDs** – the GNSO (an ICANN Supporting Organization); Verisign, the root zone maintainer; ICANN management, which is responsible for the contractual relationship with gTLD operators; and NTIA.
- **IP address allocation** – the RIRs, who participate in ICANN as the Address Supporting Organization (ASO), for unicast address allocations, and the IETF, including the IESG and IAB, for special address allocations that includes multicast address space.
- **Protocol Parameter management, including management of .ARPA** – the IETF, including the IESG and IAB. ccTLD operators, gTLD operators and the RIRs all have staff who participate in the IETF.
- **.INT management** – ICANN's Government Advisory Council and NTIA.

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Performance standards for each distinct function will be discussed with the interested and affected parties that use the service.

ICANN already has established relationship with all these organizations. The ICANN Supporting Organizations and Advisory Committees are part of ICANN’s participatory and decision making structure and ICANN management engages with them on a regular basis via mailing lists, telephone calls and face-to-face at ICANN and other meetings. ICANN management also engages with Supporting Organizations on joint projects. An ongoing example is the IDN Variant project, which has involved participants from the ccNSO and the GNSO as well as ICANN. In addition, ICANN has a positive relationship with the IETF, which is formalized in an MoU and involves ICANN providing a Liaison to the IESG, currently Michelle Cotton.

**1.2.8.1 Develop Performance Standards for SOW C.2.9**

ICANN’s proposal for developing performance standards in collaboration with the interested and affected parties is described below in points i–viii.

***i. Develop Performance Standards for SOW C.2.9.1 – Coordinate Assignment of Technical Protocol Parameters***

ICANN has an excellent relationship with the IETF community, which is the principal interested and affected party for protocol parameters management. ICANN entered into a Service Level Agreement (SLA) with the IETF Administrative Support Activity (IASA) in January 2007. It supplements the Memorandum of Understanding (MoU) between the IETF and ICANN concerning the technical work of the IANA Functions, dated March 1, 2000, which was published as RFC 2860 in June 2000. ICANN and IETF Administrative Oversight Committee (IAOC) cooperatively review and revise the SLA's targets every year in a process that involves all interested and affected parties. The most recent update was signed in May 2012. ICANN will continue this annual process. The current SLA can be found on the ICANN website, and the monthly performance reports ICANN produces for the IETF community are published on ICANN's IANA website.

ICANN and the interested and affected parties associated with protocol parameter management, IETF and IAB, have publicly discussed and agreed to a set of performance standards for the Coordination of the Assignment Of Technical Protocol Parameters. The performance standards and public reporting of ICANN's fulfillment of its service level commitment have been in place for five years and are updated every year. ICANN will continue to refine the performance metrics and SLAs for the administration of the technical protocol parameters in consultation with the organizations, the IETF and IAB, responsible for creating Internet standards.

In addition to publishing monthly performance reports on ICANN's IANA website, ICANN's performance reports have regularly been presented in the plenary session of IETF meetings by the IETF Chair, thereby offering an opportunity for the technical community to ask questions and comment on ICANN's performance of this IANA Function. These meetings are shown via webcast and use remote participation technologies, such as audio and video streaming and Jabber instant messaging, for those unable to join onsite. ICANN provides support to the interested and affected parties associated with protocol parameter management, who engage in public discussion of the performance standards for the Coordination of the Assignment Of Technical Protocol Parameters in public email lists. This support is principally in the form of data.

Given the existence of a defined set of SLAs with the interested and affected parties (IETF and IAB), ICANN will schedule a meeting with the COR within 30 days of the contract award to present and discuss the existing protocol parameter function. After this initial meeting, ICANN will schedule a follow-up meeting 30 days later to include representatives from the IETF and IAB to continue the conversation about performance metrics in delivering the service. Assuming the COR is satisfied with the consultation and cooperative working relationship with the relevant parties, the next step will be to request acceptance of the report format by the COR and to publish the reports. ICANN will establish performance standards with the agreement of the relevant parties and publish them within six months of the award. See **Figure 1.2-12a**.

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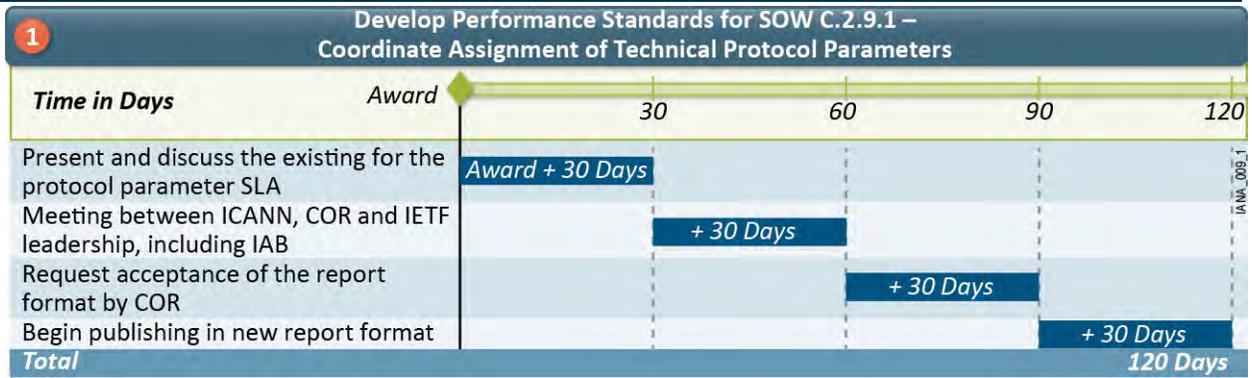


Figure 1.2-12a. Timeline

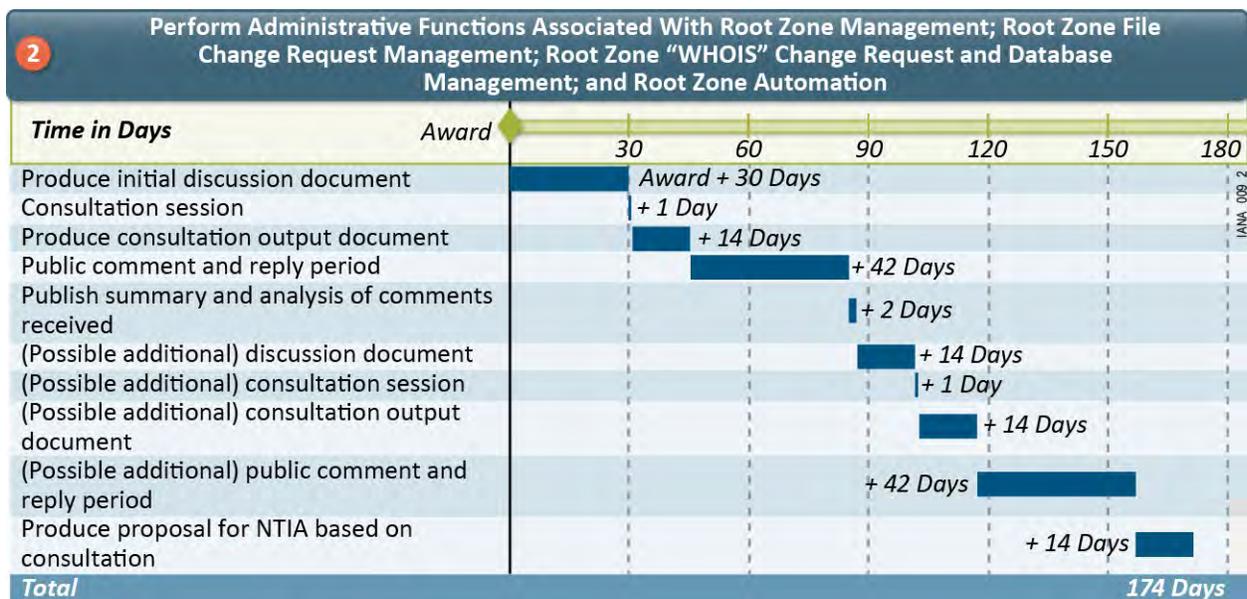
**ii. Perform Administrative Functions Associated with Root Zone Management, Root Zone File Change Request Management, Root Zone “WHOIS” Change Request and Database Management, and Root Zone Automation**

ICANN will consult the ccNSO (the ICANN Supporting Organization for ccTLDs), the GNSO (the ICANN Supporting Organization for gTLDs), the Root Zone Maintainer (currently Verisign), and the COR regarding appropriate performance standards. ICANN will share the data it has collected for the following:

- IANA Timeliness
- IANA Accuracy
- IANA Process Quality
- IANA Transparency
- IANA Reporting

Along with the measurements and internal targets for these Key Performance Indicators (KPIs), ICANN will use these data and goals as a starting point for discussion.

In order to fully consult with all interested and affected parties on appropriate performance standards for these Functions, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe® Connect™. ICANN will hold a public comment and reply period for the documents produced following these sessions. In the event that additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on performance standards. ICANN will then prepare a detailed proposal for NTIA to review and, upon acceptance by NTIA, will publish the performance standards on ICANN’s IANA website. ICANN will implement these performance standards and the reporting, which will demonstrate our fulfillment of that service level commitment within six months of the award. See **Figure 1.2-12b**.



**Figure 1.2-12b. Timeline**

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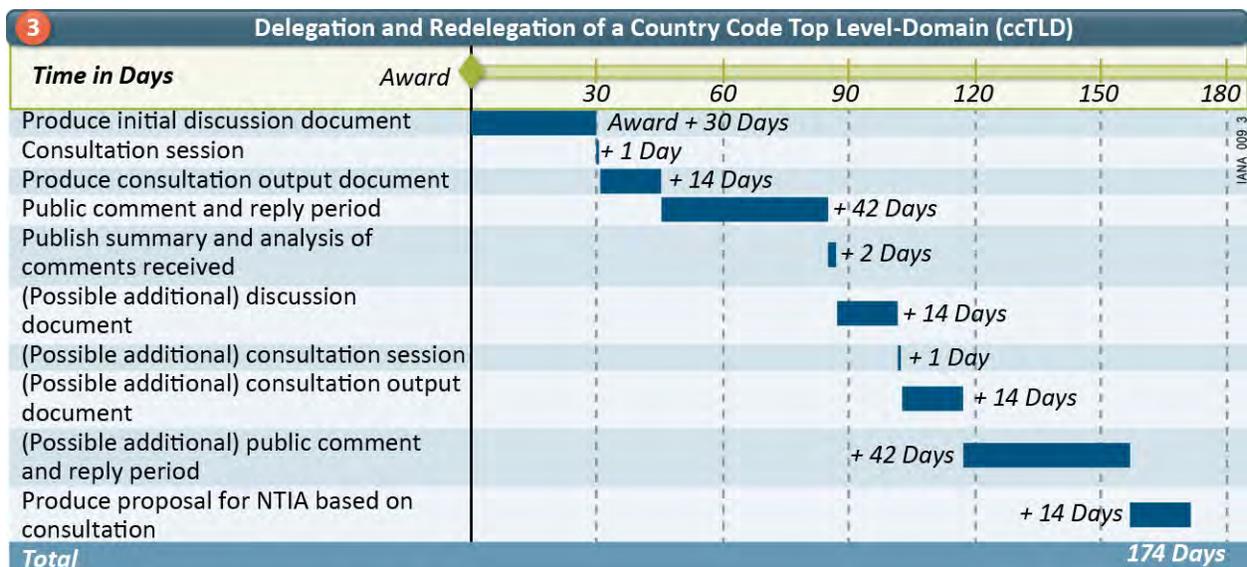
**iii. Delegation and Redelegation of a Country Code Top Level-Domain (ccTLD)**

ICANN will consult with the ccNSO, NTIA, the Root Zone Maintainer (currently Verisign), and the Governmental Advisory Committee (GAC), which provides advice to ICANN on issues of public policy regarding appropriate performance standards. Seeking input from the GAC is especially helpful where there may be an interaction between ICANN’s activities or policies and national laws or international agreements. ICANN will leverage its experience with current KPIs for root management to begin these consultations:

- IANA Timeliness
- IANA Accuracy
- IANA Process Quality
- IANA Transparency
- IANA Reporting

ICANN has developed measurements and internal targets for these KPIs and will use these data and goals as a basis for discussion.

To fully consult with all interested and affected parties on appropriate performance standards for these Functions, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe Connect. ICANN will hold a public comment and reply period for the documents produced following these sessions. In the event that an additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on performance standards. ICANN will then prepare a detailed proposal for NTIA to review and, upon acceptance by NTIA, will publish the performance standards on ICANN’s IANA website. ICANN will implement these performance standards and the reporting, which will demonstrate our fulfillment of that service level commitment. See Figure 1.2-12c.



**Figure 1.2-12c. Timeline**

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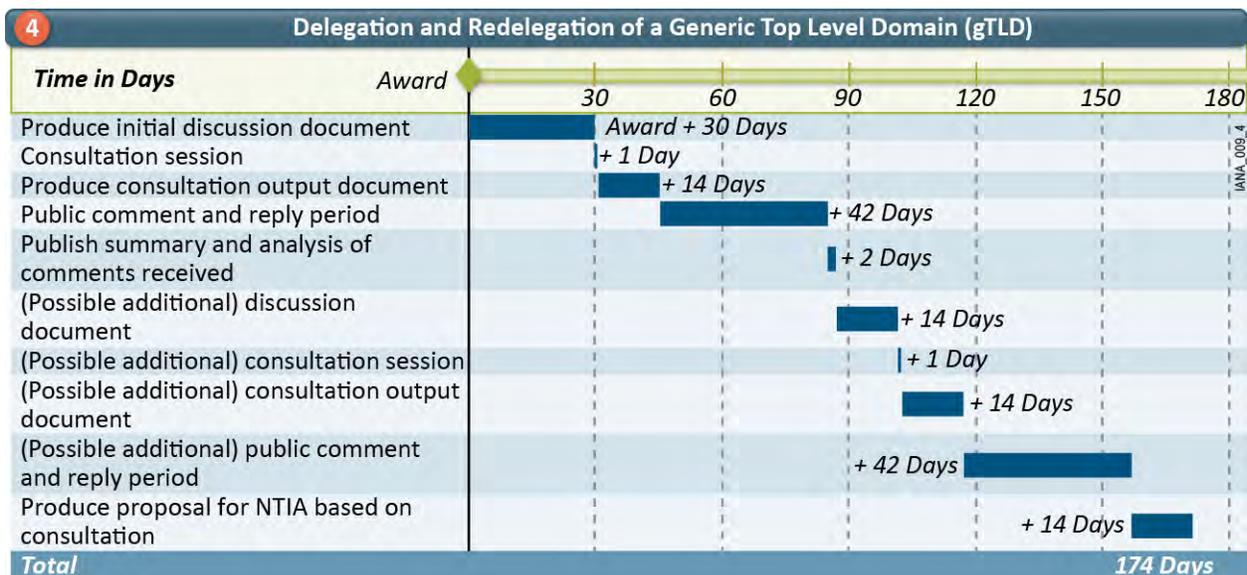
**iv. Delegation and Redelegation of a Generic Top Level Domain (gTLD)**

Staff from ICANN’s IANA and gTLD relationship management departments will consult with the GNSO, along with Verisign (the Root Zone Maintainer), and NTIA regarding appropriate performance standards. ICANN will leverage its experience with current KPIs for root management to begin these consultations:

- IANA Timeliness
- IANA Accuracy
- IANA Process Quality
- IANA Transparency
- IANA Reporting

ICANN has developed measurements and internal targets for these KPIs and will use these data and goals as a basis for discussion.

To fully consult with all interested and affected parties on appropriate performance standards for these Functions, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe Connect. ICANN will hold a public comment and reply period for the documents produced following these sessions. In the event that an additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on performance standards. ICANN will then prepare a detailed proposal for NTIA to review and, upon acceptance by NTIA, will publish the performance standards on ICANN’s IANA website. ICANN will implement these performance standards and the reporting, which will demonstrate our fulfillment of that service level commitment. See **Figure 1.2-12d**.



**Figure 1.2-12d. Timeline**

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**v. Root Domain Name System Security Extensions (DNSSEC) Key Management**

ICANN cooperated with NTIA and Verisign in 2010 on a broad consultation with industry groups regarding DNSSEC Key Management activities. The groups consulted included but were not limited to the following:

- IETF
- ICANN Supporting Organizations, including ccNSO, gNSO, RSSAC, SSAC, and ALAC
- Regional Network Operations Groups, including RIPE, Middle East Network Operations Group (MENOG), AUSNOG, and NANOG
- Government stakeholders, including NIST

ICANN intends to involve all these groups in consultations as interested and affected parties when developing performance standards. ICANN will leverage its experience with current KPIs for root management to begin these consultations:

- IANA Reporting
- IANA Timeliness
- IANA Accuracy
- IANA Transparency

ICANN has developed measurements and internal targets for these KPIs and will use these data and goals as a basis for discussion.

To fully consult with all interested and affected parties on appropriate performance standards for these Functions, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe Connect. ICANN will hold a public comment and reply period for the documents produced following these sessions. In the event that additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on performance standards. ICANN will then prepare a proposal for NTIA to review and, upon acceptance by NTIA, will publish the performance standards on ICANN's IANA website. ICANN will implement these performance standards and the reporting which will demonstrate our fulfillment of that service level commitment. See **Figure 1.2-12e**.

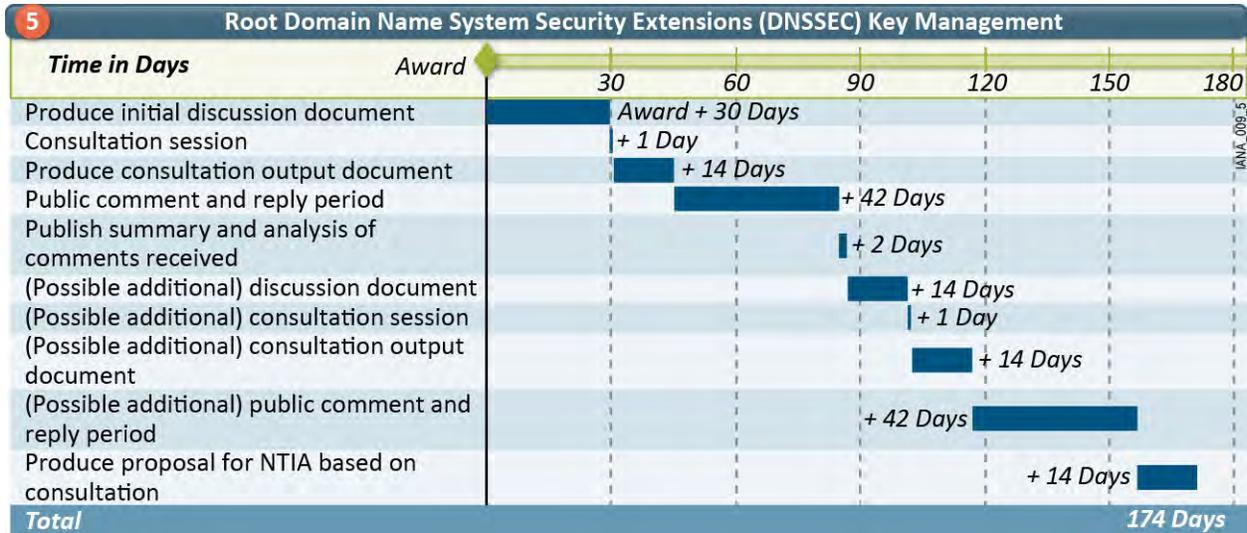


Figure 1.2-12e. Timeline

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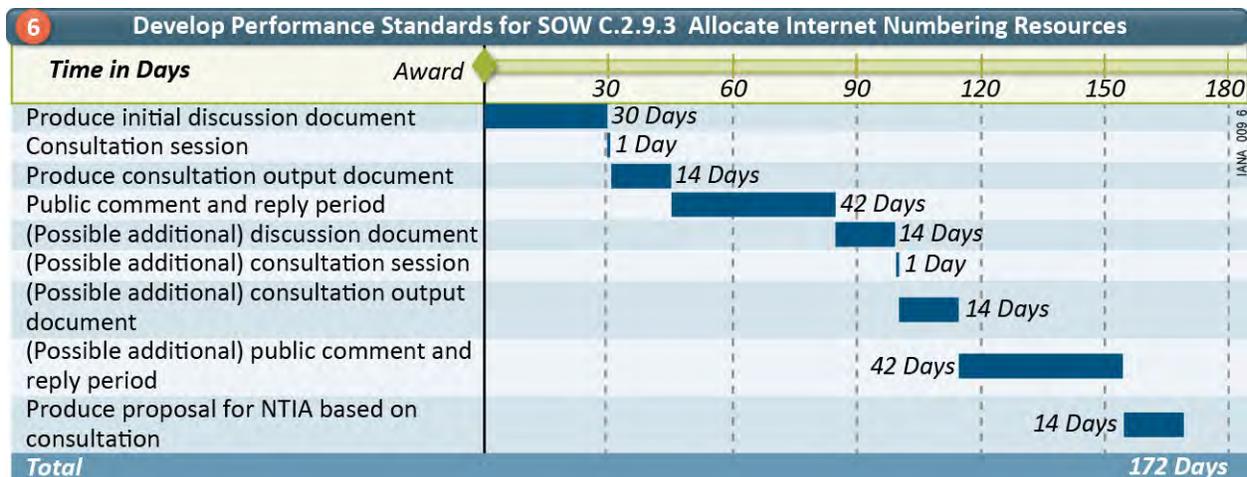
**vi. Develop Performance Standards for SOW C.2.9.3 Allocate Internet Numbering Resources**

ICANN entered into an Exchange of Letters with the Number Resource Organization (NRO) in December 2007. The NRO performs the role of the ICANN Address Supporting Organization (ASO). ICANN’s letter to the NRO included an invitation to the NRO to work with ICANN to document service levels associated with Internet Number Resource (INR) allocation processes. ICANN will renew its invitation to collaborate on service levels and will arrange a meeting at a mutually convenient location, such as an RIR or ICANN meeting or office, so ICANN and the NRO can develop performance standards. ICANN will use its KPIs for INR management, along with historical performance data as a starting point for discussions:

- IANA Accuracy
- IANA Timeliness
- IANA Process Quality
- IANA Transparency

ICANN has developed measurements and internal targets for these KPIs and can supply historical performance data. ICANN will use these data and goals as a basis for discussion.

To fully consult with all interested and affected parties on appropriate performance standards for these Functions, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe Connect. ICANN will hold a public comment and reply period for the documents produced following these sessions. In the event that an additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on performance standards. ICANN will then prepare a detailed proposal for NTIA to review and, upon acceptance by NTIA, will publish the performance standards on ICANN’s IANA website. ICANN will implement these performance standards and the reporting which will demonstrate our fulfillment of that service level commitment. See **Figure 1.2-12f**.



**Figure 1.2-12f. Timeline**

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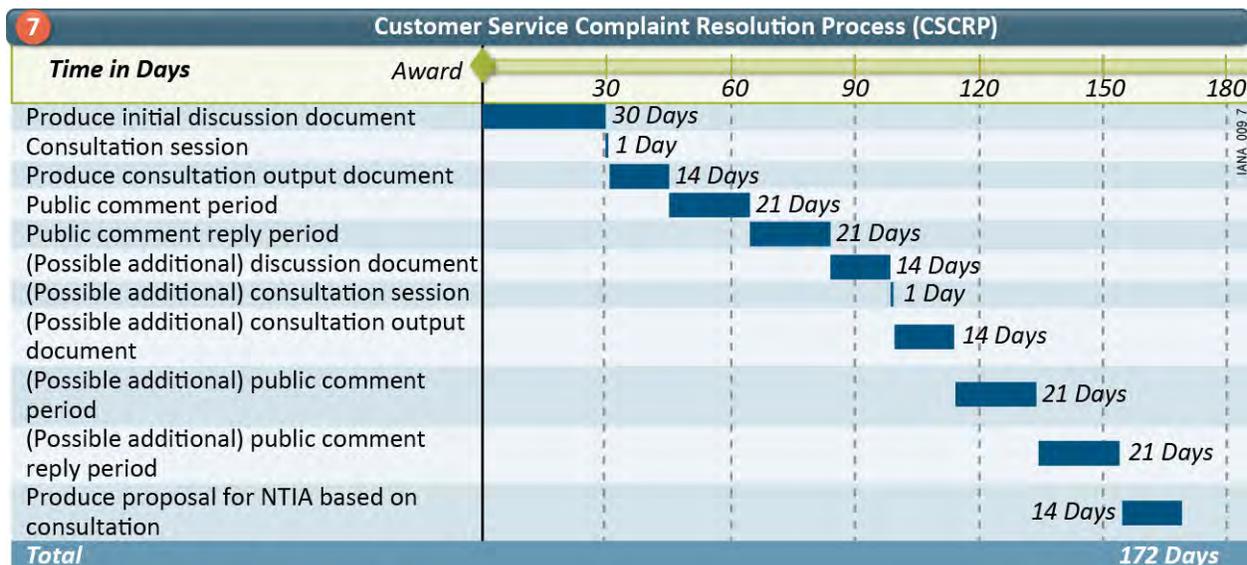
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**vii. Customer Service Complaint Resolution Process (CSCR)**

ICANN worked with the ccNSO and IETF leadership to develop an Escalation Procedure in 2006. This procedure, which has been published on ICANN’s IANA website (<https://www.iana.org/procedures/escalation>), forms a part of the SLA ICANN reviews and updates with the IAOC each year. ICANN will convene a group from all key stakeholder customer organizations: ccNSO, gNSO, NRO, IETF IANA WG, GAC, and NTIA. This group will review the current escalation procedure to see whether it continues to meet the needs of the organizations or if it should be refined. ICANN will publish any updates on ICANN’s IANA website and discuss with the IAOC incorporation of agreed changes into future revisions to the IAOC’s SLA.

To fully consult with all interested and affected parties on an appropriate CSCR, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe Connect. ICANN will hold a public comment and reply period for the documents produced following these sessions. In the event that additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on a CSCR proposal. ICANN will then prepare a detailed proposal for NTIA to review and, upon acceptance by NTIA, will publish the CSCR on ICANN’s IANA website. ICANN will implement the CSCR.

In addition to a current IANA Escalation Procedure, ICANN has an Ombudsman who can be reached thru the ICANN website and who reports directly to ICANN’s Board of Directors. The Ombudsman is available to conduct an independent, impartial and neutral review of facts and can also investigate complaints of unfairness using Alternative Dispute Resolution techniques. See **Figure 1.2-12g**.



**Figure 1.2-12g. Timeline**

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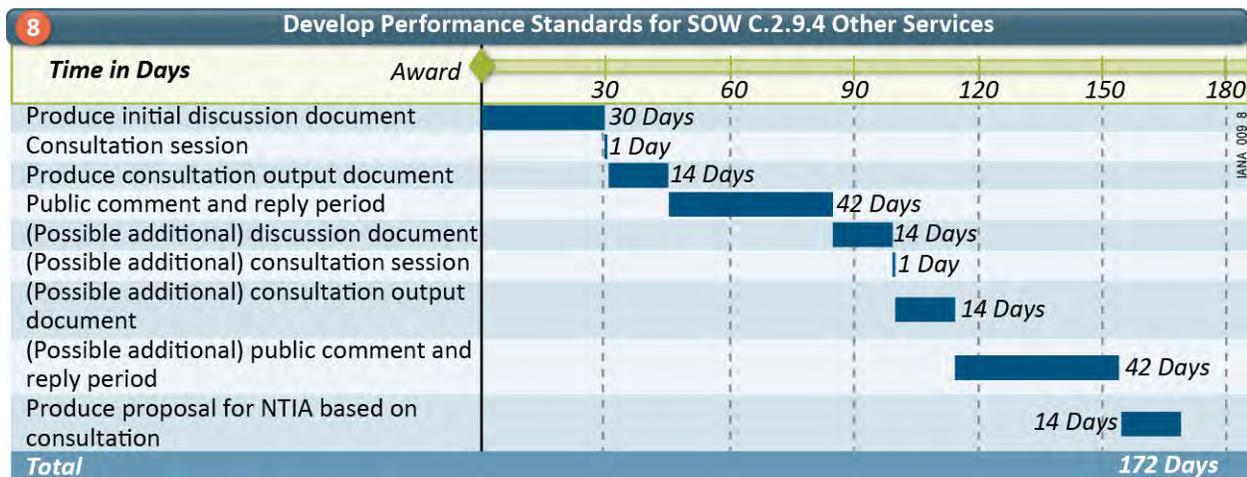
**viii. Develop Performance Standards for SOW C.2.9.4 Other Services**

ICANN will consult with NTIA regarding appropriate performance standards. ICANN will use the KPIs it has developed for root management as a starting point for this discussion:

- IANA Timeliness
- IANA Accuracy
- IANA Process Quality
- IANA Transparency
- IANA Reporting

ICANN has historical performance data and will use these data as a basis for discussion.

To fully consult with all interested and affected parties on appropriate performance standards for these Functions, ICANN will schedule and conduct consultation sessions with opportunities for remote participation using Adobe Connect. ICANN plans to hold a public comment and reply period for the documents produced following these sessions. In the event that additional discussion is necessary, ICANN will repeat these steps, so additional input can be collected from all interested and affected parties on performance standards. ICANN will then prepare a detailed proposal for NTIA to review and, upon acceptance by NTIA, will publish the performance standards on ICANN’s IANA website. ICANN will implement these performance standards and the reporting, which will demonstrate our fulfillment of that service level commitment. See **Figure 1.2-12h**.



**Figure 1.2-12h. Timeline**

**1.2.8.2 Post Via a Website**

As described above, ICANN will produce a proposal for NTIA at the conclusion of the consultation process planned with the interested and affected parties listed above for each of the IANA Functions. The plan is to complete the performance requirements phase of the consultation within three months of the award. Eight weeks will be reserved for discussions and iterations on the format of the web pages where the performance metrics will be published. The plan is to receive approval to publish from the COR on or before five and one half months after the award. Upon acceptance by NTIA, ICANN will publish within six months of the award

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the document on ICANN's IANA website in a section dedicated to performance standards. ICANN will publish the accepted document within a week of NTIA's notification that it has been accepted. ICANN will notify the interested and affected parties that the document has been published using its established links with each of the key stakeholders. These links include dedicated private mailing lists for announcements and discussions and regularly scheduled meetings.

### **1.2.8.3 Collaboration with Stakeholders**

To develop the performance standards, ICANN will work with each of the IANA Functions. ICANN will collaborate closely with each of the relevant stakeholder groups. ICANN will make sure that the stakeholders will be able to contribute text and comment on drafts prior to seeking approval and publishing the performance standards for each IANA Function.

## **1.2.9 Internet Assigned Numbers Authority (IANA) Functions [M.8; C.2.9]**

ICANN will provide support for requisite IANA Functions including the following: (1) the coordination of the assignment of technical Internet protocol parameters, (2) the administration of certain responsibilities associated with the Internet DNS root zone management, (3) the allocation of Internet numbering resources, and (4) other services related to the management of the ARPA and INT top-level domains (TLDs). The following section discusses in detail our understanding and technical approach to each SOW requirement.

### **1.2.9.1 Coordinate the Assignment of Technical Protocol Parameters Including the Management of the Address and Routing Parameter Area (ARPA) TLD [M.8; C.2.9.1]**

ICANN recognizes the Assignment of Technical Protocol Parameters and the management of the Address and Routing Parameter Area (ARPA) TLD as an essential component for successfully operating the IANA Functions. Assigning unique operation codes, port numbers, object identifiers (such as private enterprise numbers), protocol numbers, and other technical protocol parameters are vital parts of how the Internet works.

The process of managing the protocol parameter registries depends on a close working relationship with the IESG as well as the trust and confidence of the IETF community that the registries will remain accurate and available. ICANN has built this relationship over a long period of time and enjoys the trust and confidence of the IETF, IESG and IAB in the management of the protocol parameter registries.

In parallel with this, ICANN entered into an MoU with the IETF in 2000 (RFC 2860, Memorandum of Understanding Concerning the Technical Work of the Internet Assigned Numbers Authority). Subsequent yearly SLAs—which define the service time commitment goals, escalation procedures and projects for the IETF related work—will be reviewed annually and agreed to by both ICANN and the IETF. ICANN will continue to meet the deliverables of the SLA defined in the supplemental agreements. Over the last three years, ICANN has consistently met or exceeded the cumulative SLA goal for IANA Department processing times for IETF related requests.

Following guidance from the IAB and under the terms of the MoU (RFC2860), ICANN will continue to administer the .ARPA domain used exclusively for Internet-infrastructure purposes.

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ICANN will continue to follow the management guidelines and operational requirements defined in RFC3172 for the management of the .ARPA domain. ICANN will continue to observe the interim arrangement for DNSSEC for .ARPA and will work with integral parties to deploy a long-term architecture for DNSSEC in .ARPA to replace the interim arrangement.

### ***Understanding the Requirement***

ICANN understands that upon award of the contract, its responsibility for the assignment of technical protocol parameters, including the management of the Address and Routing Parameter Area (ARPA) TLD, will continue. In fulfilling this requirement, ICANN will assign unique values to various protocol parameters and maintain the list of existing and future registries created by the approved documents becoming Request for Comments (RFCs). There are currently more than 1,500 protocol parameter registries that have been created through what starts as an Internet-Draft (I-D), mostly initiated within the IETF, ultimately becoming a published RFC. Dozens of registries are added each year as more I-Ds that request new protocol registries become published RFCs. ICANN will continue to support the IETF and the RFC process by reviewing I-Ds before they are approved for publication to ensure that the request for actions complies with existing registration policies.

The relationship between ICANN and the IETF in coordinating the assignment of technical protocol parameters is described in a Memorandum of Understanding (MoU), published as RFC 2860 (See Appendix B). Since 2007, ICANN and the IETF have signed supplemental annual agreements which are integral to protocol parameter work. Under the new contract, ICANN will continue to develop these agreements together with the IETF leadership as their input helps guide the deliverables related to the protocol parameter work for the IETF.

ICANN will continue to manage the technical protocol parameters according to the instructions contained in the RFCs definition documents published through the IETF process. These documents define the creation of the protocol parameter registries and their registration policies. The strong working relationship ICANN has developed with these two groups ensures that any concerns about how requests are being processed are quickly communicated to ICANN and can be addressed rapidly. Similarly, any clarification ICANN needs for registration policies can be quickly provided.

ICANN understands the importance and responsibility of the management of .ARPA, including the addition of new second-level domains and updates to existing names and the implementation of DNSSEC in the .ARPA TLD. Through direction of the IAB, working with NTIA and Verisign, ICANN understands the deployment of a replacement for the current interim agreement for DNSSEC in .ARPA will fulfill the requirement as described in this contract.

### ***Technical Approach***

ICANN will have experienced staff assigned to support the technical protocol parameter assignments and the .ARPA management. ICANN will continue to use the processes in place utilizing the registration policies and procedures that have been developed by the IETF, IAB and ICANN for protocol parameter registries and .ARPA management. With over 13 years of experience, ICANN has created and will maintain productive working relationships with the

IETF, IESG and IAB and knows how to perform the protocol parameter and .ARPA work, delivering at service levels requested by these stakeholder groups.

ICANN will follow the established formal process review process, which is designed to improve processes in response to environmental changes, deployment experience and customer feedback. ICANN will remain responsive and flexible with receiving instructions from the IETF regarding requests for changes in processes while working collaboratively to continually improve processes for protocol parameter requests and document reviews. Process managers formally will review each step-by-step process every year in a change management process. Changes to processes will be the result of new definitions in RFCs providing instructions regarding registration policies to ICANN or instructions from IESG members and designated experts regarding registration procedures.

#### **1.2.9.1.1 Review and Assign Unique Values**

ICANN will responsibly review and assign unique values for protocol parameters in the registries currently maintained and for those future registries created through the RFC process. Protocol parameters (e.g., operation codes, port numbers, object identifiers, and protocol numbers) are an essential part of what makes the Internet work. ICANN will continue to process protocol parameter requests according to the established guidelines and policies defined in RFCs and will work together with the IETF leadership to determine appropriate service level goals.

There will be two ways in which ICANN will continue to receive requests for the assignment and registration of protocol parameters. The first will be through approved I-Ds becoming RFCs. Second will be through requests submitted directly to ICANN (not through the IETF document process). For approved Internet-Drafts becoming RFCs, the request for the protocol parameter assignments will be found in the IANA Considerations section of the document. The document will describe the specific actions to be taken by ICANN. This may include setting up a new registry with initial assignments, adding new assignments to existing registries or making modifications to existing registries. The Internet community will be able to submit requests directly to ICANN through online webforms or via email to request assignment of protocol parameters. Examples of webforms that will be used for requesting protocol parameter assignments can be found in **Appendix B**.

Together with the IETF, ICANN will continue to develop SLAs for the protocol parameter registry maintenance and document reviews. These agreements will include goal times for processing all types of requests for protocol parameters, specifically how much time is spent with ICANN. These agreements will be integral to the IANA Functions related to technical protocol parameters and they will define what ICANN delivers.

**Figure 1.2-13** lists the process flowcharts that will be used to review and assign unique values for protocol parameters.

**Figure 1.2-13. List of Process Flowcharts**

| <b>FIGURE #</b> | <b>CHART TITLE</b>   | <b>DESCRIPTION</b>   |
|-----------------|--|--|
| 1.2-14          | Internet-Draft Approval Process                                | This process will be used for documents approved to become RFCs, which may contain actions for ICANN to perform (new protocol parameter registries or assignments in existing registries). |
| 1.2-16          | First Come First Served (FCFS) Process                         | This process will be used for requests that are in registries with a First Come First Served registration policy per RFC 5226.   |
| 1.2-18          | Private Enterprise Number (PEN) – New Request Process          | This process will be used for new PEN requests that are in registries with a FCFS registration policy per RFC 5226.  |
| 1.2-20          | Private Enterprise Number (PEN) – Modification Request Process | This process will be used for PEN modification requests that are in registries with a FCFS registration policy per RFC 5226.   |
| 1.2-22          | Private Enterprise Number (PEN) – Removal Request Process      | This process will be used for PEN deletion requests that are in registries with a FCFS registration policy per RFC 5226.   |
| 1.2-24          | Expert Review Process  | This process will be used for requests that are in registries with a Expert Review registration policy per RFC 5226.   |
| 1.2-26          | IESG Approval Process  | This process will be used for requests that are in registries with a IESG Approval registration policy per RFC 5226.   |



- **PPM** – Protocol Parameter Manager
- **Authors** – the authors for the I-D that has been approved for publication as an RFC

**Figure 1.2-15. Internet-Draft Approval Process Step-by-Step Description**

| 1                  | PENDING RFC/DOCUMENT SENT TO ICANN  |
|--------------------|---|
| <b>Description</b> | An approval or intent to publish for an I-D is sent to ICANN.   |
| <b>Actor</b>       | IETF Secretariat or RFC Editor  |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• A message is sent to the ticketing system.</li> <li>• A message is sent to the ticketing system.</li> <li>• Message from Secretariat comes in a specified format.</li> <li>• Go to Action box 2.</li> </ul>  |
| 2                  | RECEIVE INFORMATION/NEW TICKET  |
| <b>Description</b> | A new ticket is created and either ticketing system automatically adds the ticket to the correct queue, or the ticket is manually placed in the right queue.  |
| <b>Actor</b>       | AUTO and/or IPS   |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• E-mail sent directly to the queue is automatically added to the appropriate ticket queue.</li> <li>• Tickets that arrive elsewhere are manually moved to the appropriate Ticketing System queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Action box 3.</li> </ul> |
| 3                  | IDENTIFY POSSIBLE ACTIONS   |
| <b>Description</b> | Gather all information needed to determine if there are actions to be performed by ICANN. This step also includes filling in custom fields for the ticket.  |
| <b>Actor</b>       | IPS   |
| <b>Documents</b>   | n/a   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Review the most recent version of the document.</li> <li>• Check the Last Call ticket (if applicable).</li> <li>• Check the Evaluation ticket.</li> <li>• Check for any other related tickets.</li> <li>• Go to Decision box 4.</li> </ul>   |
| 4                  | ANY IANA ACTIONS TO PERFORM?  |
| <b>Description</b> | Staff checks all the information identified to see if there are any actions for ICANN to perform.   |
| <b>Actor</b>       | IPS   |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Input to making decision based on the review of the Last Call, Evaluation and other related tickets, are there actions to perform?</li> <li>• If yes, go to Decision box 6.</li> <li>• If no, go to Action box 5.</li> </ul>   |
| 5                  | MARK TICKET AS NO IC  |
| <b>Description</b> | The ticket needs to be marked as having “NO IC” or No IANA Considerations. This means the Internet-Draft has no IANA Actions to perform.  |
| <b>Actor</b>       | IPS   |

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|                    |   |
|--------------------|---|
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>When the Internet-Draft does not contain any IANA Actions the ticket can be resolved.</li> <li>Go to END.</li> </ul>   |
| <b>6</b>           | <b>CAN ICANN PERFORM ALL OF THE ACTIONS NOW?</b>  |
| <b>Description</b> | Can ICANN perform ALL the actions right now? This means the document is not dependent on another document getting approved and actions performed.   |
| <b>Actor</b>       | IPS   |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>Verify that all the actions can be performed immediately (not having to wait for a registry to be created by a dependant document).</li> <li>If yes, go to Action box 16.</li> <li>If no, go to Decision box 7.</li> </ul>   |
| <b>7</b>           | <b>CAN ICANN PERFORM SOME OF THE ACTIONS NOW?</b>   |
| <b>Description</b> | Can ICANN perform SOME of the actions now? This means that some of the actions can be performed now and some will require waiting until later.  |
| <b>Actor</b>       | IPS   |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>Identify which actions, if any, can be performed immediately.</li> <li>Identify which actions need to be performed later and what document is required to be processed before the actions can be completed.</li> <li>If yes, go to Action box 16.</li> <li>If no, go to Decision box 8.</li> </ul> |
| <b>8</b>           | <b>IS IETF CONSULTATION NEEDED?</b>   |
| <b>Description</b> | Does the IETF (IESG, Area Directors, WG Chairs, and/or experts) need to be consulted regarding the pending actions?   |
| <b>Actor</b>       | PPM or IPS  |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>Determine if further consultation is needed.</li> <li>If yes, go to Sub Process box 12.</li> <li>If no, go to Decision box 9.</li> </ul>   |
| <b>9</b>           | <b>DOES ICANN NEED TO SEND QUESTIONS TO AUTHORS?</b>  |
| <b>Description</b> | Do questions or requests for clarification need to be sent to the authors of the document?  |
| <b>Actor</b>       | IPS   |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>Determine if further questions need to be asked of the authors to clarify the actions.</li> <li>Identify what questions need to be asked or what needs clarified.</li> <li>If yes, go to Action box 10.</li> <li>If no, go to Action box 13.</li> </ul>  |
| <b>10</b>          | <b>SEND QUESTIONS TO AUTHORS</b>  |
| <b>Description</b> | Send an email to the authors with questions regarding actions.  |
| <b>Actor</b>       | IPS   |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>Send email to authors.</li> </ul>  |

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|                    |  |
|--------------------|--|
|                    | <ul style="list-style-type: none"> <li>This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days.</li> <li>Go to Action box 11.</li> </ul>   |
| <b>11</b>          | <b>AUTHORS PROVIDE INFORMATION</b>   |
| <b>Description</b> | Authors send back information to help clarify the requested actions.   |
| <b>Actor</b>       | Authors  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>ICANN receives an email from the authors with answers to questions and/or clarification.</li> <li>Go to Decision box 6.</li> </ul>  |
| <b>12</b>          | <b>PERFORM IETF CONSULTATION – SUB PROCESS</b>   |
| <b>Description</b> | Perform the IETF Consultation by using the defined sub process.  |
| <b>Actor</b>       | PPM or IPS   |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>Follow the steps in the IETF Consultation Sub Process.</li> <li>Go to Decision box 6.</li> </ul>  |
| <b>13</b>          | <b>NOTIFICATION TO AUTHORS</b>   |
| <b>Description</b> | Inform the authors that we cannot proceed with the actions for the document, as it will need to be put on hold. (This could be ALL the actions or only SOME actions.)  |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>Send email to Authors.</li> <li>Go to Decision box 14.</li> </ul>   |
| <b>14</b>          | <b>PROCESS ON HOLD</b>   |
| <b>Description</b> | In order to perform all the actions for the approved Internet-Draft, another document must be approved and actions performed for it first.   |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>This ticket will stay in this Action box until the dependent actions are performed. A weekly check to see if the dependent document has been approved is performed where the next decision is asked again.</li> <li>Go to Decision box 15.</li> </ul> |
| <b>15</b>          | <b>PROCESS STILL ON HOLD?</b>  |
| <b>Description</b> | Weekly check to see if the document holding up the approved Internet-Draft is approved yet.  |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | n/a  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>Check against relevant queues to see if the dependent document has been approved and the actions completed.</li> <li>If yes, go to Action box 14.</li> <li>If no, go to Action box 16.</li> </ul>   |
| <b>16</b>          | <b>PERFORM ACTIONS</b>   |
| <b>Description</b> | Perform the actions in the IANA registries.  |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | N/A  |

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|                    |  |
|--------------------|--|
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Create new registries and/or add/modify/delete registrations from existing registries.</li> <li>• Change references to show the RFC-to-be.</li> <li>• Update the matrix to include new registries, registration procedures and references.</li> <li>• Go to Action box 17.</li> </ul>   |
| <b>17</b>          | <b>NOTIFICATION TO THE AUTHORS</b>   |
| <b>Description</b> | Inform the Internet-Draft authors (cc'ing WG chairs and ADs) that the actions for the document have been completed.  |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Confirm the actions are visible in the IANA Registries.</li> <li>• Write to the authors (cc'ing the WG chairs and ADs) and send them details of the actions completed.</li> <li>• This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days.</li> <li>• Go to Decision box 18.</li> </ul> |
| <b>18</b>          | <b>CONFIRM IANA ACTIONS PERFORMED</b>  |
| <b>Description</b> | Receive response from the authors indicating the actions taken are correct.  |
| <b>Actor</b>       | Authors and IPS  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Check response from authors to see if all actions taken are correct.</li> <li>• If yes, go to Decision box 20.</li> <li>• If no, go to Action box 19.</li> </ul>  |
| <b>19</b>          | <b>FURTHER ACTIONS</b>   |
| <b>Description</b> | The authors may have provided feedback to ICANN regarding changes to the actions performed.  |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Identify if there are any corrections and/or additions to be made in the registries and/or matrix.</li> <li>• Identify if there are any questions to answer.</li> <li>• Go to Action box 16.</li> </ul>   |
| <b>20</b>          | <b>ALL IANA ACTIONS PERFORMED?</b>   |
| <b>Description</b> | Have ALL the Actions been performed and confirmed? (Some actions may have been completed at different times if there was a dependency.)  |
| <b>Actor</b>       | IPS  |
| <b>Documents</b>   | N/A  |
| <b>Steps</b>       | <ul style="list-style-type: none"> <li>• Confirm the actions are visible in the IANA Registries.</li> <li>• Confirm there are no additional actions that are waiting on other documents.</li> <li>• If yes, go to Action box 21.</li> <li>• If no, go to Action box 14.</li> </ul>   |
| <b>21</b>          | <b>NOTIFICATION TO THE RFC-EDITOR</b>  |
| <b>Description</b> | Inform RFC-Editor that the IANA Actions have been completed and identify which actions were performed.   |
| <b>Actor</b>       | IPS  |

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|                    |   |
|--------------------|---|
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"><li>• Send message to RFC-Editor.</li><li>• This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days.</li><li>• Go to Action box 22.</li></ul> |
| <b>22</b>          | <b>ACKNOWLEDGMENT LETTER</b>  |
| <b>Description</b> | The RFC-Editor informs ICANN that they have received (acknowledged) receipt of confirmation of IANA Actions completed.  |
| <b>Actor</b>       | RFC Editor/IPS  |
| <b>Documents</b>   | N/A   |
| <b>Steps</b>       | <ul style="list-style-type: none"><li>• Receive message from RFC-Editor indicating acknowledgment.</li><li>• Go to END.</li></ul>   |

The status of documents that have been approved for publication will be publicly available on ICANN'S IANA website.

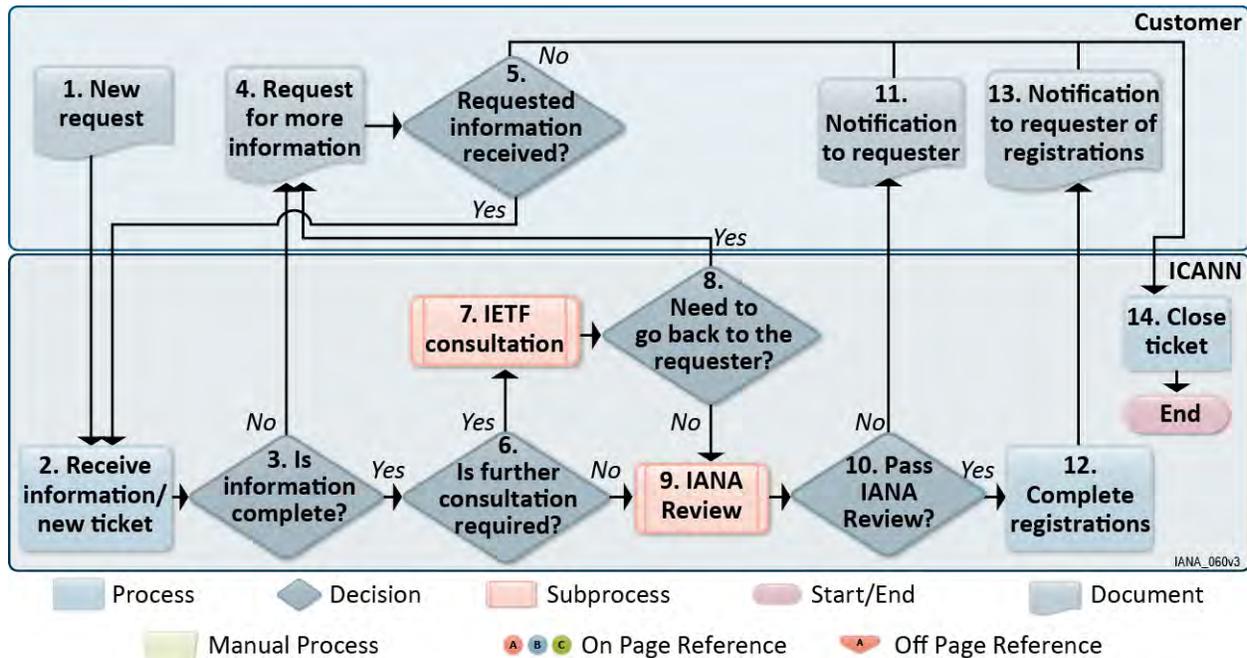
Protocol parameters will be submitted either using the forms available on ICANN'S IANA website or via email. Requests will be made on behalf of individuals or organizations/companies. Upon receipt of a request, ICANN will verify what the requester is seeking to register and what the registration procedures are for that parameter type. The registration procedures for each registry will be established by the RFC authors and will be in most cases reviewed by the IETF community including Working Groups, IESG and IAB. The definitions of the registration procedures can be found in RFC 5226. If clarification is required, ICANN will work with subject matter experts and the IESG to answer any questions.

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**First Come First Served Protocol Parameter Request Process**

Figure 1.2-16 shows the top-level, step-by-step process that will be used for requests for protocol parameters that follow the FCFS registration procedures. Examples of FCFS requests are TRIP ITAD numbers and Vendor Specific Application IDs. These requests do not require additional review by experts or do not require additional documentation. They will be reviewed to make sure the minimal information requested has been submitted and then are processed.



**Figure 1.2-16. First Come First Served (FCFS) Process**

Note: The PEN registry will also use the FCFS process; however, because of the volume of requests, they use a separate processing system.

Figure 1.2-17 shows the top-level, step-by-step process used for requests for protocol parameters.

**Definitions**

- **AUTO** – Automatically through ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Requesters** – The requester who submitted the request.
- **IETF** – Internet Engineering Task Force

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- **IESG** – Internet Engineering Steering Group
- **AD** – Area Director
- **WGC** – Working Group Chair

**Figure 1.2-17. FCFS Process Step-by-Step Description**

| 1           | NEW REQUEST SENT TO ICANN  |
|-------------|--|
| Description | A request for a new registration in IANA maintained registries is sent to ICANN.   |
| Actor       | Requester  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• A message is sent to <i>iana@iana.org</i> or to a specific queue via email or through an online template.</li> <li>• Go to Action box 2.</li> </ul>   |
| 2           | RECEIVE INFORMATION/NEW TICKET   |
| Description | If this is the initial information being received, a new ticket is created. Ticketing system automatically puts the ticket in the correct queue or the ticket is manually placed in the appropriate queue. If this is additional information being received, it will either directly go to the existing ticket, or a new ticket will be created and will be merged with the existing ticket.   |
| Actor       | AUTO and/or IPS  |
| Documents   | Tools needed: Ticketing system   |
| Steps       | <ul style="list-style-type: none"> <li>• Tickets that arrive in <i>iana@iana.org</i> are manually moved to the appropriate ticketing system queue.</li> <li>• Some tickets will automatically arrive in the appropriate queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Decision box 3.</li> </ul>   |
| 3           | IS INFORMATION COMPLETE?   |
| Description | Review the information in the ticket. Check to make sure all required information for the registration requested is included.  |
| Actor       | IPS  |
| Documents   | <i>www.iana.org/protocols</i> (to verify which registry and registration procedures)<br><i>www.rfc-editor.org</i> (to verify any information in the guiding RFC)   |
| Steps       | <ul style="list-style-type: none"> <li>• Review the ticket information.</li> <li>• Check which registry they are requesting a parameter in.</li> <li>• Add the registry information if applicable to a custom field.</li> <li>• Are all criteria met according to the governing RFC? Check the RFC that created the registry and established the registration procedures. Are there any specific criteria that need to be met to submit a fully formed request? Are only specific characters allowed in the name being registered? Are there any other rules to be followed for the registry the applicant is seeking registration in? Check to see if there is already a registration with the same name/number (duplicates).</li> <li>• If yes, go to Decision box 6.</li> <li>• If no, go to Action box 4.</li> </ul> |
| 4           | REQUEST FOR MORE INFORMATION   |
| Description | A message is sent to the requester asking for more information regarding the requested parameter registration.   |
| Actor       | IPS  |

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|             |   |
|-------------|---|
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Send message to requester.</li> <li>• Ask clarifying questions as needed.</li> <li>• This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>• Go to Decision box 5.</li> </ul>  |
| <b>5</b>    | <b>REQUESTED INFORMATION RECEIVED?</b>  |
| Description | Has the requested information been sent back to ICANN by the requester?   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Information has been sent back to ICANN.</li> <li>• If yes, go to Action box 2.</li> <li>• If no AND past 30 days, go to Action box 14.</li> </ul>   |
| <b>6</b>    | <b>IS FURTHER CONSULTATION REQUIRED?</b>  |
| Description | Does ICANN need to consult with someone in the IETF community regarding this request?   |
| Actor       | IPS   |
| Documents   | <p>ICANN's Private Network link:<br/> <a href="https://wiki.icann.org/display/icanniana/Designated+Experts+List&amp;nbsp;nbsp;">https://wiki.icann.org/display/icanniana/Designated+Experts+List&amp;nbsp;nbsp;</a> (This page lists all the designated experts/email addresses for registries<br/> <a href="http://datatracker.ietf.org/wg/">http://datatracker.ietf.org/wg/</a> (This page includes all the names/email addresses for Area Directors and WGCs.)</p> |
| Steps       | <ul style="list-style-type: none"> <li>• Are there questions that cannot be answered by the requester or ICANN that require sending a question to the IETF (IESG, AD, WGC and/or Expert)?</li> <li>• If yes, go to Sub Process box 7.</li> <li>• If no, go to Sub Process box 9.</li> </ul>   |
| <b>7</b>    | <b>IETF CONSULTATION SUB PROCESS</b>  |
| Description | IETF Consultation Sub Process   |
| Actor       | PPM or IPS  |
| Documents   | N/A   |
| Steps       | Go to Decision box 8.   |
| <b>8</b>    | <b>NEED TO GO BACK TO THE REQUESTER?</b>  |
| Description | Does ICANN need to go back to the requester with requests for clarification and/or questions?   |
| Actor       | PPM or IPS  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Determine if ICANN needs to go back to the requester with questions/clarification.</li> <li>• If yes, go to Action box 4.</li> <li>• If no, go to Sub Process box 9.</li> </ul>  |
| <b>9</b>    | <b>IANA REVIEW SUB PROCESS</b>  |
| Description | IANA Review Sub Process   |
| Actor       | IPS   |
| Documents   | ICANN's Private Network link: <a href="https://wiki.icann.org/display/icanniana/IANA+Review+Process">https://wiki.icann.org/display/icanniana/IANA+Review+Process</a>   |
| Steps       | <ul style="list-style-type: none"> <li>• Go to Decision box 10.</li> </ul>  |

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| <b>10</b>   | <b>PASS IANA REVIEW?</b>   |
|-------------|--|
| Description | Did the request pass IANA Review?  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• If yes, go to Action box 12.</li> <li>• If no, go to Action box 11.</li> </ul>  |
| <b>11</b>   | <b>NOTIFICATION TO REQUESTER</b>   |
| Description | Notify the requester that the request can not be processed.  |
| Actor       | PPM  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Send email to the requester.</li> <li>• Go to Action box 14.</li> </ul>   |
| <b>12</b>   | <b>COMPLETE REGISTRATIONS</b>  |
| Description | Perform the actions in the IANA Registries.  |
| Actor       | IPS  |
| Documents   | Tools needed: Subversion and Oxygen  |
| Steps       | <ul style="list-style-type: none"> <li>• Complete registrations in existing registries.</li> <li>• Go to Action box 13.</li> </ul>   |
| <b>13</b>   | <b>NOTIFICATION TO REQUESTER</b>   |
| Description | Inform the requester that the registration has been completed.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Confirm the registration is visible in the IANA Registries.</li> <li>• Write to the requester and send them details of the registration completed.</li> <li>• Go to Action box 14.</li> </ul> |
| <b>14</b>   | <b>CLOSE TICKET</b>  |
| Description | Final step to close the ticket.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Go to END.</li> </ul>   |

**Private Enterprise Number (PEN) Protocol Parameters**

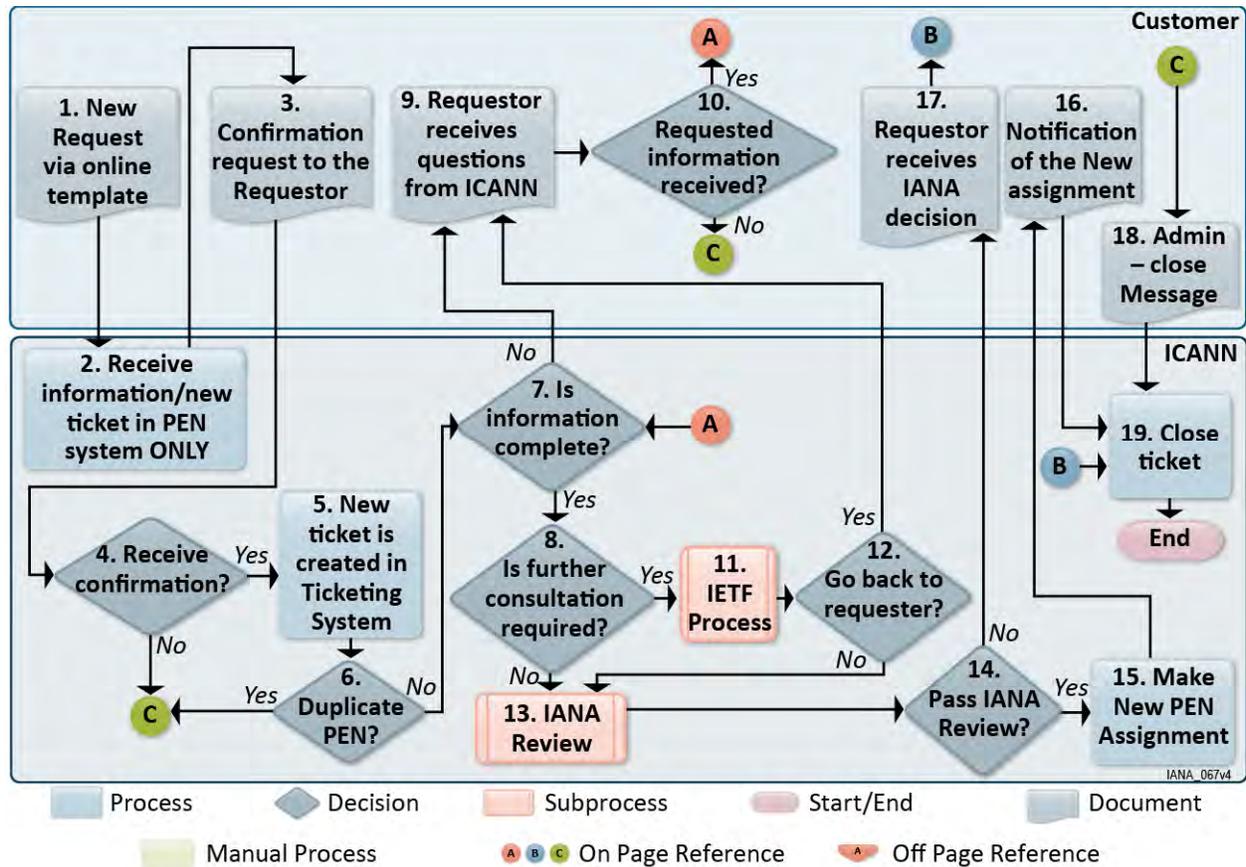
Private Enterprise Numbers (PENs) are a type of object identifier protocol parameter. Because of the large volume of requests, ICANN will use a separate system to process PEN requests. ICANN will automate the current system to allow for more automation and to improve both administrative and user interfaces. ICANN will also produce more statistical information from an automated system. Below are the step-by-step processes ICANN will use to handle requests for new PENs, modifications of existing PENs and the removal of PENs.

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**New Private Enterprise Numbers (PENs)**

Figure 1.2-18 shows the top-level, step-by-step process that will be used for requests for New Private Enterprise Numbers that follow the first come first served registration procedures.



**Figure 1.2-18. Private Enterprise Number (PEN) – New Request Process**

Figure 1.2-19 describes the top-level, step-by-step process that will be used for requests for new Private Enterprise Numbers that follow the first come first served registration procedures.

**Definitions**

- **AUTO** – Automatically through PEN system and/or ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Requesters** – The requester who submitted the request
- **IETF** – Internet Engineering Task Force

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- IESG – Internet Engineering Steering Group
- AD – Area Director
- WGC – Working Group Chair

**Figure 1.2-19. Private Enterprise Number (PEN) – New Request Process Step-by-Step Description**

| 1           | NEW REQUEST SENT TO ICANN  |
|-------------|--|
| Description | A request for a new registration in IANA PEN registry is sent to ICANN. See <b>Appendix A</b> .  |
| Actor       | Requester  |
| Documents   | N/A  |
| Steps       | Go to Action box 2   |
| 2           | RECEIVE INFORMATION/NEW TICKET (IN PEN SYSTEM ONLY)  |
| Description | A new ticket is created in the IANA PEN system ONLY. The request will NOT be created in the ticket system at this time.  |
| Actor       | AUTO   |
| Documents   | Online template  |
| Steps       | Go to Action box 3   |
| 3           | CONFIRMATION REQUEST TO THE REQUESTOR  |
| Description | The IANA PEN system automatically generates a “confirmation message” and sends it to the email address specified in the template to request one confirmation. The “confirmation message” contains a secure non-guessable and non-sequential web-based link.  |
| Actor       | AUTO   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• The IANA PEN system               <ul style="list-style-type: none"> <li>– The outgoing message is logged in the system.</li> <li>– 30-days timeout starts.</li> <li>– IPS reviews the ticket information.</li> </ul> </li> <li>• Ticket system: NO Event occurred.</li> <li>• WHEN it is spam, IPS can interfere and manually close the request: Set the Request state to “Admin-close.” No further action and outgoing message are required.</li> <li>• Go to Step 4.</li> </ul>  |
| 4           | RECEIVE CONFIRMATION?  |
| Description | A confirmation is returned via the secure web-based link.  |
| Actor       | Requester  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• IF the requestor confirms the request within the 30 calendar days:               <ul style="list-style-type: none"> <li>– A web-based “Confirmation” message is automatically displayed on the website.</li> </ul> </li> <li>• IF the requestor CANCELS the request:               <ul style="list-style-type: none"> <li>– A web-based “Request has been cancelled” message is automatically displayed on the website.</li> </ul> </li> <li>• This ticket will stay in this Step until a response is received. Automated Pings/Reminders will be sent from the PEN system every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>• If yes, go to Step 5.</li> <li>• If no AND past 30 days, go to Step 18.</li> </ul> |
| 5           | NEW TICKET IS CREATED IN TICKET SYSTEM   |
| Description | The PEN request has been confirmed by the requester. A new request is now created in the   |

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|             |   |
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|             | ticketing system and will be reviewed by ICANN.   |
| Actor       | AUTO  |
| Documents   | An AutoReply message is sent from the system upon the creation of the new ticket. The AutoReply message provides an acknowledgement of receipt of the PEN request and provides the Ticket System URI, so the requestor can check the status of the request in any given time.   |
| Steps       | Go to Action box 6  |
| <b>6</b>    | <b>DUPLICATE PEN?</b>   |
| Description | Review the information in the ticket. Check whether 1) the company already has existing allocations in the registry, 2) there is another new application in the queue and 3) there is a modification request in the queue.  |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• “Duplicate Check” function to allow IPS to check this requirement: <ul style="list-style-type: none"> <li>– Case 1: the company already has existing allocations in the registry: <ul style="list-style-type: none"> <li>• If yes, go to Step 18.</li> <li>• If no, go to Step 7.</li> </ul> </li> <li>– Case 2: there is another new application in the queue: <ul style="list-style-type: none"> <li>• Go to Step 7.</li> </ul> </li> <li>– Case 3: there is a modification request in the queue: (The requester submitted a modification request when the requester realized the company already has an existing PEN after the requester submitted the New request.) <ul style="list-style-type: none"> <li>• If yes, go to Step 18.</li> <li>• If no, go to Step 7.</li> </ul> </li> </ul> </li> </ul> |
| <b>7</b>    | <b>IS INFORMATION COMPLETE?</b>   |
| Description | Review the information in the ticket. Check to make sure all required information for the registration is included.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• IPS reviews the ticket information.</li> <li>• If yes, go to Step 8.</li> <li>• If no, go to Step 9.</li> </ul>  |
| <b>8</b>    | <b>IS FURTHER CONSULTATION REQUIRED?</b>  |
| Description | Does ICANN need to consult with someone in the IETF community regarding this request?   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | If yes, go to Step 11. If no, go to Step 13.  |
| <b>9</b>    | <b>REQUESTOR RECEIVES QUESTIONS FROM ICANN</b>  |
| Description | A message is sent to the requester asking for more information regarding the requested parameter registration.  |
| Actor       | IPS and Requestor   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• The message is logged in the PEN system.</li> <li>• The outgoing message is logged in ticketing system.</li> <li>• Send questions for clarifications to requestor and/or request additional information from requestor.</li> <li>• Go to Step 10.</li> </ul>   |
| <b>10</b>   | <b>REQUESTED INFORMATION RECEIVED?</b>  |
| Description | Has the requested information been sent back to ICANN by the requester?   |
| Actor       | Requestor   |

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| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Information has been sent back to ICANN.</li> <li>The message is logged in the PEN system.</li> <li>The outgoing message is logged in ticketing system.</li> <li>This ticket will stay in this Action box until a response is received. Automated Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>If yes, go to Step 7.</li> <li>If no AND past 30 days, go to Step 18.</li> </ul> |
| <b>11</b>   | <b>IETF CONSULTATION SUB PROCESS</b>   |
| Description | IETF Consultation Sub Process  |
| Actor       | PPM or IPS   |
| Documents   | N/A  |
| Steps       | Go to Step 12.   |
| <b>12</b>   | <b>GO BACK TO THE REQUESTER?</b>   |
| Description | Does ICANN need to go back to the requester with requests for clarification and/or questions?  |
| Actor       | PPM or IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Determine if ICANN needs to go back to the requester with questions/clarification.</li> <li>If yes, go to Step 10.</li> <li>If no, go to Sub Process box 13.</li> </ul>   |
| <b>13</b>   | <b>IANA REVIEW SUB PROCESS</b>   |
| Description | Requests are required to perform an IANA review under the contractual obligation with the instructions from the ICANN Legal Department. A well-defined request will be sent to legal (outside consultant) to perform the IANA Review. The request will be stalled within this state until ICANN receives clearance to continue processing the request.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Go to Step 14.</li> </ul>   |
| <b>14</b>   | <b>PASS IANA REVIEW?</b>   |
| Description | Did the request pass IANA Review?  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>If yes, go to Step 15.</li> <li>If no, go to Step 17.</li> </ul>  |
| <b>15</b>   | <b>COMPLETE ASSIGNMENT</b>   |
| Description | A new allocation is immediately made in the IANA PEN registry.   |
| Actor       | AUTO and IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>ICANN reviews result in the ticket.</li> <li>The PEN system assigns the next available number in the PEN database.</li> <li>Go to Step 16.</li> </ul>   |
| <b>16</b>   | <b>NOTIFICATION OF THE NEW ASSIGNMENT</b>  |
| Description | Inform the requester that the registration has been completed.   |
| Actor       | AUTO and IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The registration will be visible in the IANA PEN registry.</li> <li>Send a "Completion" message including the details of the registration to the requester.</li> </ul>  |

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|             | <ul style="list-style-type: none"> <li>The PEN system records the outgoing “Completion” message.</li> <li>The ticketing system records the outgoing “Completion” message.</li> <li>Go to Step 19.</li> </ul>  |
| <b>17</b>   | <b>REQUESTER RECEIVES ICANN DECISION</b>  |
| Description | Notify the requester that the request cannot be processed.  |
| Actor       | PPM   |
| Documents   | An email message informing the requester that the request cannot be processed at this time.   |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system records the outgoing message.</li> <li>In the ticketing system send email to the requester.</li> <li>Go to Step 19.</li> </ul>  |
| <b>18</b>   | <b>“ADMIN-CLOSED” MESSAGE</b>   |
| Description | Inform the requester that the request has been administratively closed due to the following one of the scenario: <ul style="list-style-type: none"> <li>Past 30 days</li> <li>An existing PEN</li> <li>Incomplete Info</li> </ul>   |
| Actor       | AUTO or IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system records the outgoing “Admin-closed” message.</li> <li>The ticketing system records the outgoing “Admin-closed” message.</li> <li>Send an “Admin-closed” message including the original template.</li> <li>Go to Step 19.</li> </ul> |
| <b>19</b>   | <b>CLOSE TICKET</b>   |
| Description | Final step to close the ticket.   |
| Actor       | AUTO and IPS  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Go to END.</li> </ul>  |

### Modification of Private Enterprise Numbers (PENs)

Figure 1.2-20 is the top-level, step-by-step process that will be used for requests for Modification of existing PENs that follow the first come first served registration procedures.

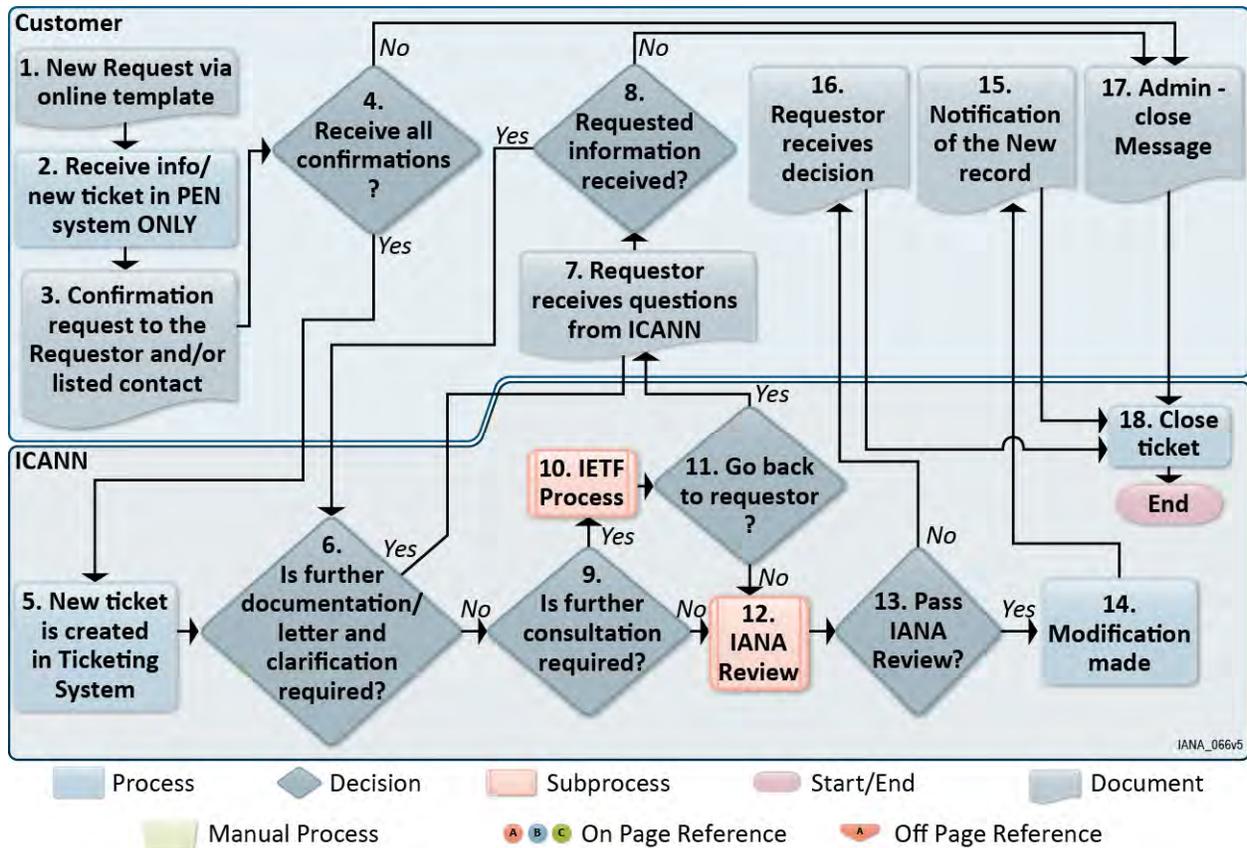


Figure 1.2-20. Private Enterprise Number (PEN) – Modification Request Process

Figure 1.2-21 is the step-by-step process that will be used for requests for Modification of existing Private Enterprise Numbers.

This process will define the PEN modification application workflow.

#### Definitions

- **AUTO** – Automatically through PEN and/or ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Requesters** – The requester who submitted the request.
- **List Contact** – The old contact listed in the PEN registry

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- IETF – Internet Engineering Task Force
- IESG – Internet Engineering Steering Group
- AD – Area Director
- WGC – Working Group Chair

**Figure 1.2-21. Private Enterprise Number (PEN) – Modification Request Process**

| 1           | NEW REQUEST SENT TO ICANN   |
|-------------|---|
| Description | A request to edit an existing registration from IANA PEN registry is sent to ICANN.   |
| Actor       | Requester   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• An online template is submitted via <a href="http://pen.iana.org/pen/ModifyPen.page">http://pen.iana.org/pen/ModifyPen.page</a>. See <b>Appendix A</b> for template.</li> <li>• Only ONE template to update a PEN record is allowed at any given time.</li> <li>• Go to Action box 2.</li> </ul>   |
| 2           | RECEIVE INFORMATION/NEW TICKET IN PEN SYSTEM ONLY   |
| Description | A new ticket is created in the PEN system ONLY. The request will NOT be created in ticketing system at this time.   |
| Actor       | AUTO  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>– Templates will automatically arrive in the PEN system.</li> <li>• Go to Step 3.</li> </ul>   |
| 3           | REQUESTOR RECEIVES MESSAGE TO REQUEST CONFIRMATION(S)   |
| Description | <ul style="list-style-type: none"> <li>• The PEN system automatically generates a “confirmation message” and sends it to relevant addresses to request confirmation(s):               <ul style="list-style-type: none"> <li>– The proposed email address specified in the template</li> <li>– The current email address associated with the requested PEN record in the PEN database</li> </ul> </li> <li>• “Confirmation messages” will contain secure non-guessable and non-sequential web-based links responding to the requests.</li> </ul>  |
| Actor       | AUTO and/or IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system               <ul style="list-style-type: none"> <li>– Request state stays as “PENDING_CONFIRMATION.”</li> <li>– The outgoing messages are logged in the system; two outgoing messages IF the listed email address and proposed email address are different addresses.</li> <li>– Request clock is automatically set to “the requestor” time.</li> <li>– 30-days timeout starts.</li> <li>– IPS reviews the ticket information.</li> </ul> </li> <li>• When it is spam or test ticket, IPS can interfere and close the request:               <ul style="list-style-type: none"> <li>– Set the Request state to “Admin-close.” No further action and outgoing message are required.</li> </ul> </li> <li>• Ticket system: NO Event occurred.</li> <li>• In the PEN system the outgoing messages are logged in the system; two outgoing messages IF the listed email address and proposed email address are different addresses.</li> <li>• Request clock is automatically set to “the requestor” time</li> <li>• 30-days timeout starts.</li> </ul> |

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|             |  |
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|             | <ul style="list-style-type: none"> <li>• IPS reviews the ticket information.</li> <li>• When it is spam or test ticket, IPS can interfere and close the request.</li> <li>• Go to Decision box 4.</li> </ul>   |
| <b>4</b>    | <b>IS CONFIRMATION (OR CONFIRMATIONS) RECEIVED?</b>  |
| Description | One or two confirmations are returned via the secure web-based link  |
| Actor       | Requester and/or Listed Contact  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• A web-based “Confirmation” message is automatically displayed on the website when a contact visits a secure web-based link.</li> <li>• IF either the requester or the listed contact returns one confirmation via the secure web-based link:</li> <li>• This ticket will stay in this step until a response is received. Automated Pings/Reminders will be sent from the PEN system every seven calendar days. The request will be closed if there is no response after 30 days. Set Request state to “Expired.”</li> <li>• If no (one confirmation) AND past 30 days, go to Step 17.</li> <li>• IF the requestor or listed contact CANCEL the request: <ul style="list-style-type: none"> <li>– A web-based “Request has been cancelled” message is automatically displayed on the website.</li> <li>– Go to Step 17.</li> </ul> </li> </ul> |
| <b>5</b>    | <b>CREATE NEW TICKET</b>   |
| Description | The PEN request has been confirmed by either the current contact or the proposed contact. A new ticket is now created in the ticketing system.   |
| Actor       | AUTO and/or IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>– Tickets will arrive in a new/appropriate queue <i>iana-pen@iana.org</i>.</li> <li>– Go to Decision box 6.</li> </ul>  |
| <b>6</b>    | <b>IS FURTHER DOCUMENTATION/LETTER AND CLARIFICATIONS REQUIRED?</b>  |
| Description | Review the information in the ticket. Check whether 1) a letter is required and 2) supplemental documents and information is required to verify the requested changes.   |
| Actor       | IPS or AUTO  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system</li> <li>• IPS checks the requested changes and compares with the existing record in the PEN database, determines whether we have received an email confirmation from the listed contact or a bounce from the listed email address, and if additional supplemental documents and/or a letter are required to process the requested changes.</li> <li>• If yes, go to Step 7.</li> <li>• If no, go to Decision box 9.</li> </ul>  |
| <b>7</b>    | <b>REQUEST FOR MORE INFORMATION</b>  |
| Description | A message is sent to the requester asking for more information regarding the requested changes.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system records the outgoing message.</li> <li>• Ticketing system records the outgoing message.</li> <li>• IPS reviews the ticket information and sends a message to requester to request additional information and clarifications to verify the requested changes.</li> </ul>  |

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|             |  |
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|             | <ul style="list-style-type: none"> <li>Go to Decision box 8.</li> </ul>  |
| <b>8</b>    | <b>REQUESTED INFORMATION RECEIVED?</b>   |
| Description | Has the requested documentation and/or information been sent back to ICANN by the requester?   |
| Actor       | Requester and/or Listed Contact  |
| Documents   | A signed letter, documentation of sale or acquisition, a copy of the original assignment notification, etc., in pdf or fax   |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system records the returned information</li> <li>Ticketing system records the returned information</li> <li>Information has been sent back to ICANN for further review</li> <li>This ticket will stay in this Step until a response is received. Automated Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>If yes, go to Decision box 6.</li> <li>If no AND past 30 days, go to Step 17.</li> </ul>                                    |
| <b>9</b>    | <b>IS FURTHER CONSULTATION REQUIRED?</b>   |
| Description | Does ICANN need to consult with someone in the IETF community regarding this request?  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system <ul style="list-style-type: none"> <li>IPS changes “Request state” to “PENDING_IESG_REVIEW.”</li> <li>Request clock is automatically set to “Others” time.</li> </ul> </li> <li>Ticketing system <ul style="list-style-type: none"> <li>Are there questions that cannot be answered or determined by the requestor or ICANN that requires sending questions to the IETF (IESG, AD, WGC and/or Expert)?</li> </ul> </li> <li>If yes, go to Sub Process box 10.</li> <li>If no, go to Sub Process box 12.</li> </ul> |
| <b>10</b>   | <b>IETF CONSULTATION SUB PROCESS</b>   |
| Description | IETF Consultation Sub Process  |
| Actor       | PPM or IPS   |
| Documents   | N/A  |
| Steps       | Go to Decision box 11.   |
| <b>11</b>   | <b>NEED TO GO BACK TO THE REQUESTER?</b>   |
| Description | Does ICANN need to go back to the requester with requests for clarification and/or questions?  |
| Actor       | PPM or IPS   |
| Documents   | Additional documentation, if required  |
| Steps       | <ul style="list-style-type: none"> <li>Determine if ICANN needs to go back to the requester with questions/clarification.</li> <li>If yes, go to Step.</li> <li>If no, go to Sub Process box 12.</li> </ul>  |
| <b>12</b>   | <b>IANA REVIEW SUB PROCESS</b>   |
| Description | IANA Review Sub Process  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | Go to Step 13  |
| <b>13</b>   | <b>PASS IANA REVIEW?</b>   |
| Description | Did the request pass IANA Review?  |
| Actor       | IPS  |

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|             |  |
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| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The IANA Review result is recorded in the ticketing system.</li> <li>If yes, go to Action box 14.</li> <li>If no, go to Action box 16.</li> </ul>   |
| <b>14</b>   | <b>MODIFICATION COMPLETED</b>  |
| Description | The PEN record has been updated in the IANA PEN registry.  |
| Actor       | AUTO and IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system               <ul style="list-style-type: none"> <li>Change “Request state” to “MODIFIABLE.”</li> <li>Update the registry.</li> </ul> </li> <li>Ticketing system               <ul style="list-style-type: none"> <li>IPS changes ticket state to “open.”</li> <li>IPS changes the IANA_Prot-Param_State to “Modifiable.”</li> <li>IPS logs the IANA Review result in the ticket.</li> </ul> </li> <li>Go to Step 15.</li> </ul> |
| <b>15</b>   | <b>NOTIFICATION TO REQUESTER</b>   |
| Description | Inform the requester that the modification has been completed.   |
| Actor       | AUTO and IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Send a “Completion” message including the details of the new information to the requester (current contact).</li> <li>The PEN system records the outgoing “Completion” message.</li> <li>Ticketing system               <ul style="list-style-type: none"> <li>records the outgoing “Completion” message in RT.</li> </ul> </li> <li>The changes will be visible in the IANA PEN registry.</li> <li>Go to Action box 19.</li> </ul>             |
| <b>16</b>   | <b>NOTIFICATION TO REQUESTER ABOUT THE DECISION (PER OFAC)</b>   |
| Description | Notify the requester that the request cannot be processed.   |
| Actor       | PPM  |
| Documents   | An email message informing the requester that the request can not be processed at this time.   |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system               <ul style="list-style-type: none"> <li>Record the outgoing message.</li> </ul> </li> <li>Send email to the requester.</li> <li>Go to Action box 18.</li> </ul>   |
| <b>17</b>   | <b>“ADMIN-CLOSED” NOTIFICATION TO REQUESTER</b>  |
| Description | <p>Inform the requester that the request has been administratively closed due to the one of the following scenarios:</p> <ul style="list-style-type: none"> <li>Past 30 days</li> <li>Incomplete information or lack of supportive documentation</li> <li>Rejected by the listed contact or other reasons</li> </ul>   |
| Actor       | AUTO or IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system               <ul style="list-style-type: none"> <li>Record the outgoing “Admin-closed” message.</li> </ul> </li> <li>Ticketing system               <ul style="list-style-type: none"> <li>Record the outgoing “Admin-closed” message.</li> </ul> </li> </ul>   |

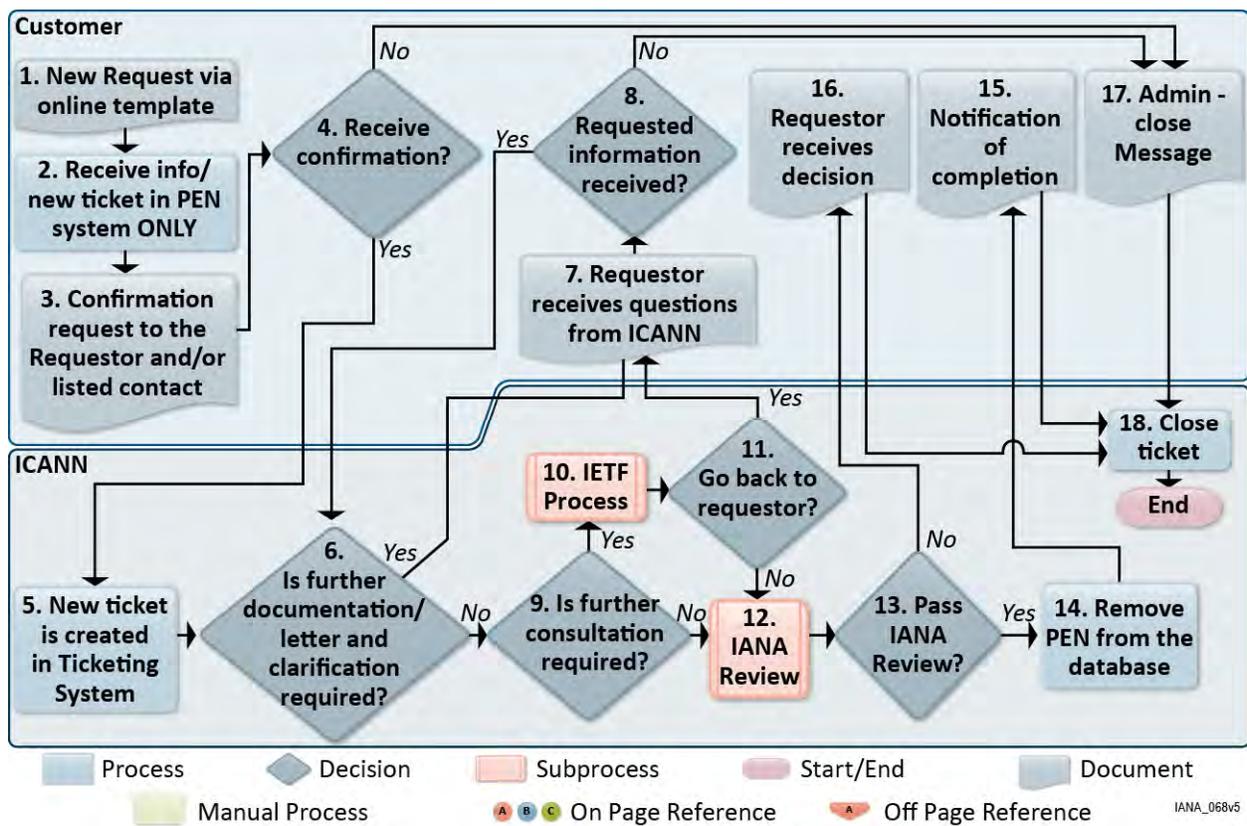
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|             |   |
|-------------|---|
|             | <ul style="list-style-type: none"> <li>Send an “Admin-closed” message including the original template.</li> <li>Go to Action box 18.</li> </ul>   |
| <b>18</b>   | <b>CLOSE TICKET</b>   |
| Description | Final step to close the ticket.   |
| Actor       | AUTO  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system: no action required.</li> <li>Tecketing system                             <ul style="list-style-type: none"> <li>Change ticket state to “Resolved.”</li> </ul> </li> <li>Go to END.</li> </ul> |

**Removal of Private Enterprise Numbers (PENs)**

Figure 1.2-22 shows the top-level, step-by-step process that will be used for requests for Removal of existing Private Enterprise Numbers that follow the first come first served registration procedures.



**Figure 1.2-22. Private Enterprise Number (PEN) – Removal Request Process**

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Figure 1.2-23 presents the top-level, step-by-step process that will be used for requests for Removal of existing PENs that follow the FCFS registration procedures.

**Definitions**

- **AUTO** – Automatically through PEN and/or ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Requesters** – The requester who submitted the request
- **List Contact** – The old contact listed in the PEN registry
- **IETF** – Internet Engineering Task Force
- **IESG** – Internet Engineering Steering Group
- **AD** – Area Director
- **WGC** – Working Group Chair

**Figure 1.2-23. Private Enterprise Number (PEN) – Removal Request Process**

| 1           | NEW REQUEST SENT TO ICANN  |
|-------------|--|
| Description | A request to remove an existing registration from IANA PEN registry is sent to ICANN.  |
| Actor       | Requester  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• An online template is submitted via a template form. Only ONE template to update a PEN record is allowed at any given time.</li> <li>• Go to Action box 2.</li> </ul>   |
| 2           | RECEIVE INFORMATION/NEW TICKET IN PEN SYSTEM ONLY  |
| Description | A new ticket is created in the PEN system ONLY. The request will NOT be created in ticketing system at this time.  |
| Actor       | AUTO   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>– Templates will automatically arrive in the PEN system.</li> <li>–</li> <li>• Go to Step 3.</li> </ul>   |
| 3           | REQUESTOR RECEIVES MESSAGE TO REQUEST CONFIRMATION(S)  |
| Description | <ul style="list-style-type: none"> <li>• The PEN system automatically generates a “confirmation message” and sends it to relevant addresses to request confirmation(s):               <ul style="list-style-type: none"> <li>– 1) the proposed email address specified in the template</li> <li>– 2) the current email address associated with the requested PEN record in the PEN database</li> </ul> </li> <li>• “Confirmation messages” will contain secure non-guessable and non-sequential web-based links responding to the requests.</li> </ul> |
| Actor       | AUTO and/or IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system records the outgoing messages and logs in the system if the listed email</li> </ul>  |

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|             | <p>address and proposed email address are different addresses.</p> <ul style="list-style-type: none"> <li>– 30-days timeout starts.</li> <li>– Review the ticket information.</li> </ul> <ul style="list-style-type: none"> <li>• When it is spam or test ticket, IPS can interfere and close the request.</li> <li>• Go to Decision box 4.</li> </ul>   |
| <b>4</b>    | <b>IS CONFIRMATION (OR CONFIRMATIONS) RECEIVED?</b>  |
| Description | One or two confirmations are returned via the secure web-based link.   |
| Actor       | Requester and/or Listed Contact  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• A web-based “Confirmation” message is automatically displayed on the website when a contact visits a secure web-based link.</li> <li>• IF either the requester or the listed contact returns one confirmation via the secure web-based link: <ul style="list-style-type: none"> <li>– The PEN system records the returned confirmation and timestamps.</li> <li>– The PEN system records both returned confirmations and timestamps.</li> <li>– This ticket will stay in this Step until a response is received. Automated Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> </ul> </li> <li>• If yes, go to Decision box 5.</li> <li>• If no AND past 30 days, go to Action box 18.</li> <li>• IF the requestor or listed contact CANCEL the request. <ul style="list-style-type: none"> <li>– A web-based “Request has been cancelled” message is automatically displayed on the website.</li> <li>– Go to Step 17.</li> </ul> </li> </ul> |
| <b>5</b>    | <b>CREATE NEW TICKET</b>   |
| Description | The PEN request has been confirmed by either the current contact or the proposed contact. A new ticket is now created in the IANA ticketing system.  |
| Actor       | AUTO and/or IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>– Tickets will arrive in the appropriate new queue <i>iana-pen@iana.org</i>.</li> <li>– Ticket is manually assigned to an IPS.</li> </ul> <ul style="list-style-type: none"> <li>• Go to Decision box 6.</li> </ul>   |
| <b>6</b>    | <b>IS FURTHER DOCUMENTATION/LETTER AND CLARIFICATIONS REQUIRED?</b>  |
| Description | Review the information in the ticket. Check whether 1) a letter is required and 2) supplemental documents and information is required to verify the requested changes.   |
| Actor       | IPS or AUTO  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system <ul style="list-style-type: none"> <li>– Request state—no change</li> <li>– Request clock is still in the “IANA” time—no change.</li> </ul> </li> <li>• Ticketing system <ul style="list-style-type: none"> <li>– IIPS checks the requested changes and compares them with the existing record in the PEN database, determines whether we have received an email confirmation from the listed contact or a bounce from the listed email address, and if additional supplemental documents and/or a letter are required to process the removal request.</li> </ul> </li> <li>• If yes, go to Step 7.</li> <li>• If no, go to Decision box 9.</li> </ul>   |
| <b>7</b>    | <b>REQUEST FOR MORE INFORMATION</b>  |
| Description | A message is sent to the requester asking for more information regarding the requested   |

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|             |   |
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|             | changes.  |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system records the outgoing message.</li> <li>• The ticketing system records outgoing message.</li> <li>• IPS reviews the ticket information and sends a message to the requester to request additional information and clarifications to verify the requested changes.</li> <li>• Go to Decision box 8.</li> </ul>  |
| <b>8</b>    | <b>REQUESTED INFORMATION RECEIVED?</b>  |
| Description | Has the requested documentation and/or information been sent back to ICANN by the requester?  |
| Actor       | Requester and/or Listed Contact   |
| Documents   | A signed letter, a copy of the original assignment notification, etc., in pdf or fax  |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system records the returned information.</li> <li>• Ticketing system records the returned information.</li> <li>• Information has been sent back to ICANN.</li> <li>• This ticket will stay in this Step until a response is received. Automated Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>• If yes, go to Decision box 6.</li> <li>• If no AND past 30 days, go to Step 17.</li> </ul> |
| <b>9</b>    | <b>IS FURTHER CONSULTATION REQUIRED?</b>  |
| Description | Does ICANN need to consult with someone in the IETF community regarding this request?   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• The PEN system               <ul style="list-style-type: none"> <li>– IPS changes “Request state” to “PENDING_IESG_REVIEW.”</li> <li>– Request clock is automatically set to “Others” time.</li> <li>–</li> </ul> </li> <li>• Are there questions that cannot be answered or determined by the requestor that require IANA to go to the IETF (IESG, AD, WGC and/or Expert)?</li> <li>• If yes, go to Sub Process box 10.</li> <li>• If no, go to Sub Process box 12.</li> </ul>          |
| <b>10</b>   | <b>IETF CONSULTATION SUB PROCESS</b>  |
| Description | IETF Consultation Sub Process   |
| Actor       | PPM or IPS  |
| Documents   | N/A   |
| Steps       | Go to Decision box 11.  |
| <b>11</b>   | <b>NEED TO GO BACK TO THE REQUESTER?</b>  |
| Description | Does ICANN need to go back to the requester with requests for clarification and/or questions?   |
| Actor       | PPM or IPS  |
| Documents   | Additional documentation if required  |
| Steps       | <ul style="list-style-type: none"> <li>• Determine if ICANN needs to go back to the requester with questions/clarification.</li> <li>• If yes, go to Step 7.</li> <li>• If no, go to Sub Process box 12.</li> </ul>   |
| <b>12</b>   | <b>IANA REVIEW SUB PROCESS</b>  |
| Description | IANA Review Sub Process   |

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| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Go to Decision box 13.</li> </ul>   |
| <b>13</b>   | <b>PASS IANA REVIEW?</b>   |
| Description | Did the request pass IANA Review?  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The IANA Review result is recorded in the ticketing system.</li> <li>If yes, go to Action box 14.</li> <li>If no, go to Step 16.</li> </ul>   |
| <b>14</b>   | <b>UPDATE THE PEN DATABASE</b>   |
| Description | The PEN record is immediately being removed from the IANA PEN registry.  |
| Actor       | AUTO   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system updates the registry.</li> <li>Go to Action box 15.</li> </ul>   |
| <b>15</b>   | <b>NOTIFICATION TO REQUESTER</b>   |
| Description | Inform the requester that the modification has been completed.   |
| Actor       | AUTO   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Send a "Completion" message to the requester (current contact).</li> <li>The PEN system records the outgoing "Completion" message.</li> <li>Ticketing system records the outgoing "Completion" message.</li> <li>Go to Action box 18.</li> </ul>                          |
| <b>16</b>   | <b>NOTIFICATION TO REQUESTER ABOUT ICANN DECISION (PER OFAC)</b>   |
| Description | Notify the requester that the request can not be processed.  |
| Actor       | PPM  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system records the outgoing message.</li> <li>Send email to the requester.</li> <li>Go to Action box 18.</li> </ul>   |
| <b>17</b>   | <b>"ADMIN-CLOSED" NOTIFICATION TO REQUESTER</b>  |
| Description | <p>Inform the requester that the request has been administratively closed due to the one of following scenarios:</p> <ul style="list-style-type: none"> <li>Past 30 days</li> <li>Incomplete information or lack of supportive documentation</li> <li>Rejected by the listed contact or other reasons</li> </ul> |
| Actor       | AUTO or IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>The PEN system records the outgoing "Admin-closed" message.</li> <li>Ticketing system records the outgoing "Admin-closed" message.</li> <li>Send an "Admin-closed" message including the original template.</li> <li>Go to Action box 18.</li> </ul>                      |
| <b>18</b>   | <b>CLOSE TICKET</b>  |
| Description | Final step to close the ticket.  |
| Actor       | AUTO   |
| Documents   | N/A  |

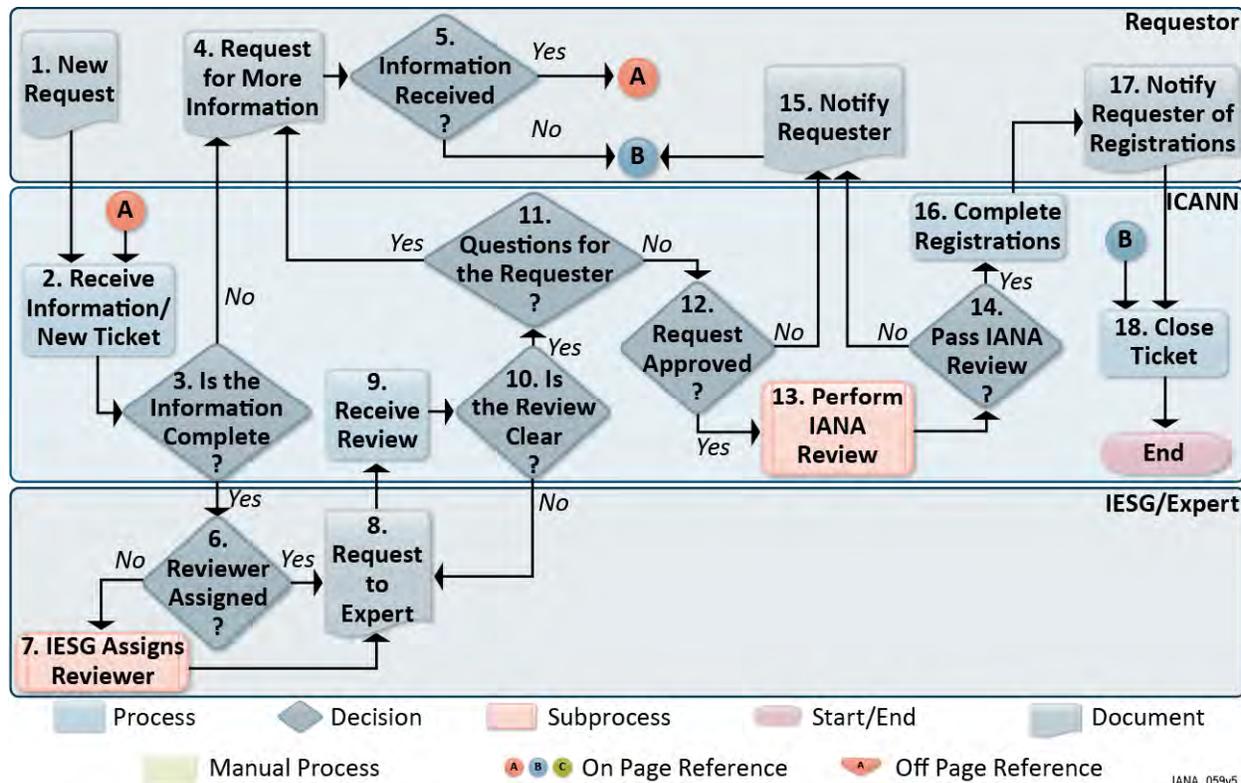
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| Steps | • Go to END. |
|-------|--------------|

**Expert Review protocol parameter request process (Also includes Specification Required)**

Figure 1.2-24 shows the top-level process that will be used for requests for protocol parameters that follow the Expert Review registration procedures. Requests that follow the Specification Required policy will also follow this process, as there is a mandatory Expert Review as part of the IETF defined process. Examples of Expert Review protocol parameters are port numbers and media types.



**Figure 1.2-24. Expert Review Process**

Figure 1.2-25 shows the top-level process that will be used for requests for protocol parameters that follow the Expert Review registration procedures.

**Definitions**

- **AUTO** – Automatically through ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist

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- **PPM** – Protocol Parameter Manager
- **Requesters** – the requester who submitted the request
- **Expert** – the Designated Expert who reviews the request
- **IESG** – Internet Engineering Steering Group

**Figure 1.2-25. Expert Review Process Step-by-Step Description**

| <b>1</b>    | <b>NEW REQUEST SENT TO ICANN</b>  |
|-------------|---|
| Description | A request for a new registration in IANA registries is sent to ICANN.   |
| Actor       | Requester   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• A message is sent via email or through an online template.</li> <li>• Go to Action box 2.</li> </ul>   |
| <b>2</b>    | <b>RECEIVE INFORMATION/NEW TICKET</b>   |
| Description | A new ticket is created. Ticketing system automatically puts the ticket in the correct queue or the ticket is manually placed in the appropriate queue.   |
| Actor       | AUTO and/or IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Tickets not sent directly to the ticket queue are manually moved to the appropriate queue.</li> <li>• Some tickets will automatically arrive in the appropriate queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Decision box 3.</li> </ul>   |
| <b>3</b>    | <b>IS INFORMATION COMPLETE?</b>   |
| Description | Review the information in the ticket. Check to make sure all required information for the registration requested is included.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Review the ticket information.</li> <li>• Check which registry they are requesting a parameter in.</li> <li>• Are all criteria met according to the governing RFC?</li> <li>• If yes, go to Decision box 6.</li> <li>• If no, go to Action box 4.</li> </ul>   |
| <b>4</b>    | <b>REQUEST FOR MORE INFORMATION</b>   |
| Description | A message is sent to the requester asking for more information regarding the requested parameter registration.  |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Send message to requester.</li> <li>• Ask clarifying questions as needed.</li> <li>• Change custom state to “Waiting on Requester.”</li> <li>• Change ticket state to “stalled.”</li> <li>• This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>• Go to Decision box 5.</li> </ul> |
| <b>5</b>    | <b>INFORMATION RECEIVED?</b>  |
| Description | Has the requested information been sent back to ICANN by the requester?   |
| Actor       | IPS   |
| Documents   | N/A   |

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|             |  |
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| Steps       | <ul style="list-style-type: none"> <li>Information has been sent back to ICANN.</li> <li>If yes, go to Action box 2.</li> <li>If no AND past 30 days, go to Action box 15.</li> </ul>  |
| <b>6</b>    | <b>REVIEWER ASSIGNED?</b>  |
| Description | Identify the expert who should review this request.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Has an expert been designated to review requests in this registry?</li> <li>If yes, go to Action box 8.</li> <li>If no, go to Sub Process box 7.</li> </ul>   |
| <b>7</b>    | <b>IESG ASSIGNS REVIEWER SUB PROCESS</b>   |
| Description | IESG Consultation Sub Process  |
| Actor       | PPM or IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Go to Action box 8.</li> </ul>  |
| <b>8</b>    | <b>REQUEST TO EXPERT</b>   |
| Description | ICANN sends Expert a request for review or clarification.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Forward request to the designated expert.</li> <li>This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days. If no response after 30 days, go to Action box 7.</li> <li>Go to Action box 9.</li> </ul> |
| <b>9</b>    | <b>RECEIVE REVIEW</b>  |
| Description | The Expert sends his/her review to ICANN.  |
| Actor       | Expert/IPS   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Ticket state is automatically set to "open."</li> <li>Change custom state to "In Progress."</li> <li>Go to Decision box 10.</li> </ul>  |
| <b>10</b>   | <b>IS THE REVIEW CLEAR?</b>  |
| Description | Determine whether ICANN needs more information from the reviewer before proceeding.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Can ICANN determine what to do next, based on the expert's instructions?</li> <li>If yes, go to Decision box 11.</li> <li>If no, go to box 8.</li> </ul>  |
| <b>11</b>   | <b>QUESTIONS FOR THE REQUESTER?</b>  |
| Description | Does the expert want more information from the requester?  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>If yes, go to Action box 4.</li> <li>If no, go to Decision box 12.</li> </ul>   |
| <b>12</b>   | <b>REQUEST APPROVED?</b>   |
| Description | Did the expert approve this request?   |
| Actor       | IPS  |
| Documents   | N/A  |

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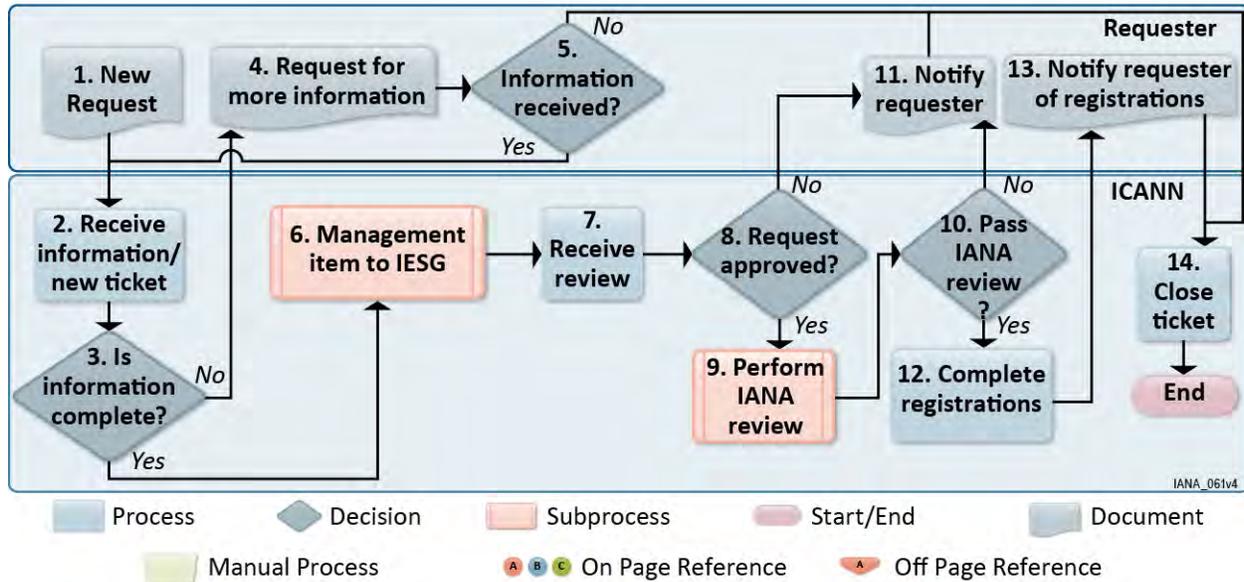
|             |   |
|-------------|---|
| Steps       | <ul style="list-style-type: none"> <li>The expert doesn't want more information from the requester. Has the expert approved this request for registration?</li> <li>If yes, go to Sub Process 13.</li> <li>If no, go to Action box 15.</li> </ul> |
| <b>13</b>   | <b>IANA REVIEW SUB PROCESS</b>  |
| Description | IANA Review Sub Process   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Go to Decision box 10.</li> </ul>  |
| <b>14</b>   | <b>PASS IANA REVIEW?</b>  |
| Description | Did the request pass IANA Review?   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>If yes, go to Action box 16.</li> <li>If no, go to Action box 15.</li> </ul>   |
| <b>15</b>   | <b>NOTIFICATION TO REQUESTER</b>  |
| Description | Inform the requester that the registrations cannot be made.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Write to the requester and explain that the registration cannot be completed.</li> <li>Go to Action box 18.</li> </ul>   |
| <b>16</b>   | <b>COMPLETE REGISTRATIONS</b>   |
| Description | Perform the actions in the IANA Registries.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Complete registrations in existing registries.</li> <li>Go to Action box 17.</li> </ul>  |
| <b>17</b>   | <b>NOTIFICATION TO REQUESTER</b>  |
| Description | Inform the requester that the request is complete   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Confirm that registrations are visible in the IANA Registries.</li> <li>Write to the requester and send them details of registrations.</li> <li>Go to Action box 18.</li> </ul>                            |
| <b>18</b>   | <b>CLOSE TICKET</b>   |
| Description | Final step to close the ticket.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Go to END.</li> </ul>  |

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**IESG Approval protocol parameter request process**

Figure 1.2-26 shows the top-level process that will be used for requests for protocol parameters that follow the IESG Approval registration procedures. Examples include DNS Label Types and Electronic Commerce Modelling Language (ECML) Parameter Types.



**Figure 1.2-26. IESG Approval Process**

Figure 1.2-27 shows the top-level process will be used for requests for protocol parameters that follow the IESG Approval registration procedures.

**Definitions**

- **AUTO** – Automatically through ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Requesters** – the requester who submitted the request
- **IETF** – Internet Engineering Task Force
- **IESG** – Internet Engineering Steering Group

**Figure 1.2-27. IESG Approval Process Step-by-Step Description**

| <b>1</b>    | <b>NEW REQUEST SENT TO ICANN</b>   |
|-------------|--|
| Description | A request for a new registration in IANA registries is sent to ICANN.  |
| Actor       | Requester  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• A message is sent to <a href="mailto:iana@iana.org">iana@iana.org</a> or to a specific queue via email or through an online template.</li> <li>• Go to Action box 2.</li> </ul>   |
| <b>2</b>    | <b>RECEIVE INFORMATION/NEW TICKET</b>  |
| Description | A new ticket is created. Ticketing system automatically puts the ticket in the correct queue or the ticket is manually placed in the appropriate queue.  |
| Actor       | AUTO and/or IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Tickets that arrive in <a href="mailto:iana@iana.org">iana@iana.org</a> are manually moved to the appropriate queue.</li> <li>• Some tickets will automatically arrive in the appropriate queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Decision box 3.</li> </ul>  |
| <b>3</b>    | <b>IS INFORMATION COMPLETE?</b>  |
| Description | Review the information in the ticket. Check to make sure all required information for the registration requested is included.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Review the ticket information.</li> <li>• Check which registry they are requesting a parameter in.</li> <li>• Add the registry information if applicable to a custom field.</li> <li>• Are all criteria met according to the governing RFC?</li> <li>• If yes, go to Decision box 6.</li> <li>• If no, go to Action box 4.</li> </ul> |
| <b>4</b>    | <b>REQUEST FOR MORE INFORMATION</b>  |
| Description | A message is sent to the requester asking for more information regarding the requested parameter registration.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Send message to requester.</li> <li>• Ask clarifying questions as needed.</li> <li>• This ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days. The request will be closed if there is no response after 30 days.</li> <li>• Go to Decision box 5.</li> </ul>     |
| <b>5</b>    | <b>REQUESTED INFORMATION RECEIVED?</b>   |
| Description | Has the requested information been sent back to ICANN by the requester?  |
| Actor       | IPS  |
| Documents   | N/A  |

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|-------------|---|
| Steps       | <ul style="list-style-type: none"> <li>Information has been sent back to ICANN.</li> <li>If yes, go to Action box 2.</li> <li>If no AND past 30 days, go to Action box 14.</li> </ul> |
| <b>6</b>    | <b>IESG MANAGEMENT ITEM SUB PROCESS</b>   |
| Description | IESG Management Item Sub Process  |
| Actor       | PPM or IPS  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Go to Action box 7.</li> </ul>   |
| <b>7</b>    | <b>RECEIVE REVIEW</b>   |
| Description | The IESG sends the IESG's decision to ICANN.  |
| Actor       | IESG  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Go to Decision box 8.</li> </ul>   |
| <b>8</b>    |   |
| Description | Request approved?   |
| Actor       | PPM or IPS  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>If yes, go to Action box 9.</li> <li>If no, go to Action box 11.</li> </ul>  |
| <b>9</b>    | <b>IANA REVIEW SUB PROCESS</b>  |
| Description | IANA Review Sub Process   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Go to Decision box 10.</li> </ul>  |
| <b>10</b>   | <b>PASS IANA REVIEW?</b>  |
| Description | Did the request pass IANA Review?   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>If yes, go to Action box 12.</li> <li>If no, go to Action box 11.</li> </ul>   |
| <b>11</b>   | <b>NOTIFICATION TO REQUESTER</b>  |
| Description | Notify the requester that the request cannot be processed.  |
| Actor       | PPM   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Send email to the requester.</li> <li>Go to Action box 14.</li> </ul>  |
| <b>12</b>   | <b>COMPLETE REGISTRATIONS</b>   |
| Description | Perform the actions in the IANA registries.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Complete registrations in existing registries.</li> </ul>  |

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|             | <ul style="list-style-type: none"> <li>Go to Action box 13.</li> </ul>   |
| <b>13</b>   | <b>NOTIFICATION TO REQUESTER</b>   |
| Description | Inform the requester that the registration has been completed.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Confirm the registration is visible in the IANA registries.</li> <li>Write to the requester and send them details of the registration completed.</li> <li>Go to Action box 14.</li> </ul> |
| <b>14</b>   | <b>CLOSE TICKET</b>  |
| Description | Final step to close the ticket.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Go to END.</li> </ul>   |

**1.2.9.1.2 Disseminate listings of assigned Parameters; Review documents**

ICANN will disseminate the listing of assigned protocol parameters through online publication on ICANN’s IANA website. On the website, a list of every registry that ICANN maintains for the IETF will be found along with other important information including the document defining the registry, registration procedures, and the names of the IESG designated experts if applicable. Every time a new registry is created, ICANN will add the necessary information to the protocol parameters listing.

In addition to the listing of all the registries, registration procedures and documents defining the registries, ICANN will make available each registry in the required formats as requested by the defining RFC or through requests from the IETF. Most registries will be available in multiple formats: xml, text and csv. These multiple formats will allow viewers of the registries to use the information in ways that work for them.

ICANN will review Internet-Drafts requesting the creation of registries or revisions to existing registries to make sure they include all necessary information needed to perform those actions. ICANN will continue to review each document at pre-defined stages as defined by the IETF. Working closely with the IESG, ICANN will confirm the instructions, usually located in an “IANA Considerations” section, making sure that they have identified all the necessary pieces to a new registry (e.g., titles, registration procedures, initial registrations, and range of registry values if applicable). For updates to existing registries, ICANN will make sure that the request follows the existing registration procedures and any other established rules in the defining RFC. When Internet-Drafts do not clearly document the requested actions, ICANN will work together with the IESG, Working Group Chairs and Internet-Draft authors to resolve unresolved issues or unanswered questions. ICANN will participate in twice monthly teleconferences with the IESG where the Internet-Draft documents are discussed.

After the requested actions have been performed and the RFC-Editor has assigned a number for the published document, ICANN will review what has been published in the RFC and what will appear in the registry to verify there are no discrepancies. In the case of discrepancies, ICANN

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will work with the RFC-Editor, RFC authors, Working Group Chairs, and Area Directors of the IESG to either make modifications to the maintained registries or to submit an RFC erratum to document the issue. During this process, the references in the registry that point to the approved document will be changed from an Internet-Draft to the RFC number for the published document.

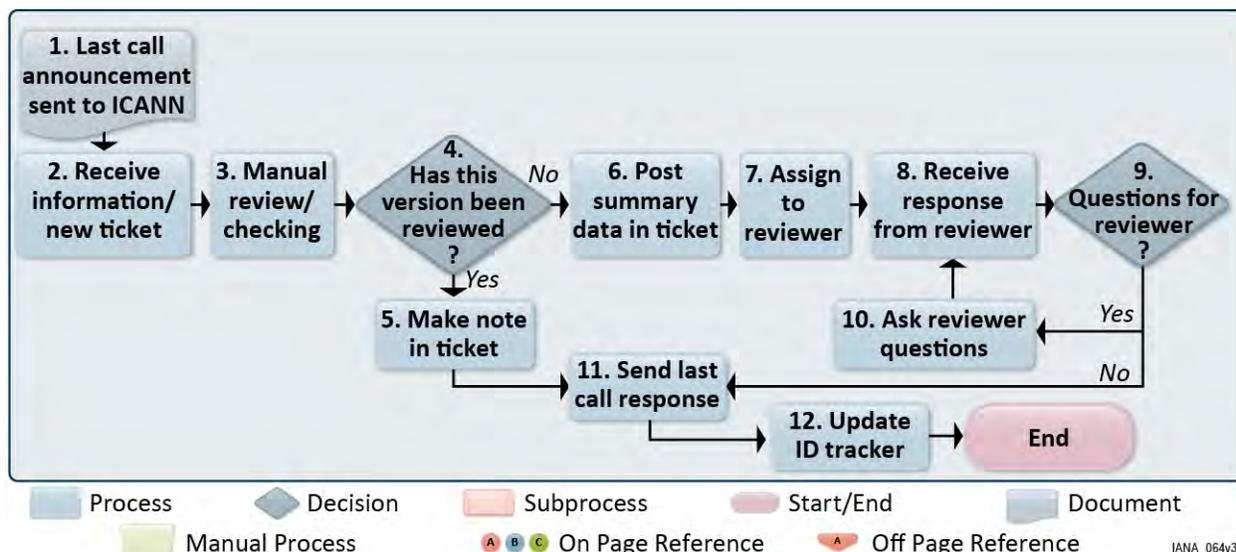
**Figure 1.2-28** lists the process flowcharts that will be used to review technical documents (Internet-Drafts) and how information will get in the listing of the protocol parameter registries.

**Figure 1.2-28. List of Process Flowcharts**

| FIGURE # | CHART TITLE                             | DESCRIPTION  |
|----------|---|--|
| 2.1-29   | Internet-Draft Last Call Process        | This process will be used to review an Internet-Draft in IETF Last Call. The document is reviewed for proposed protocol parameter related actions, usually described in the "IANA Considerations" section of the document.   |
| 2.1-31   | Internet-Draft Evaluation Process       | This process will be used to review an Internet-Draft in IESG Evaluation. The document is compared to a version reviewed during Last Call to see if the requested actions are still clearly defined, as there can sometimes be changes between document versions. For I-Ds that are not going through the IETF process, this is the first official review that ICANN performs. |
| 2.1-33   | Internet-Draft Update Reference Process | This process will be used to update the references in the registries maintained by ICANN. After ICANN performs the actions during the Approvals process, ICANN puts placeholders as references until the final document is published in the form of an RFC.  |

**Top level Last Call review of Internet-Drafts process**

**Figure 1.2-29** shows the top-level process that will be used for the review of Internet-Drafts that are entering the IETF Last Call and ends with ICANN’s submission of review comments.



**Figure 1.2-29. Internet-Draft Last Call Process**

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Figure 1.2-30 shows the top-level process that will be used for the review of I-Ds that are entering the IETF Last Call and ends with ICANN’s submission of review comments.

**Definitions**

- **AUTO** – Automatically through ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Authors** – the authors of the Internet-Draft that has been approved for publication as an RFC
- **Reviewer** – reviews the Internet-Draft on ICANN’s behalf and determines IANA Actions

**Figure 1.2-30. Internet-Draft Last Call Process Step-by-Step Description**

| 1           | LAST CALL ANNOUNCEMENT SENT TO ICANN  |
|-------------|---|
| Description | Notification that an Internet-Draft has entered IETF Last Call is sent to ICANN.  |
| Actor       | IETF Secretariat  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• A message is sent to <i>drafts-lastcall@iana.org</i>.</li> <li>• Message from Secretariat comes in a specified format.</li> <li>• Go to Action box 2.</li> </ul>   |
| 2           | RECEIVE INFORMATION/NEW TICKET  |
| Description | A new ticket is created and ticketing system automatically adds the ticket to the correct queue.  |
| Actor       | AUTO  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• E-mail sent to <i>draft-approval@iana.org</i> is automatically added to the appropriate queue.</li> <li>• Tickets that arrive in <i>drafts-lastcall@iana.org</i> are manually moved to the appropriate ticketing system queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Action box 3.</li> </ul>                           |
| 3           | MANUAL REVIEW/CHECKING  |
| Description | Gather all information needed to determine the actions to be performed by ICANN. This step also includes filling in custom fields for the ticket.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Add the draft string to a custom field.</li> <li>• Add the version number to a custom field.</li> <li>• Refer to the Last Call expiration date in the message and fill in the “Last Call Duration” and “Due Date” fields accordingly.</li> <li>• Check for any related tickets and add as a “refers to.”</li> <li>• Go to Decision box 4.</li> </ul> |

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| 4           | HAS THIS VERSION BEEN REVIEWED?  |
|-------------|--|
| Description | Staff checks to see if a Last Call ticket for the same version of the document has already been processed.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Input to making decision.</li> <li>• Has staff already sent the IESG a review for this version of the document?</li> <li>• If yes, go to Decision box 5.</li> <li>• If no, go to Action box 6.</li> </ul>   |
| 5           | MAKE NOTE IN TICKET  |
| Description | Staff adds comment in ticket noting that this version of the document has already been reviewed.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Staff comments in ticket.</li> <li>• Go to Action box 11.</li> </ul>  |
| 6           | POST SUMMARY DATA IN TICKET  |
| Description | Staff summarizes document data for the reviewer's benefit.   |
| Actor       | IPS  |
| Documents   | Internet-Draft posted on IETF website  |
| Steps       | <ul style="list-style-type: none"> <li>• Open the I-D and check its length.</li> <li>• Send the reviewer a note from the ticket listing the document's title, string, length, and due dates.</li> <li>• Go to Action box 7.</li> </ul>   |
| 7           | ASSIGN TO REVIEWER   |
| Description | Assign the ticket to reviewer who will determine what (if any) ICANN actions this Internet-Draft will require upon approval.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Assign ticket to reviewer.</li> <li>• Go to Action box 8.</li> </ul>  |
| 8           | RECEIVE RESPONSE FROM REVIEWER   |
| Description | The reviewer sends his response to the ticket.   |
| Actor       | Reviewer   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• ICANN receives review.</li> <li>• Go to Decision box 9.</li> </ul>  |
| 9           | DOES ICANN HAVE QUESTIONS FOR THE REVIEWER?  |
| Description | Do questions or requests for clarification need to be sent to the reviewer?  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Determine if further questions need to be asked to clarify the review.</li> <li>• Identify what questions need to be asked or what needs to be clarified.</li> <li>• If yes, go to Action box 10.</li> <li>• If no, go to Action box 11.</li> </ul> |
| 10          | ASK REVIEWER QUESTIONS   |
| Description | Send an email to the reviewer with questions regarding actions.  |

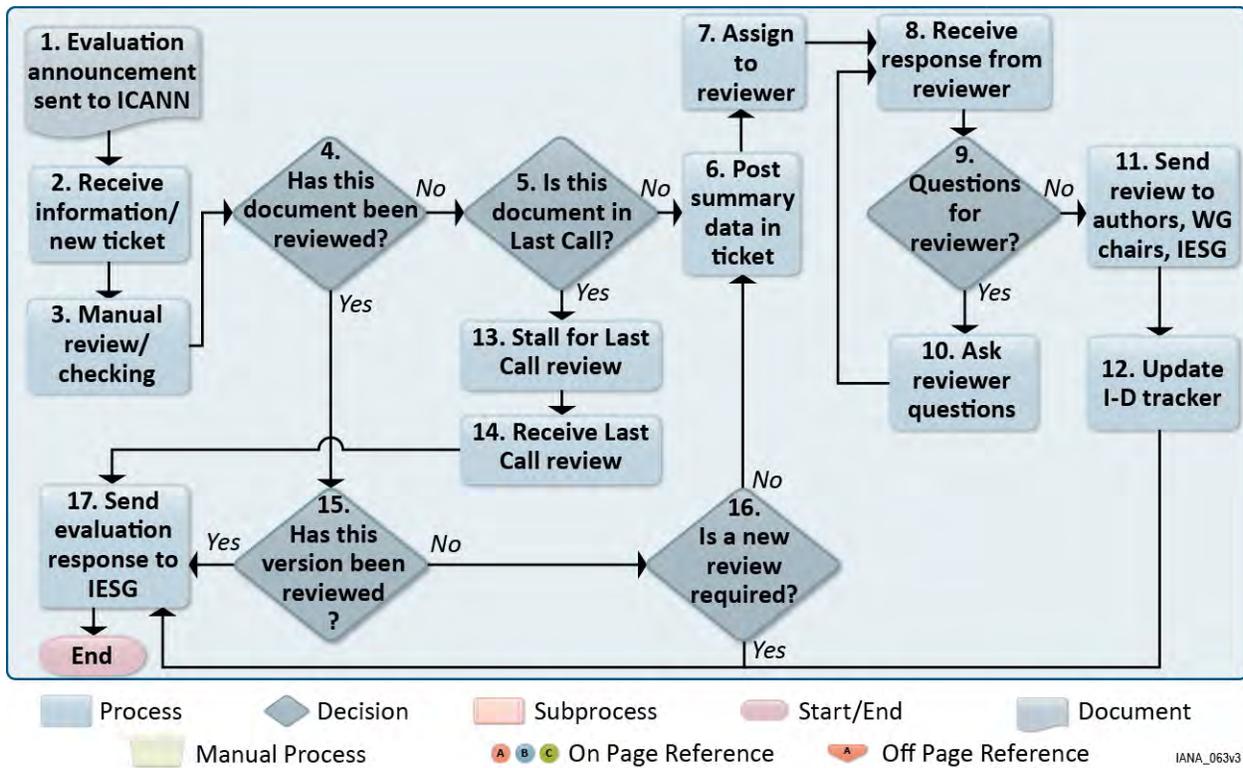
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|             |   |
|-------------|---|
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Send email to reviewer.</li> <li>Go to Action box 8.</li> </ul>  |
| <b>11</b>   | <b>SEND LAST CALL RESPONSE</b>  |
| Description | Send list of ICANN actions to authors, WGCs and IESG.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>ICANN sends list of actions to be performed and/or questions to the authors, relevant IETF Working Group chairs and IESG.</li> <li>Go to Action box 12.</li> </ul> |
| <b>12</b>   | <b>UPDATE I-D TRACKER</b>   |
| Description | Post response in the IETF I-D tracker.  |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>Post the same comments sent to the authors and IESG in Action box 11 in the IETF's I-D tracker.</li> <li>Go to END.</li> </ul>                                     |

**Top-level Evaluation Review of I-Ds Process**

Figure 1.2-31 is the top-level process that will be used for the review of Internet-Drafts that are entering the IESG Evaluation step and ends with ICANN's submission of review comments.



**Figure 1.2-31. Internet-Draft Evaluation Process**

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Figure 1.2-32 is the top-level process that will be used for the review of I-Ds that are entering the IESG Evaluation step and ends with ICANN’s submission of review comments.

**Definitions**

- **AUTO** – Automatically through ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Authors** – the authors for the I-D that has been approved for publication as an RFC
- **Reviewer** – reviews the I-D on ICANN’s behalf and determines IANA Actions

**Figure 1.2-32. Internet-Draft Evaluation Process Step-by-Step Description**

| 1           | LAST CALL ANNOUNCEMENT SENT TO ICANN   |
|-------------|--|
| Description | Notification that an Internet-Draft has entered IESG Evaluation is sent to ICANN.  |
| Actor       | IETF Secretariat   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• A message is sent to <i>drafts-eval@iana.org</i>.</li> <li>• Message from Secretariat comes in a specified format.</li> <li>• Go to Action box 2.</li> </ul>  |
| 2           | RECEIVE INFORMATION/NEW TICKET   |
| Description | A new ticket is created and ticketing system automatically adds the ticket to the correct queue.   |
| Actor       | AUTO   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• E-mail sent to <i>draft-approval@iana.org</i> is automatically added to the appropriate queue.</li> <li>• Tickets that arrive in <i>drafts-eval@iana.org</i> are manually moved to the appropriate queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Action box 3.</li> </ul> |
| 3           | MANUAL REVIEW/CHECKING   |
| Description | Gather all information needed to determine the actions to be performed by ICANN. This step also includes filling in custom fields for the ticket.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Add the draft string to a custom field.</li> <li>• Add the version number to a custom field.</li> <li>• Check for any related tickets and add as a “refers to.”</li> <li>• Go to Decision box 4.</li> </ul>   |
| 4           | HAS THIS DOCUMENT BEEN REVIEWED?   |
| Description | Staff checks to see if a Last Call ticket for the document has already been resolved.  |

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|             |   |
|-------------|---|
| Actor       | IPS   |
| Documents   | n/a   |
| Steps       | <ul style="list-style-type: none"> <li>• Input to making decision</li> <li>Has staff already sent the IESG a Last Call review for this document?</li> <li>• If yes, go to Decision box 15</li> <li>• If no, go to Decision box 5</li> </ul>             |
| <b>5</b>    | <b>IS THIS DOCUMENT IN LAST CALL?</b>   |
| Description | Staff checks to see if a Last Call ticket for the document is currently in process.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Input to making decision.</li> <li>• Is there an open ticket for this document in the drafts-last call queue?</li> <li>• If yes, go to Action box 13.</li> <li>• If no, go to Action box 6.</li> </ul>         |
| <b>6</b>    | <b>POST SUMMARY DATA IN TICKET</b>  |
| Description | Staff summarizes document data for the reviewer's benefit.  |
| Actor       | IPS   |
| Documents   | Internet-Draft posted on IETF website.  |
| Steps       | <ul style="list-style-type: none"> <li>• Open the Internet-Draft and check its length.</li> <li>• Send the reviewer a note from the ticket listing the document's title, string, length, and due date.</li> <li>• Go to Action box 7.</li> </ul>        |
| <b>7</b>    | <b>ASSIGN TO REVIEWER</b>   |
| Description | Assign the ticket to reviewer who will determine what (if any) IANA Actions this I-D will require upon approval.  |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Assign ticket to reviewer.</li> <li>• Go to Action box 8.</li> </ul>   |
| <b>8</b>    | <b>RECEIVE RESPONSE FROM REVIEWER</b>   |
| Description | The reviewer sends his response to the ticket.  |
| Actor       | Reviewer  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• ICANN receives review.</li> <li>• Go to Decision box 9.</li> </ul>   |
| <b>9</b>    | <b>DOES ICANN HAVE QUESTIONS FOR THE REVIEWER?</b>  |
| Description | Do questions or requests for clarification need to be sent to the reviewer?   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Input to making decision.</li> <li>• Determine whether further questions need to be asked to clarify the review.</li> <li>• Identify what questions need to be asked or what needs to be clarified.</li> </ul> |

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|             | <ul style="list-style-type: none"> <li>• If yes, go to Action box 10.</li> <li>• If no, go to Action box 11.</li> </ul>   |
| <b>10</b>   | <b>ASK REVIEWER QUESTIONS</b>   |
| Description | Send an email to the Reviewer with questions regarding actions.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Send email to Reviewer.</li> <li>• Go to Action box 8.</li> </ul>  |
| <b>11</b>   | <b>SEND REVIEW TO AUTHORS, WG AND IESG</b>  |
| Description | Send list of IANA Actions to authors, Working Group chairs, and IESG.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• ICANN sends list of actions to be performed and/or questions to the authors, relevant IETF WGCs and IESG.</li> <li>• Go to Action box 12.</li> </ul>               |
| <b>12</b>   | <b>UPDATE I-D TRACKER</b>   |
| Description | Post review in the IETF I-D tracker   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Post the same comments sent to the authors and IESG in Action box 11 in the IETF's I-D tracker.</li> <li>• Go to Action box 17.</li> </ul>                         |
| <b>13</b>   | <b>STALL FOR LAST CALL REVIEW</b>   |
| Description | Stall ticket and note that it is waiting for the document's Last Call review to end.  |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Go to Action box 14.</li> </ul>  |
| <b>14</b>   | <b>RECEIVE LAST CALL REVIEW</b>   |
| Description | Evaluation processing can be resumed upon receipt of Last Call review and subsequent resolution of Last Call ticket.  |
| Actor       | IPS/reviewer  |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Receive Last Call review and follow process to resolution of Last Call ticket.</li> <li>• Go to Action box 17.</li> </ul>  |
| <b>15</b>   | <b>HAS THIS VERSION BEEN REVIEWED?</b>  |
| Description | Staff checks to see whether a Last Call ticket for the same version of the document has already been processed.   |
| Actor       | IPS   |
| Documents   | N/A   |
| Steps       | <ul style="list-style-type: none"> <li>• Input to making decision.</li> <li>• Has staff already sent the IESG a review for this version of the document?</li> <li>• If yes, go to Action box 17.</li> </ul> |

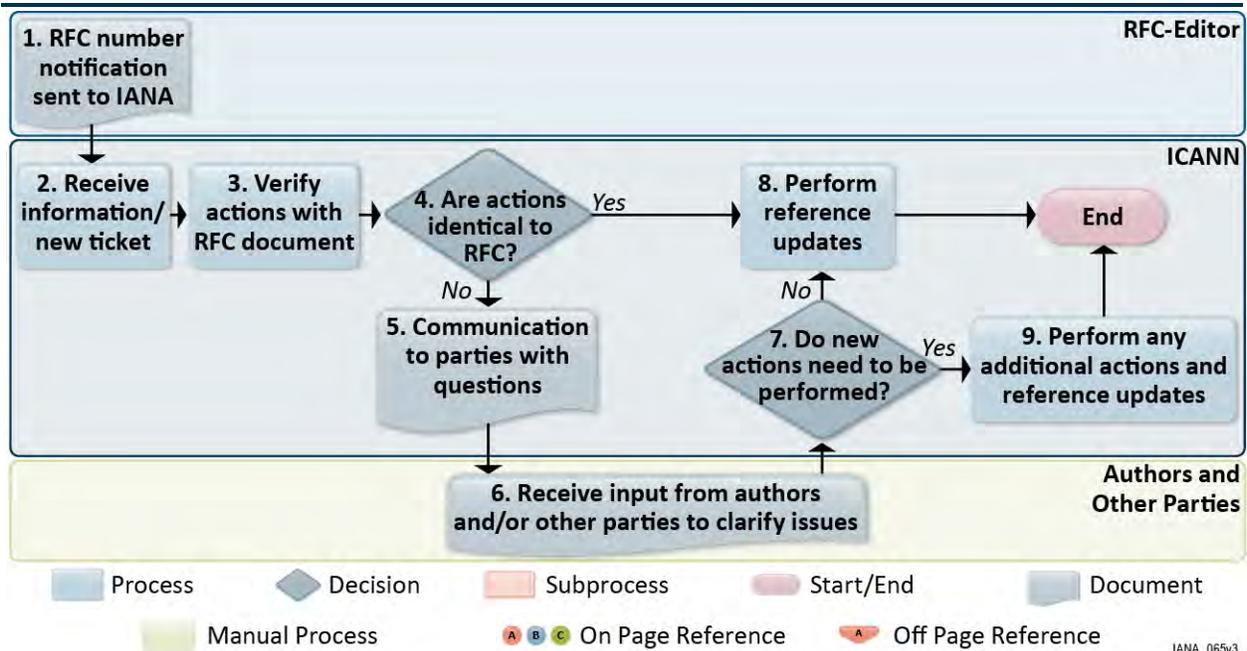
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|-------------|--|
|             | <ul style="list-style-type: none"> <li>If no, go to Action box 16.</li> </ul>  |
| <b>16</b>   | <b>IS A NEW REVIEW REQUIRED?</b>   |
| Description | Staff determines whether the new version of the document has changed enough to require a new review.   |
| Actor       | IPS  |
| Documents   | Multiple versions of Internet-Draft posted on IETF website.  |
| Steps       | <ul style="list-style-type: none"> <li>Input to making decision.</li> <li>Review difference between current version of the document and the version reviewed during Last Call.</li> <li>Determine whether IANA Actions are clear.</li> <li>If yes, go to Action box 17.</li> <li>If no, go to Action box 6.</li> </ul> |
| <b>17</b>   | <b>SEND EVALUATION RESPONSE TO IESG</b>  |
| Description | Send Evaluation Response telling IESG whether the document requires IANA Actions and whether the actions (if any) are clear.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>Check most recent review to determine whether the document requires actions and whether the actions are clear.</li> <li>Send message to IESG that says whether there are actions and whether IANA Considerations are "OK" or "NOT OK."</li> <li>Go to END.</li> </ul>           |

**Top-level Updating References for Internet-Drafts process**

**Figure 1.2-33** is the top-level process that will be used for the review of published RFCs, beginning at the announcement of the publication and ending with ICANN updating all references in the protocol parameter registry and in the listing of registries.



**Figure 1.2-33. Internet-Draft Update Reference Process**

Figure 1.2-34 is the top-level process that will be used for the review of published RFCs, beginning at the announcement of the publication and ending with ICANN updating all references in the protocol parameter registry and in the listing of registries.

**Definitions**

- **AUTO** – Automatically through ticketing system
- **IANA Actions** – The actions defined by the IETF that will be performed by ICANN as the IANA Functions Operator
- **IANA Considerations** – The actions defined in the IANA Considerations section of the RFC that will be performed by ICANN as the IANA Functions Operator
- **IANA Review** – The process to confirm adherence to national laws and international agreements
- **IPS** – IANA Project Specialist
- **PPM** – Protocol Parameter Manager
- **Authors** – the authors for the I-D that has been approved for publication as an RFC
- **AD** – Area Director for the I-D (<http://tools.ietf.org/area/>)
- **RFC-Editor** – <http://www.rfc-editor.org/index.html>

**Figure 1.2-34. Internet-Draft Update Reference Process Step-by-Step Description**

| 1           | RFC NUMBER NOTIFICATION SENT TO ICANN   |
|-------------|---|
| Description | An RFC-to-be notification or Intent to a new RFC is sent to ICANN.  |
| Actor       | RFC-Editor  |
| Documents   | Email notification from RFC Editor  |
| Steps       | <ul style="list-style-type: none"> <li>• A message is sent to <a href="mailto:drafts-update-ref@icann.org">drafts-update-ref@icann.org</a>.</li> <li>• Message contains the following basic information:</li> </ul> |

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|             |  |
|-------------|--|
|             | <ul style="list-style-type: none"> <li>– The RFC Editor has made the following assignment: <ul style="list-style-type: none"> <li>• RFC ### (draft-string)</li> <li>• Title of the document</li> <li>• Date of Pub: Month Year</li> </ul> </li> <li>• Go to Step 2.</li> </ul>   |
| <b>2</b>    | <b>RECEIVE INFORMATION/NEW TICKET</b>  |
| Description | A new ticket is created and ticketing system automatically adds the ticket to the correct queue.   |
| Actor       | AUTO   |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• E-mail sent to <i>drafts-update-ref@icann.org</i> is automatically added to the appropriate queue.</li> <li>• Ticket is manually assigned to an IPS.</li> <li>• Go to Step 3.</li> </ul>  |
| <b>3</b>    | <b>VERIFY IANA ACTIONS WITH RFC DOCUMENT</b>   |
| Description | Review the published RFC and determine if the requested registrations in the IANA Considerations section match those in the IANA registries. This step also includes filling in custom fields for the ticket.  |
| Actor       | IPS  |
| Documents   | <i>http://www.rfc-editor.org/rfcsearch.html</i> , previous “resolved” draft related tickets and, if applicable, any open or resolved tickets related to the RFC-to-be in ticketing system.   |
| Steps       | <ul style="list-style-type: none"> <li>• Add the draft string to a custom field; the draft string can be located in the subject line and with the message.</li> <li>• Add the version number to a custom field; the version number can be located in the subject line.</li> <li>• Review the RFC and relevant registries to determine if they match.</li> <li>• Go to Step 4.</li> </ul> |
| <b>4</b>    | <b>ARE ACTIONS IDENTICAL TO RFC?</b>   |
| Description | Are Actions identical to RFC?  |
| Actor       | IPS  |
| Documents   | RFC Email notification in Step 1 and <i>http://www.rfc-editor.org/rfcsearch.html</i>   |
| Steps       | <ul style="list-style-type: none"> <li>• Verify if the requested actions (in IANA registries) are identical to the assignments documented in the IANA Considerations section in the RFC.</li> <li>• If yes, go to Step 9.</li> <li>• If no, go to Step 5.</li> </ul>   |
| <b>5</b>    | <b>COMMUNICATION TO PARTIES WITH QUESTIONS</b>   |
| Description | ICANN sends questions to Authors and/or RFC-Editor (if applicable) regarding the discrepancies.  |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Identify the discrepancies between the IANA registries and the RFC, and send the questions to Authors for clarifications.</li> <li>• Go to Step 6.</li> </ul>   |
| <b>6</b>    | <b>RECEIVE INPUT FROM AUTHORS AND/OR OTHER PARTIES TO CLARIFY ISSUES</b>   |
| Description | Authors send back information to clarify the discrepancies.  |
| Actor       | Authors and/or other involved parties (i.e., experts, ADs, etc.)   |
| Documents   | N/A  |

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|             |  |
|-------------|--|
| Steps       | <ul style="list-style-type: none"> <li>• ICANN receives feedback from the authors to clarify the issues.</li> <li>• Identify if the issues have been answered.</li> <li>• The ticket will stay in this Action box until a response is received. Pings/Reminders will be sent every seven calendar days. If no response is received in a reasonable timeframe, IPS will bring this to the PPM’s attention and/or escalate this ticket to the Area Directors (ADs) of the RFC.</li> <li>• Go to Step 7.</li> </ul> |
| <b>7</b>    | <b>DO NEW ACTIONS NEED TO BE PERFORMED?</b>  |
| Description | Is there any new actions resulting from the Action box #6?   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Identify if an errata is required for the addressed discrepancy to be submitted to the RFC-Editor.</li> <li>• Determine if further questions need to go back to the authors for further clarification.</li> <li>• If yes, go to Step 9.</li> <li>• If no, go to Step 8.</li> </ul>  |
| <b>8</b>    | <b>PERFORM REFERENCE UPDATES</b>   |
| Description | Update the draft string in the IANA registries to the RFC numbers.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Update draft string in both the IANA registries and Matrix to the RFC number.</li> <li>• Go to END.</li> </ul>  |
| <b>9</b>    | <b>PERFORM ANY ADDITIONAL ACTIONS AND REFERENCE UPDATES</b>  |
| Description | Perform any additional actions and update draft string in the IANA registries to the RFC number.   |
| Actor       | IPS  |
| Documents   | N/A  |
| Steps       | <ul style="list-style-type: none"> <li>• Add/Edit/Remove any entries of assignments from the IANA registries upon confirmation by the Authors in Action Box #6; confirm with Authors for the additional edits if needed.</li> <li>• Update draft string in both the IANA registries and Matrix to the RFC number.</li> <li>• If an erratum is needed, authors (or ICANN) will submit errata to the RFC Editor.</li> <li>• Go to END.</li> </ul>  |

In response to the IETF community’s request for more transparency during the review of Internet-Drafts, the RFC-Editor, IETF Secretariat and ICANN collaborated on documentation for end-to-end tracking of documents in the IETF’s datatracker (RFC 6359). ICANN will continue to work with the IETF to develop the mechanisms to record the information for reviews of Internet-Drafts, showing states of documents that are being reviewed by ICANN in the IETF’s datatracker. ICANN will remain the authoritative source of information for the “IANA” states for documents that are being reviewed for protocol parameters actions.

**1.2.9.1.3 Operate .ARPA TLD**

ICANN understands the importance and responsibility of the management of .ARPA and, through direction of the IAB, will perform this requirement for the addition of new second-level domains to the .ARPA zone and updates to existing names.

ICANN will operate the .ARPA TLD within the current registration policies as documented in RFC 3172 and under the guidance of the IAB. The .ARPA domain is the “Address and Routing Parameter Area” domain and is designated for use exclusively for Internet-infrastructure purposes. The addition of new second-level domains in .ARPA must be requested and approved by the IAB, and the requests are usually documented in the form of an RFC. After an RFC creating a new second-level domain in .ARPA is approved for publication as an RFC, ICANN will create a request, in the form of a template (see **Appendix B**), to delegate a new second-level domain in .ARPA.

ICANN will perform Technical checks to see if the proposed name servers for the new .ARPA second-level name are working. These checks will include the following shown in **Figure 1.2-35**.

**Figure 1.2-35. Technical Checks**

| TERMS AND DEFINITIONS USED   |  |
|--|--|
| The designated zone is the domain for which the change of delegation is sought, and for which IANA maintains the parent zone.  |  |
| For purposes of these technical checks, an authoritative name server is a DNS server that has been designated to answer authoritatively for the designated zone and is being requested to be listed in the delegation. It is recorded by its fully-qualified domain name, potentially along with its IP addresses. |  |
| Name server tests are completed against each unique tuple of a hostname, an IP address and a protocol. If a hostname has multiple IP addresses, for example, the tests will be conducted against each IP address.  |  |
| Minimum Number of Name Servers   | <ul style="list-style-type: none"> <li>There must be at least two NS records listed in a delegation, and the hosts must not resolve to the same IP address.</li> </ul>   |
| Valid Hostnames  | <ul style="list-style-type: none"> <li>The hostnames used for the name servers must comply with the requirements for valid hostnames described in RFC 1123, section 2.1.</li> </ul>  |
| Name Server Reachability   | <ul style="list-style-type: none"> <li>The name servers must answer DNS queries over both the User Datagram Protocol (UDP) and Transmission Control Protocol (TCP) on port 53.</li> <li>Tests will be conducted from multiple network locations to verify the name server is responding.</li> </ul>  |
| Answer Authoritatively   | <ul style="list-style-type: none"> <li>The name servers must answer authoritatively for the designated zone. Responses to queries to the name servers for the designated zone must have the “AA”-bit set.</li> <li>This will be tested by querying for the Statement of Authority (SOA) record of the designated zone with no “RD”-bit set.</li> </ul> |
| Network Diversity  | <ul style="list-style-type: none"> <li>The name servers must be in at least two topologically separate networks.</li> <li>A network is defined as an origin autonomous system in the BGP routing table.</li> <li>The requirement is assessed through inspection of views of the BGP routing table.</li> </ul>  |
| Consistency Between Glue and Authoritative Data  | <ul style="list-style-type: none"> <li>For name servers which have IP addresses listed as glue, the IP addresses must match the authoritative A and AAAA records for that host.</li> </ul>   |
| Consistency Between Delegation and Zone  | <ul style="list-style-type: none"> <li>The set of Name Server (NS) records served by the authoritative name servers must match those proposed for the delegation in the parent zone.</li> </ul>  |

| <b>TERMS AND DEFINITIONS USED</b>              |  |
|--|--|
| Consistency Between Authoritative Name Servers | <ul style="list-style-type: none"> <li>• The data served by the authoritative name servers for the designated zone must be consistent.</li> <li>• All authoritative name servers must serve the same NS record set for the designated domain.</li> <li>• All authoritative name servers must serve the same SOA record for the designated domain.</li> <li>• If for operational reasons the zone content fluctuates rapidly, the serial numbers need only be loosely coherent.</li> </ul>  |
| No Truncation of Referrals                     | <ul style="list-style-type: none"> <li>• Referrals from the parent zone’s name servers must fit into a non-EDNS0 UDP DNS packet; therefore, the DNS payload must not exceed 512 octets.</li> <li>• The required delegation information in the referral is a complete set of NS records and the minimal set of requisite glue records. The response size is assessed as a response to a query with a maximum-sized Qualified Name (QNAME).</li> </ul>   |
| The Minimal Set of Requisite Glue Records      | <ul style="list-style-type: none"> <li>• One A record, if all authoritative name servers are in-bailiwick of the parent zone; and,</li> <li>• One AAAA record, if there are any IPv6-capable authoritative name servers and all IPv6-capable authoritative name servers are in-bailiwick of the parent zone.</li> </ul>  |
| Prohibited Networks                            | <ul style="list-style-type: none"> <li>• The authoritative name server IP addresses must not be in specially designated networks that are either not globally routable or are otherwise unsuited for authoritative name service.</li> <li>• IPv4 networks considered not globally routable are 0.0.0.0/8, 10.0.0.0/8, 127.0.0.0/8, 169.254.0.0/16, 172.16.0.0/12, 192.0.2.0/24, 192.168.0.0/16, 198.18.0.0/15, and 224.0.0.0/3. (See RFC 3330.)</li> <li>• IPv6 networks considered not globally routable are ::/128, ::1/128, 2001:2::/48, 2001:10::/28, 2001:DB8::/32, FC00::/7, and FE80::/10. (See RFC 5156.)</li> </ul> |
| Other Prohibited Networks                      | <ul style="list-style-type: none"> <li>• ::FFFF:0:0/96 (IPv4 mapped addresses, see RFC 4291)</li> <li>• 2001::/32 (Teredo, see RFC 4380)</li> <li>• 2002::/16 (6to4, see RFC 3056)</li> <li>• 192.88.99.0/24 (6to4, see RFC 3068)</li> </ul>   |
| No Open Recursive Name Service                 | <ul style="list-style-type: none"> <li>• The authoritative name servers must not provide recursive name service.</li> <li>• This requirement is tested by sending a query outside the jurisdiction of the authority with the “RD”-bit set.</li> </ul>  |
| Same Source Address                            | <ul style="list-style-type: none"> <li>• Responses from the authoritative name servers must contain the same source IP address as the destination IP address of the initial query.</li> </ul>  |

The template request will be sent to the proposed administrative and technical contacts—those who will be responsible for the second-level domain, requesting confirmation and approval of the proposed template. After the confirmations from both the administrative and technical contacts are received, the technical checks will be repeated. After a successful pass, ICANN will send the request to Verisign, currently operating the .ARPA zone, for completion. Verisign will confirm that the second-level domain has been added to the .ARPA zone, and ICANN will confirm to both the administrative and technical contacts that the request is completed.

For both adding new second-level names or modifications to existing names in .ARPA, the below step-by-step process will be used. The only difference between adding new second-level names and making changes to existing names will be which party sends the text template

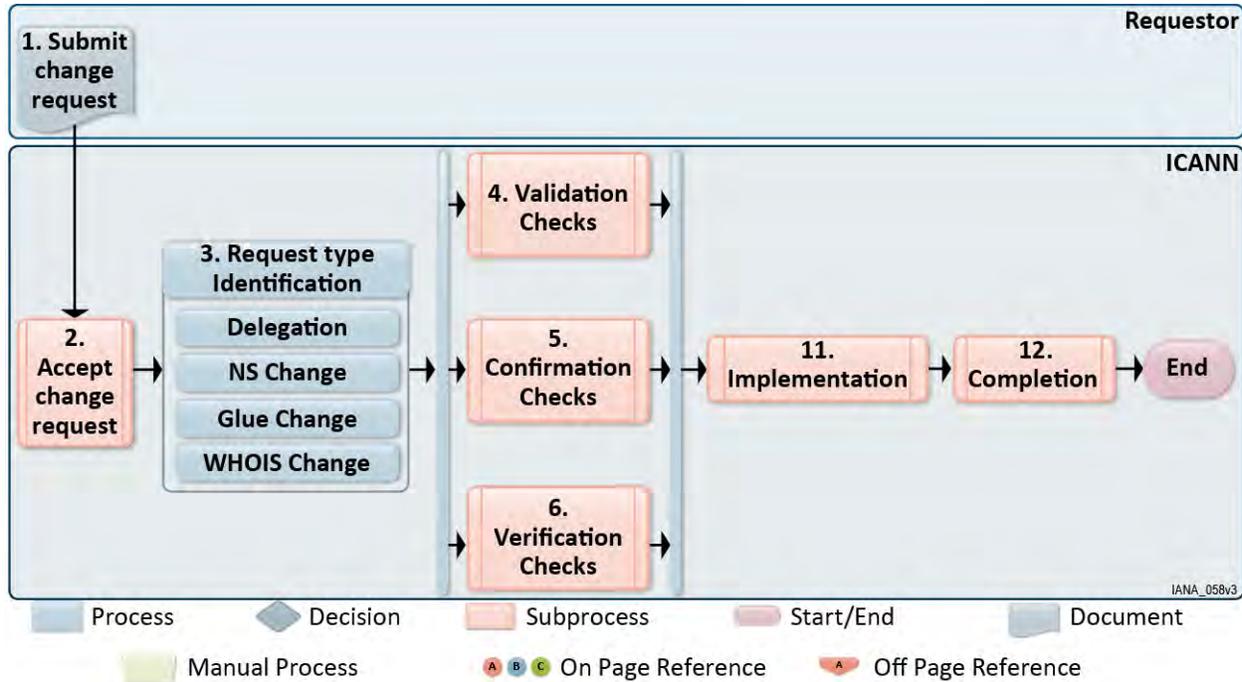
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requesting the changes. For new second-level names, this step will be completed by ICANN after publication of the RFC.

**Top-level Process for Managing the .ARPA Domain**

Figure 1.2-36 is the top-level process that will be used for the .ARPA management.



**Figure 1.2-36. Process for .ARPA Management**

The following steps include those listed below:

- **.ARPA Request** — A request is created when a template (see **Appendix B**) is submitted to ICANN. For requests adding a new second-level domain to the .ARPA zone, ICANN creates the request upon the publication of the RFC.
- **Validation Checks** — Technical checks
- **Procedural Checks** — Confirmations
- **Legal Checks** — Any necessary legal reviews are performed on the request.
- **Process Request** — For requests requiring changes to the .ARPA zone (e.g., new second-level names, name server changes, and DS records), the requests are sent to Verisign (current .ARPA administrator) for implementation. For requests requiring data changes (e.g., contact names, addresses, and phone numbers), the requests are processed by ICANN.
- **Request Confirmation** — The requester is informed of the registration and that the request is complete.

**1.2.9.1.4 Implementation**

ICANN understands the importance and responsibility of the implementation of DNSSEC in the .ARPA TLD. Through direction of the IAB and working with NTIA and Verisign, ICANN

understands the deployment of a replacement for the current interim agreement for DNSSEC in .ARPA will fulfill the requirement as described in this proposal.

ICANN notes that an interim arrangement for the deployment of DNSSEC in the .ARPA TLD was made in early 2010, and the .ARPA TLD was operationally signed on 2010-03-17. Under this interim arrangement, the .ARPA zone is signed and distributed by Verisign. ICANN understands this requirement to be direction to deploy production, long-term architecture for DNSSEC in .ARPA to replace the interim arrangement. ICANN commits to implementing such an arrangement. A proposed schedule and high-level summaries of the approach and implementation are included below.

ICANN observes that the interim arrangement has proven to be stable and considers that there is no operational urgency in replacing it. ICANN therefore proposes a conservative, measured approach to replacing the interim arrangement.

ICANN is and will continue to be committed to transparency in its operation of critical Internet infrastructure. Changes made to the technical operation of the .ARPA TLD will be widely announced, following the model of the wide technical review facilitated by ICANN, Verisign and NTIA in their successful deployment of DNSSEC in the root zone.

ICANN will follow a schedule for the production, long-term infrastructure supporting DNSSEC in the .ARPA TLD. The milestones specified refer to the proposed implementation, included below, and will be subject to change depending on the implementation plan agreed with NTIA and Verisign. A list of milestones is shown in **Figure 1.2-37**.

**Figure 1.2-37. List of Milestones**

|                |  |
|----------------|--|
| <b>STEP 1</b>  | Detailed technical proposal sent to RSSAC and the IAB for discussion.  |
| <b>STEP 2</b>  | Consensus reached with RSSAC and IAB on the detailed technical proposal.   |
| <b>STEP 3</b>  | Detailed technical proposal submitted to NTIA and Verisign.  |
| <b>STEP 4</b>  | Production DNSSEC infrastructure for ARPA deployed.  |
| <b>STEP 5</b>  | Dual operation   |
| <b>STEP 6</b>  | Report on dual operation period submitted to NTIA with proposal to enter full production.  |
| <b>STEP 7</b>  | Successor DS Resource Record Set (RRSet) submitted through IANA root zone management process.  |
| <b>STEP 8</b>  | Replacement NS RRSet submitted through IANA root zone management process.  |
| <b>STEP 9</b>  | Root Server Operators (A, B, C, D, E, F, G, H, I, K, L, M; J does not serve .ARPA currently) have all dropped the .ARPA zone from their servers. |
| <b>STEP 10</b> | Outgoing DS RRSet removal submitted through IANA root zone management process.   |
| <b>STEP 11</b> | Final DS RRSet for ARPA published in root zone.  |
| <b>STEP 12</b> | Full production  |

The following is a high-level description of what ICANN will propose as the architecture intended to illustrate the approach. ICANN will deliver a detailed technical proposal to NTIA and the IAB for discussion, as described in the proposed schedule, above. ICANN also will seek a review on its technical approach from RSSAC and the IAB and to address any concerns raised.

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ICANN considers that operational security and stability of a signed .ARPA zone are best achieved by a single entity performing the unsigned zone maintenance, zone signing and zone distribution functions. This is consistent with the stable operation of the interim arrangement for DNSSEC in .ARPA, and also follows industry best practices for operation of top-level domain infrastructure. ICANN, as IANA Functions Operator, will perform these three functions.

The .ARPA zone is currently served by 12 of the 13 root servers (A, B, C, D, E, F, G, H, I, K, L, M). Consistent with the approach indicated by the IAB in RFC 3172 section 2 and RFC 2870 section 5, ICANN will change the nameservers for the .ARPA zone, and, following implementation, root servers will no longer serve the .ARPA zone.

ICANN proposes that .ARPA be served by the same nameservers used for IANA.ORG, namely A.IANA-SERVERS.NET, B.IANA-SERVERS.NET, C.IANA-SERVERS.NET, D.IANA-SERVERS.NET, and NS.ICANN.ORG. ICANN observes that this nameserver set incorporates significant operational diversity and has been proven to be stable over a considerable period of time. Nameservers in that set are currently operated (under ICANN's direction and administrative control) by Packet Clearing House (PCH), Internet Systems Consortium (ISC), ICANN's Information Technology department, and ICANN's DNS Operations department. ICANN continually reviews performance of these nameservers and incorporates changes from time to time to best ensure the security and stability of their operation.

ICANN will use its Generic Signing Infrastructure (GSI) platform for key management and DNSSEC signing of the .ARPA zone. The GSI is currently used to sign other important, non-IANA Functions infrastructure zones such as IN-ADDR.ARPA (for IPv4 reverse mapping) and IP6.ARPA (for IPv6 reverse mapping). ICANN will publish a DNSSEC Policy and Practice Statement (DPS) for the GSI, and the controls associated with key management and operations will be subject to external audit, following which ICANN expects to receive SysTrust accreditation, consistent with the audit and accreditation awarded to ICANN by PricewaterhouseCoopers for its management of the Root Zone Key Signing Key (KSK). External audit and subsequent accreditation will take place once the new architecture is in full production.

ICANN will follow a substantial period of dual operation, during which the existing .ARPA zone (maintained and signed by Verisign) will continue to be served by the 12 root servers. The .ARPA zone, maintained and signed by ICANN, will be published on new production nameservers such that the stability, performance and availability of the successor .ARPA zone will be accurately gauged during this period.

The transition from the Verisign-maintained and -signed .ARPA zone to one maintained and signed by ICANN will be coordinated by ICANN according to the high-level schedule included above. The transition will incorporate a KSK rollover in the .ARPA zone (we do not propose the transfer of any key materials from Verisign to ICANN) and will be seamless to end-users. Root Server Operators will be engaged via RSSAC, and ICANN expects full cooperation from Root Server Operators for this transition, building on the excellent operational relationship between Root Server Operators and ICANN that was evident in the deployment of DNSSEC in the root zone.

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ICANN will extend the monthly reports to NTIA relating to the .ARPA TLD to incorporate elements relating to the performance, stability and availability of the .ARPA nameservers and to relevant events and procedures carried out on the GSI pertaining to DNSSEC in the .ARPA TLD.

### **1.2.9.2 Administrative Functions Associated with Root Zone Management**

ICANN has successfully performed the IANA Functions for more than 13 years, most recently in accordance with the 2006 Contract. Consequently, many of the processes defined within this response have been historically documented and implemented by ICANN, relying on the deep understanding that ICANN brings to the non-obvious complexities of the IANA Functions. The proposed workflow for Requirement C.2.9.2 reflects the process currently used in operating the Administrative Functions associated with Root Zone Management, and ICANN proposes to continue this workflow. This will be fully conformant with the overall workflow described in the Solicitation and the illustration in Appendix 1 of the Statement of Work.

ICANN has improved its performance of the IANA Functions to accommodate the growing complexity and requirements of the Root Zone Management task. Some of the new demands that did not exist in 1999 include the complex operational requirements of DNSSEC, introduction of IPv6 records, increased speed at which changes need to be implemented, requirements of introducing new gTLDs in two early rounds (in 2000 and 2004), and introduction of Internationalized Domain Names.

All of these new services have been successfully introduced by ICANN into IANA Functions in a timely fashion. To support this, ICANN has implemented new systems to optimize the process and improve accuracy. When ICANN took over IANA Functions in 1998, the Root Zone Management process was completely manual and paper-based. During ICANN's stewardship, the process evolved with new tools including a dedicated Root Zone Database management system deployed in 2000, a fully electronic ticket tracking system in 2005, implementation of automation and fully objective technical tests in 2007, and migration to an automated workflow management system that was deployed in 2011.

ICANN has a deep and thorough understanding of the requirements of the DNS Root Zone Management process. As the IANA Functions operator since 1998, ICANN has many years of practical experience in the unique requirements of the Root Zone process, including the historical legacy that is the basis upon which many of the details of the functions are executed. The staff and management are comprised of experts with many years of experience managing the root zone process, and who maintain personal relationships with the majority of TLD Managers and other actors involved in the process.

#### **Understanding the Requirement**

To execute the Root Zone Management functions in a responsible way, ICANN recognizes the most important criterion is the technical stability of the Root Zone. Without a correctly functioning Root Zone, the ongoing stability of the Domain Name System is compromised. The series of checks-and-balances in the process ensure that changes are reviewed several times by multiple parties, and do not to impact secure and stable Root Zone operation before implementation. The process also will ensure accuracy for the changes by ensuring TLD Managers review and positively confirm the correctness of the change, and confirming the

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accuracy of changes by using the DNS protocol to reconcile the proposed changes to the DNS Root Zone with the contents of the TLD's NS, A, AAAA, and DNSKEY records obtained independently from other DNS zones. As the DNS Root Zone is designed to reflect existing information located elsewhere in the DNS, this form of checking acts as an important indicator that any request is properly implemented and accurately reflects the wishes of the operator.

The requirements for a deliberate process are tempered by the recognition that TLD Managers require timely service to maintain ongoing stable operation of their individual registries. Therefore, ICANN implements a service that minimizes the amount of time that a request requires for processing to that which is necessary to correctly execute the function.

To ensure timely operation, the process must be predictable, repeatable, and well understood by the various parties. ICANN notes that a common cause of delay when processing requests is TLD Managers submitting incomplete or inaccurate requests. Ensuring that process and requirements are fully understood helps reduce that delay and allow TLD Managers to better plan for the process.

ICANN also recognizes that accountability is essential to maintain the trust required by the community to successfully operate the function. ICANN provides a comprehensive level of detail to TLD Managers about how their requests are being processed, including regular status updates and a complete timeline describing the processing of a request. ICANN reports to the community its execution of the function through a combination of presentations and regular reporting.

### ***Technical Approach***

ICANN describes our technical approach to meeting this requirement in the following sections.

#### **1.2.9.2(1) Facilitate and Coordinate Root Zone**

ICANN will use its established process, described below, that are well understood by the various parties involved in Root Zone Management in order to continue to facilitate and coordinate the root zone's contents.

Using the language of the Solicitation, and in accordance with the existing process workflow, a TLD manager will submit a change request to the IANA Functions Operator (ICANN), which will then be processed and evaluated according to the type of change being requested. Once the various checks are satisfactorily conducted, the request will be transmitted to the Administrator, NTIA, for authorization. Following successful authorization, the Root Zone Maintainer, Verisign, will execute changes to the root zone file. Finally, ICANN as the IANA Functions Operator will implement the authorized changes to the WHOIS database and the request will be completed.

The process is designed to be as lightweight as possible within the requirements of the DNS Root Zone management process. This allows for straight-through processing with almost full automation for the significant majority of DNS Root Zone change requests. Manual processing will be performed only in cases where automation cannot be achieved without compromising the integrity of the evaluation required.

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### General Process Workflow for Root Zone Change Requests

This process workflow will be used for the life cycle of a Change Request. During the life of a request, the process will go through a number of phases. These phases will be conducted for all types of changes requested under Requirement C.2.9.2, however the specifics of the process conducted within each phase will vary depending on factors such as whether it is a technical or non-technical change, and whether it involves a substantive change of who operates the domain (commonly known as a “TLD redelegation”). These differences in processing details are elaborated upon individually under the responses to Requirements C.2.9.2.a through C.2.9.2.d. See Figures 1.2-38 and 1.2-39.

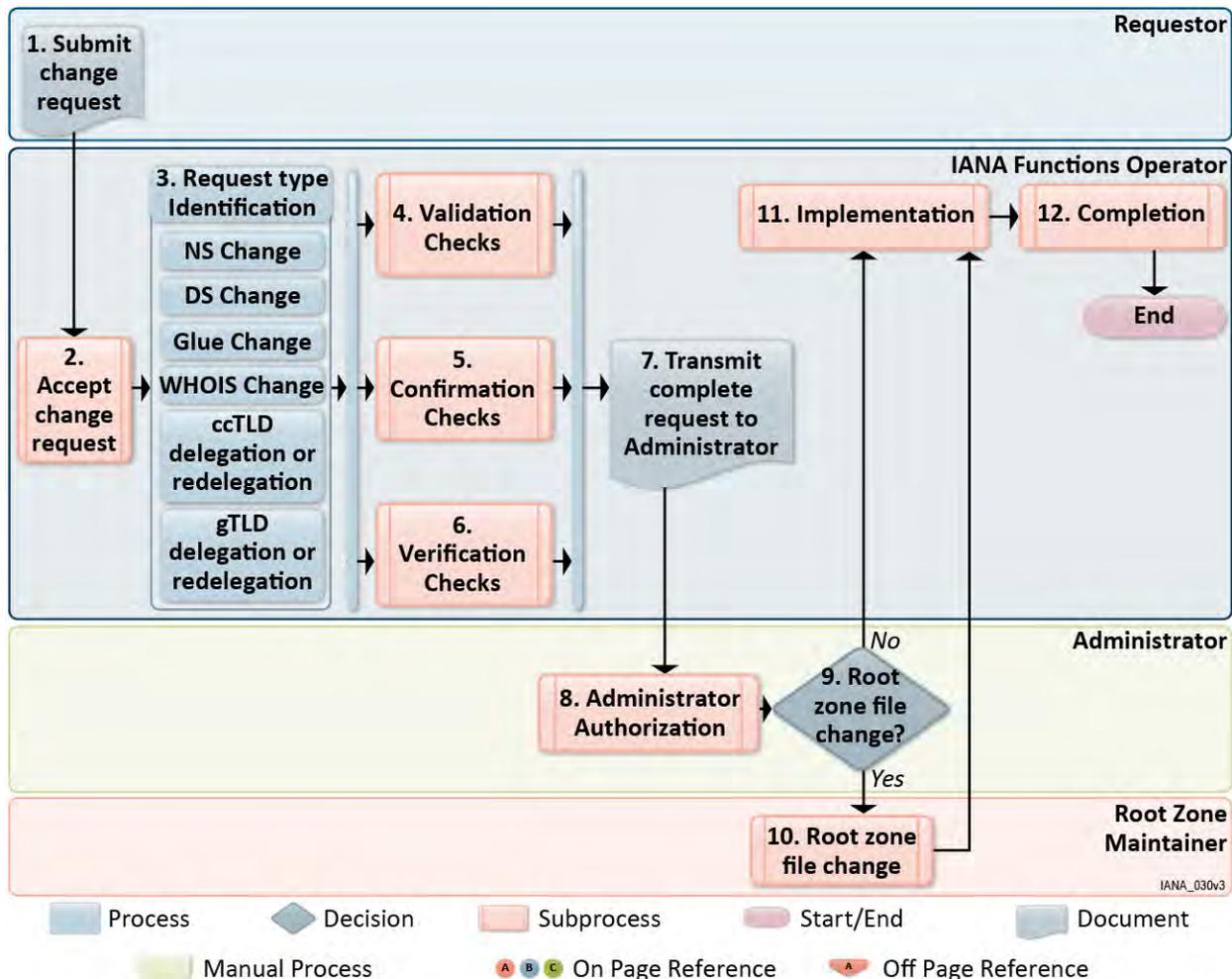


Figure 1.2-38. Top-Level Root Zone Process

Figure 1.2-39. Top-Level Root Zone Change Step-by-Step Description

| 1           | SUBMIT CHANGE REQUEST  |
|-------------|--|
| Description | A change request is submitted by requestor, typically through ICANN’s IANA Root Zone Management website.. ese requests will typically be lodged through ICANN’s IANA Root Zone Management website. The software used for processing standard root zone change requests is an existing system that was developed by ICANN and coordinates operations for updating the root zone with the Administrator and Root Zone Maintainer. Should a requestor not to use this |

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|                    |   |
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|                    | system, the request may be emailed to root-mgmt@iana.org, submitted via facsimile or postal mail.   |
| <b>2</b>           | <b>ACCEPT CHANGE REQUEST</b>  |
| <b>Description</b> | A change request is accepted.   |
| <b>3</b>           | <b>REQUEST TYPE IDENTIFICATION</b>  |
| <b>Description</b> | The type of change request (i.e., Name Server (NS) record change, Delegation Signer (DS) record change, glue record change, WHOIS database change, ccTLD (re-)delegation, gTLD (re-)delegation, or a combination thereof) will be identified in order to determine which checks must be performed during the processing of the request.   |
| <b>4</b>           | <b>VALIDATION CHECKS</b>  |
| <b>Description</b> | Checks for request completeness are performed, as well as technical checks on the technical elements of the request. In the case of those requests submitted via the automated root zone management system, many of these checks are performed automatically in tandem with accepting the change request. If the request is unclear or has validation issues, further clarification is sought from the requester.   |
| <b>5</b>           | <b>CONFIRMATION CHECKS</b>  |
| <b>Description</b> | For existing top-level domains, the existing administrative and technical contacts for the top-level domain are asked to consent to the proposed change. For changes that involve inducting new contact persons, the new contacts are asked to consent to their new responsibility. The Sponsoring Organization is asked to endorse certain changes, particularly relating to personnel changes in the contacts for the domain (e.g., staff succession). In some cases, third parties are involved in consenting to changes to the root zone. This is either through explicit request from the operator (who has placed “special handling instructions” on file), or through legal, contractual, or governmental obligation. In the specific case of changing the IP addresses (“glue”) of a name server shared by multiple top-level domains, the contact persons from other affected TLDs will also be asked to confirm the change. |
| <b>6</b>           | <b>VERIFICATION CHECKS</b>  |
| <b>Description</b> | Requests are reviewed to deem whether they represent a material change to the operator of the domain. If they are, they are considered a “re-delegation” and must be reviewed against a set of additional public interest criteria, as described under C.2.9.2.c and C.2.9.2.d. Additionally, at this stage any necessary legal reviews are performed on the request, and any special handling of the request as requested by certain TLD managers is performed.  |
| <b>7</b>           | <b>TRANSMIT COMPLETE REQUEST TO ADMINISTRATOR</b>   |
| <b>Description</b> | The complete request is transmitted to administrator.   |
| <b>8</b>           | <b>AUTHORIZATION</b>  |
| <b>Description</b> | Changes to the DNS Root Zone File, as well as changes to the DNS Root Zone WHOIS Database, are transmitted to the Administrator for authorization. Such changes cannot be enacted without explicit positive authorization from the Administrator. Once a request has passed review and is ready for transmittal to the Administrator for authorization, the system will instantiate a Change Request in the Root Zone Maintainer’s system using the EPP protocol. At this stage of the process, the Root Zone Maintainer’s system will hold the request as pending until it receives proper authorization from the Administrator.   |
| <b>9</b>           | <b>ROOT ZONE FILE CHANGE?</b>   |
| <b>Description</b> | If yes, go to Step 10.<br>If no, go to Step 11.   |
| <b>10</b>          | <b>ROOT ZONE FILE CHANGE</b>  |

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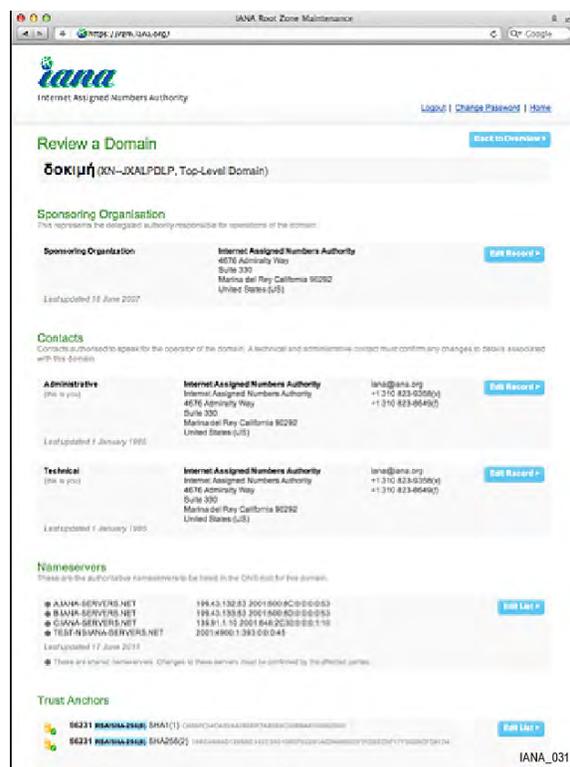
|                    |  |
|--------------------|--|
| <b>Description</b> | The Root Zone Maintainer conducts changes to the Root Zone File following authorization by the Administrator.  |
| <b>11</b>          | <b>IMPLEMENTATION</b>  |
| <b>Description</b> | ICANN conducts changes to the Root Zone Whois Database. Changes to the Root Zone File are cross-verified by ICANN to ensure they were enacted correctly. Any potential implementation issues are identified, researched, and if necessary remedied through mutual communication between the parties.                   |
| <b>12</b>          | <b>COMPLETION</b>  |
| <b>Description</b> | The Root Zone Maintainer propagates any changes to the Root Zone File to the Authoritative Root Zone Servers; and changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at whois.iana.org by the IANA Functions Operator, ICANN. The requester is informed that the request is completed. |

Online interface for Request Management

ICANN will recommend to TLD managers that they submit their change requests via a secure online website that ICANN has developed which provides an advanced interactive interface that allows existing managers to enter changes, review their proposed changes, and revert or make further changes, all prior to lodgment as a formal Change Request. The interface also will provide complex functionality to advise the TLD manager of common scenarios, such as when the request may need to be split into multiple parts in order to expedite processing. During this lodgment process, online feedback will be immediately provided on common errors associated with request completeness and technical accuracy. Upon lodgment as a formal Change Request, a reference number will be immediately provided via the web interface, and the status will be tracked moving forward.

**Figure 1.2-40** is a representative screen shot of the currently deployed interface for TLD managers.

Subsequent to lodging a change request, TLD managers will use this online interface to review currently pending requests to identify their current status, as well as review historical requests that have been concluded. The interface will provide the ability for TLD managers to withdraw any request that has not yet advanced to its final implementation phases, and perform common administrative tasks such as updating their login credentials to the system.



**Figure 1.2-40. ICANN Interface for TLD Managers**

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### Template

If a change request is submitted via means other than through the automated web interface — such as email, facsimile, or postal mail — the requestor will be encouraged to do so using a template posted on ICANN’s IANA website. This form reflects the transmittal format used for the Administrator’s Authorization prior to the migration to the automated root zone management workflow in 2011. Using the form will not be a mandatory requirement: so long as the applicant clearly and unambiguously articulates the nature of the request, any request will be accepted by ICANN and will be entered into the online system on the requestor’s behalf.

The proposed template is attached in **Appendix B**.

#### **1.2.9.2(2) Maintain 24x7 Operation**

ICANN will maintain all online services in relation to the performance of C.2.9.2 and ensure they are available 24x7, with the exception of any scheduled maintenance that may need to be performed from time to time.

ICANN will ensure any scheduled maintenance does not impact the full 24x7 availability of the DNS Root Zone, DNS Root Zone Servers, or ICANN’s ability for the IANA Functions Operator to facilitate emergency change requests. In order to effect this, ICANN will ensure additional systems are in place to handle any requirements during such maintenance windows, and schedule maintenance with its root management partners and other involved parties to ensure ongoing service.

The online systems for performing the tasks of C.2.9.2 will be deployed using multiple redundant facilities.

Normal root zone management operations will not require ICANN to process routine requests on a 24x7 basis. Instead, what is essential is that the online systems will be available on a 24x7 basis, that requests will be lodged on a 24x7 basis, and that ICANN Staff will be available for escalation of emergency requests on a 24x7 basis. ICANN will staff its offices, at a minimum, according to normal business hours in the US Pacific time zone. Normal routine changes that require handling by staff will be processed during these hours.

ICANN will provide an online self-service interface whereby credentialed TLD managers will submit change requests at any time. Credentialed TLD managers will also log in at any time to review the status of their request, and perform other actions, without necessitating direct involvement of ICANN staff.

As well as general staff availability during standard business hours, ICANN will continue to provide TLD managers with a 24x7 emergency contact number that allows TLD managers to quickly reach ICANN to declare an emergency and seek to expedite a Root Zone change request. ICANN will execute such changes in accordance with the obligations of the standard root zone management workflow as expeditiously as possible. This prioritization will include performing emergency reviews of the request as the first priority, out of ordinary business hours if necessary, and informing its contacts at NTIA and Verisign, in their roles as Administrator and Root Zone Maintainer, of any pending changes that will require priority authorization and implementation. See **Figures 1.2-41 and 1.2-42**.

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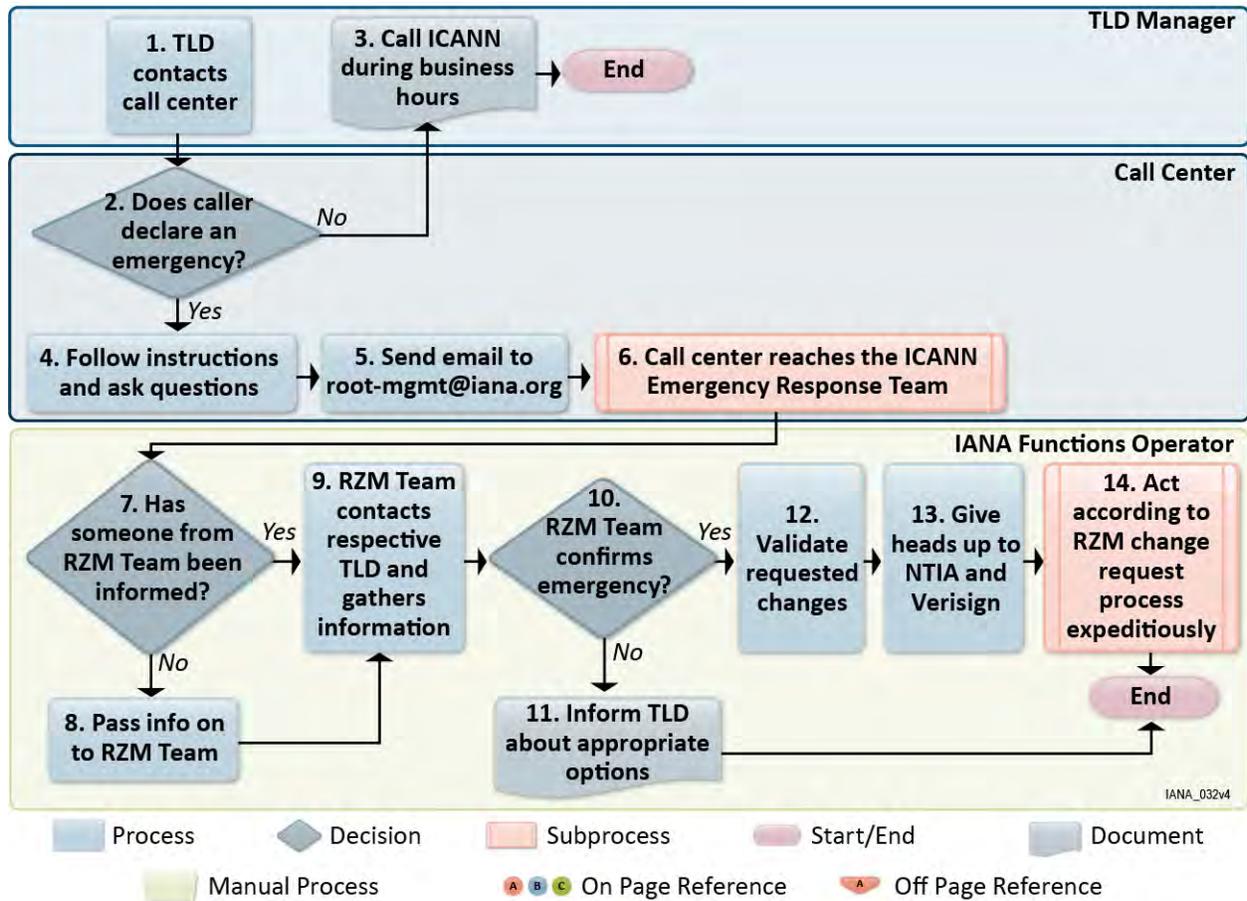


Figure 1.2-41. 24x7 Emergency Process

Figure 1.2-42. 24x7 Emergency Process Step-by-Step Description

| 1           | TLD CONTACTS CALL CENTER   |
|-------------|--|
| Description | All TLD managers are provided with an emergency contact telephone number that will reach a 24x7 call center.   |
| 2           | DOES CALLER DECLARE AN EMERGENCY?  |
| Description | The caller is asked if the issue is an emergency that requires an urgent root zone change, and can not wait until regular business hours.  |
| 3           | CALL ICANN DURING BUSINESS HOURS   |
| Description | In the event the caller decides it is not an emergency, their contact details are logged and they are advised to speak to ICANN’s IANA Function staff during regular business hours. |
| 4           | FOLLOW INSTRUCTIONS AND ASK QUESTIONS  |
| Description | Call center staff follow a set of instructions to solicit relevant information relating to the nature of the emergency, and the contact details of the TLD manager.                  |
| 5           | SEND EMAIL TO <a href="mailto:root-mgmt@iana.org">ROOT-MGMT@IANA.ORG</a>   |
| Description | The particulars of the emergency call are sent by the call center staff to the ticketing system. This opens a ticket and starts an audit log of the specific request.                |

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|--------------------|---|
| <b>6</b>           | <b>CALL CENTER REACHES THE ICANN EMERGENCY RESPONSE TEAM</b>  |
| <b>Description</b> | The call center has the emergency roster of ICANN's IANA Functions staff, as well as escalation points for ICANN senior management. The call center will call through the roster until they contact a person to hand the issue to. The ICANN staff member that receives the issue will be the primary person responsible for resolution of the issue. |
| <b>7</b>           | <b>HAS SOMEONE FROM THE ROOT ZONE MANAGEMENT (RZM) TEAM BEEN INFORMED?</b>  |
| <b>Description</b> | The primary person responsible checks if the Root Zone Management team within the ICANN's IANA Functions staff is aware of the issue.   |
| <b>8</b>           | <b>PASS INFO ON TO RZM TEAM</b>   |
| <b>Description</b> | If necessary, information relating to the emergency request is communicated to the Root Zone Management team.   |
| <b>9</b>           | <b>RZM TEAM CONTACTS TLD MANAGER</b>  |
| <b>Description</b> | The IANA Functions staff performing the root zone management functions contact the TLD manager using the contact details provided to the call center. The nature of the issue is discussed in more detail, and a plan is devised to resolve the issue.  |
| <b>10</b>          | <b>RZM TEAM CONFIRMS EMERGENCY</b>  |
| <b>Description</b> | Following dialog with the TLD manager, the RZM team confirms the particulars of the issue and the need to perform an emergency root zone change to resolve the issue.   |
| <b>11</b>          | <b>INFORM TLD ABOUT APPROPRIATE OPTIONS</b>   |
| <b>Description</b> | In the event the TLD manager and RZM team deem that an emergency root zone change can not resolve the issue, ICANN will inform the TLD manager about what other options they have to resolve the issue.   |
| <b>12</b>          | <b>VALIDATE REQUESTED CHANGES</b>   |
| <b>Description</b> | ICANN validates the request in accordance with the standard procedures described in the Root Zone Change process, including performing technical checks and performing contact confirmations. ICANN takes steps to conduct these as quickly as possible.  |
| <b>13</b>          | <b>GIVE HEADS UP TO NTIA AND VERISIGN</b>   |
| <b>Description</b> | ICANN takes all available steps to inform personnel at NTIA and Verisign that there is an active emergency change request being conducted, and encourages NTIA and Verisign to process the request as quickly as possible.  |
| <b>14</b>          | <b>ACT ACCORDING TO ROOT ZONE CHANGE REQUEST PROCESS EXPEDITIOUSLY</b>  |
| <b>Description</b> | ICANN executes the root zone change request as quickly as possible according to all standard policies and procedures. ICANN prioritizes the rapid implementation of the request above other requests at normal priority.  |

**1.2.9.2(3) Contractor shall work collaboratively with NTIA and the Root Zone Maintainer**

ICANN will continue to work with the NTIA and the Root Zone Maintainer following the successful manner in which collaboration has been conducted over the course of the current contract. This collaboration will include regularly scheduled coordination meetings on general Root Zone Management issues, and several meetings per year specifically on the topic of emergency response and scenario planning. ICANN will also work with the parties on face-to-face workshops as needed on a variety of root zone management topics.

In the execution of the Root Zone Management function, from time to time, specific operational issues warrant immediate questioning and response. Ad-hoc meetings will be called

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between Verisign, ICANN, and NTIA to resolve these issues as they arise. ICANN staff will be available on-call outside of regular business hours, and ICANN staff contact details will be provided to NTIA and Verisign to allow for immediate dialogue on any operational issues that arise.

Above and beyond the successful working relationships demonstrated in executing the routine Root Zone Management functions under the current contact, ICANN has demonstrated its ability to work collaboratively with the parties during the process of developing, testing, and deploying the Root Zone Workflow Automation System. This project involved intensive coordination and liaison between the parties over an extended period of time. The work involved complex requirements and specifications development, and a multi-year development and testing process that concluded with its successful launch in 2011.

ICANN will continue advancing these relationships by continuing regularly scheduled coordination meetings, and will work with the parties to identify areas where coordination can be improved.

#### **1.2.9.2.a Root Zone File Change Request Management**

ICANN has successfully performed the IANA Functions for more than 13 years, most recently in accordance with the 2006 contract. Consequently, many of the processes defined within this response have been historically documented and implemented by ICANN, relying on the deep understanding that ICANN brings to the complexities of the IANA Functions. The proposed workflow for Requirement C.2.9.2.a reflects the process currently used in operating the Administrative Functions associated with Root Zone Management, and ICANN will continue to use this workflow. This will be fully conformant with the overall workflow described in the Solicitation, and the illustration in Appendix 1 of the Statement of Work.

In performing the work for more than 13 years, ICANN has improved the function to accommodate the growing complexity and requirements of the Root Zone Management task. Some of the new demands that did not exist in 1999 include the complex operational requirements of DNSSEC, introduction of IPv6 records, increased speed at which changes need to be implemented, and introduction of Internationalised Domain Names.

All of these new services have been successfully introduced by ICANN in performing the IANA Functions in a timely fashion. To support this, ICANN has implemented new systems to optimize the process and improve accuracy. When ICANN took over the IANA Functions in 1998, the Root Zone Management process was completely manual and paper-based. During ICANN's stewardship, the process evolved with new tools including a dedicated Root Zone Database management system deployed in 2000, a fully electronic ticket tracking system in 2005, implementation of automation and fully objective technical tests in 2007, and migration to an automated workflow management system that was deployed in 2011.

ICANN has a deep and thorough understanding of the requirements of the DNS Root Zone Management process. As the IANA Functions operator, ICANN has many years of practical experience in the unique requirements of the Root Zone process, including the historical legacy that is the basis upon which many of the details of the functions are executed. The staff and management are comprised of experts with many years of experience in managing the root

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zone process, and based on this experience maintain personal relationships with the majority of TLD Managers and other actors involved in the process.

### ***Understanding the Requirement***

To execute the Root Zone Management functions in a responsible way, ICANN recognizes the most important criteria is the technical stability of the Root Zone. Without a correctly functioning Root Zone, the ongoing stability of the Domain Name System is compromised. The series of checks-and-balances in the process ensure changes are reviewed several times by multiple parties, and ensured not to impact secure and stable Root Zone operation before implementation. The process also ensures accuracy for the changes by ensuring that TLD Managers review and positively confirm the correctness of the change, and confirming the accuracy of changes by using the DNS protocol to reconcile the proposed changes to the DNS Root Zone, with the contents of the TLD's NS, A, AAAA, and DNSKEY records obtained independently from other DNS zones. As the DNS Root Zone is designed to reflect existing information located elsewhere in the DNS, this form of checking acts as an important indicator that any request is properly implemented and accurately reflects the wishes of the operator.

The requirements for a deliberate process are tempered by the recognition that TLD Managers require timely service to maintain ongoing stable operation of their individual registries. Therefore, ICANN implements a service that minimizes the amount of time that a request requires processing by ICANN to that necessary to correctly execute the function.

To ensure timely operation, the process must be predictable, repeatable, and well understood by the various parties. ICANN notes that a common cause of delay when processing requests is TLD Managers submitting incomplete or inaccurate requests. Ensuring that process and requirements are fully understood helps reduce that delay and allow TLD Managers to better plan for the process.

ICANN also recognizes that accountability is essential to maintain the trust required by the community to successfully operate the function. ICANN provides a comprehensive level of detail to TLD Managers about how their requests are being processed, including regular status updates, and a complete timeline describing the processing of a request. ICANN reports to the community our execution of the function, through a combination of presentations and regular reporting.

### ***Technical Approach***

ICANN's approach to this requirement will be to conduct a Change Request review to ensure it is consented to by the relevant parties, and meets minimum criteria that serve to ensure common technical issues will be identified and corrected or will not otherwise impact the stable and secure operation of the DNS Root Zone. The technical checks that will be used were developed collaboratively with the community of TLD managers and with the Root Zone Maintainer, Verisign.

The specific approach to Root Zone Change files will be based on the general process described in Section 1.2.9.2, with specific processing elements specific to Root Zone File changes.

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1.2.9.2.a.1 Receiving and processing root zone file change requests

ICANN will use the following process workflows to implement the requirements of C.2.9.2.a. These process workflows are modeled on the general process workflow described in section 1.2.9.2 of our response. As requests of different types will not be mutually exclusive (for example, a Name Server Change and a DS Record Change, can be part of the same request), the process will follow the same overall flow but will be tailored in specific elements in accordance with what is being requested in a specific instance.

The three categories of technical changes under Requirement C.2.9.2.a that will be requested for TLDs are:

- **Name server changes** – changes to the set of NS records listed for a given TLD, including adding, changing, and removing individual NS records
- **Delegation Signer Resource Record changes** – changes to the set of DS records listed for a given TLD, including adding and removing individual DS records
- **Glue record changes** – changes to the set of A and/or AAAA records listed for a given name server, including adding and removing individual A/AAAA records

For each of these three categories, ICANN will implement a specific process flow modeled on the general process flow, as described below.

### Name Server Change

Figures 1.2-43 and 1.2-44 depict the process for Name Server Change.

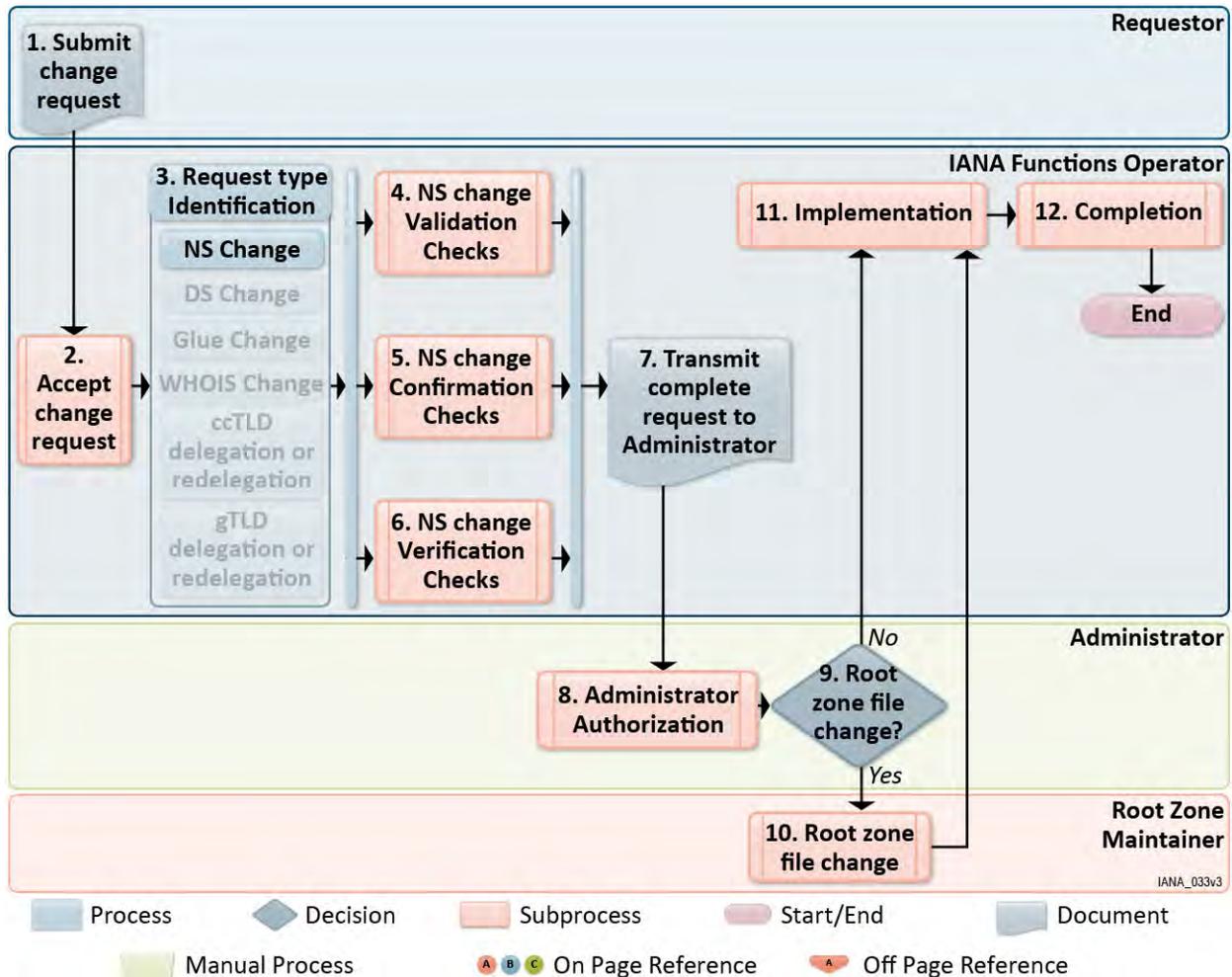


Figure 1.2-43. Name Server Change Root Zone Management Process Flow

Figure 1.2-44. Name Server Change Root Zone Management Step-by-Step Description

|                    |   |
|--------------------|---|
| <b>1</b>           | <b>SUBMIT CHANGE REQUEST</b>  |
| <b>Description</b> | A change request will be created when a requestor lodges it with ICANN. These requests will typically be lodged through ICANN’s IANA Root Zone Management website. The software used for processing standard root zone change requests is an existing system that was developed by ICANN and coordinates operations for updating the root zone with the Administrator and Root Zone Maintainer. Should a requestor not to use this system, the request may be emailed to <a href="mailto:root-mgmt@iana.org">root-mgmt@iana.org</a> , submitted via facsimile or postal mail. |
| <b>2</b>           | <b>ACCEPT CHANGE REQUEST</b>  |
| <b>Description</b> | A change request is accepted.   |
| <b>2</b>           | <b>REQUEST TYPE IDENTIFICATION</b>  |
| <b>Description</b> | This type of change request is classified as relating to changes to one or more NS records listed in the DNS Root Zone.   |

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| <b>4</b>           | <b>NS VALIDATION CHECKS</b>  |
| <b>Description</b> | Initially, checks for request completeness are conducted against the supplied NS records, such that they are comprised of properly formed and legal fully-qualified host names suitable for listing in NS records. A set of technical checks are performed. Failures against these technical checks are reported to the requester to remedy. In certain circumstances, some of these requirements can be waived if the applicant can satisfactorily demonstrate the implications are fully understood, and there is no adverse impact on DNS operation in implementing the change. |
| <b>5</b>           | <b>NS CONFIRMATION CHECKS</b>  |
| <b>Description</b> | Standard confirmations, as described in our response to C.2.9.2, are conducted. There are no additional specific confirmation checks unique to NS record changes.  |
| <b>6</b>           | <b>NS VERIFICATION CHECKS</b>  |
| <b>Description</b> | Standard verification checks, as described in the response to Requirement C.2.9.2, are conducted. There are no additional specific verification checks unique to NS record changes.  |
| <b>7</b>           | <b>TRANSMIT COMPLETE REQUEST</b>   |
| <b>Description</b> | Changes to NS records are transmitted to the Administrator for authorization.  |
| <b>8</b>           | <b>AUTHORIZATION</b>   |
| <b>Description</b> | Changes cannot be enacted without explicit positive authorization from the Administrator.  |
| <b>9</b>           | <b>ROOT ZONE FILE CHANGE?</b>  |
| <b>Description</b> | If yes, go to Step 10.<br>If no, go to Step 11.  |
| <b>10</b>          | <b>CHANGE ROOT ZONE FILE</b>   |
| <b>Description</b> | Changes to NS records are conducted by the Root Zone Maintainer following authorization by the Administrator.  |
| <b>11</b>          | <b>IMPLEMENTATION</b>  |
| <b>Description</b> | Changes to NS records in the Root Zone File are cross-verified by ICANN to ensure they were enacted correctly. Any potential implementation issues are identified, researched, and if necessary remedied through mutual communication between the parties.   |
| <b>12</b>          | <b>COMPLETION</b>  |
| <b>Description</b> | The Root Zone Maintainer propagates changes to the Root Zone File to the Authoritative Root Zone Servers; and changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at ICANN's whois.iana.org. The requester is informed that the request is completed.   |

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1.2.9.2.a.2 Delegation Signer Resource Record Change

Figures 1.2-45 and 1.2-46 depict the Delegation Signer resource record change process.

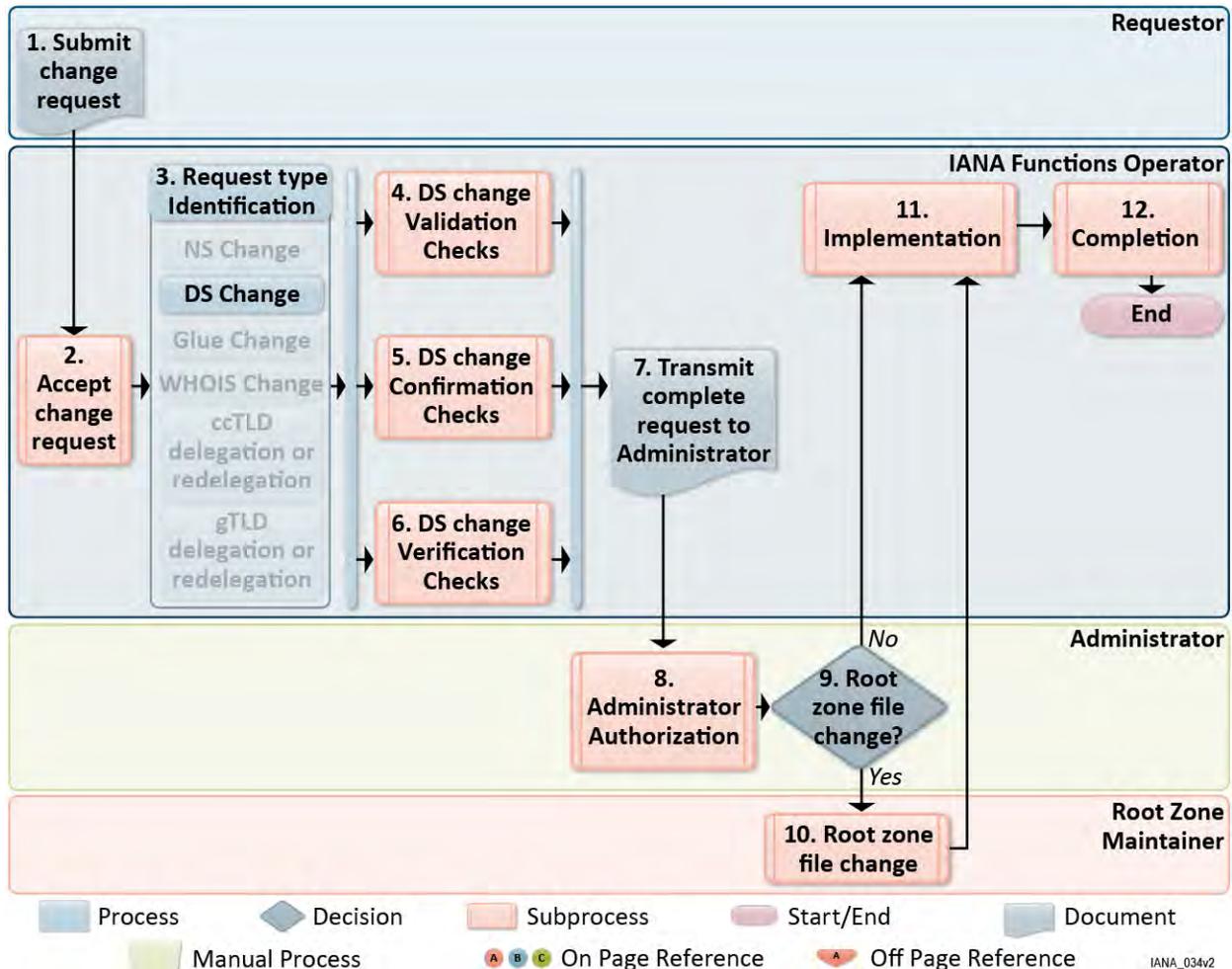


Figure 1.2-45. Delegation Signer Change Root Zone Management Process Flow

Figure 1.2-46. Delegation Signer Change Root Zone Management Step-by-Step Description

|                    |   |
|--------------------|---|
| <b>1</b>           | <b>SUBMIT CHANGE REQUEST</b>  |
| <b>Description</b> | A change request will be created when a requestor lodges it with ICANN. These requests will typically be lodged through ICANN’s IANA Root Zone Management website. The software used for processing standard root zone change requests is an existing system that was developed by ICANN and coordinates operations for updating the root zone with the Administrator and Root Zone Maintainer. Should a requestor not to use this system, the request may be emailed to <a href="mailto:root-mgmt@iana.org">root-mgmt@iana.org</a> , submitted via facsimile or postal mail. |
| <b>2</b>           | <b>ACCEPT CHANGE REQUEST</b>  |
| <b>Description</b> | A change request is accepted.   |
| <b>3</b>           | <b>REQUEST TYPE IDENTIFICATION</b>  |
| <b>Description</b> | This type of change request is classified as relating to a DS record change.  |

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| <b>4</b>           | <b>DS VALIDATION CHECKS</b>  |
| <b>Description</b> | Checks for request completeness are conducted against the supplied DS records, such that they are comprised of properly formed digests of the correct length suitable for listing in DS records. A set of technical checks are performed. Failures against these technical checks are reported to the requester to remedy. In certain circumstances, some of these requirements can be waived if the applicant can satisfactorily demonstrate the implications are fully understood, and there is no adverse impact on DNS operation in implementing the change. |
| <b>5</b>           | <b>DS CONFIRMATION CHECKS</b>  |
| <b>Description</b> | Standard confirmations, as described in our response to C.2.9.2, are conducted. There are no additional specific confirmation checks unique to DS record changes.  |
| <b>6</b>           | <b>DS VERIFICATION CHECKS</b>  |
| <b>Description</b> | Standard verification checks, as described in the response to Requirement C.2.9.2, are conducted. There are no additional specific verification checks unique to DS record changes.  |
| <b>7</b>           | <b>TRANSMIT REQUEST</b>  |
| <b>Description</b> | Changes to DS records are transmitted to the Administrator for authorization.  |
| <b>8</b>           | <b>AUTHORIZATION</b>   |
| <b>Description</b> | Changes cannot be enacted without explicit positive authorization from the Administrator.  |
| <b>9</b>           | <b>ROOT ZONE FILE CHANGE?</b>  |
| <b>Description</b> | If yes, go to Step 10.<br>If no, go to Step 11.  |
| <b>10</b>          | <b>ROOT ZONE FILE CHANGE</b>   |
| <b>Description</b> | DS record changes are conducted by the Root Zone Maintainer following authorization by the Administrator.  |
| <b>11</b>          | <b>IMPLEMENTATION</b>  |
| <b>Description</b> | DS record changes in the Root Zone File are cross-verified by ICANN to ensure they were enacted correctly. Any potential implementation issues are identified, researched, and if necessary remedied through mutual communication between the parties.   |
| <b>12</b>          | <b>COMPLETION</b>  |
| <b>Description</b> | The Root Zone Maintainer propagates changes to the Root Zone File to the Authoritative Root Zone Servers; and changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at ICANN's whois.iana.org. The requester is informed that the request is completed.   |

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1.2.9.2.a.3 Glue Change

Figures 1.2-47 and 1.2-48 depict the Glue Change Root Zone Management process.

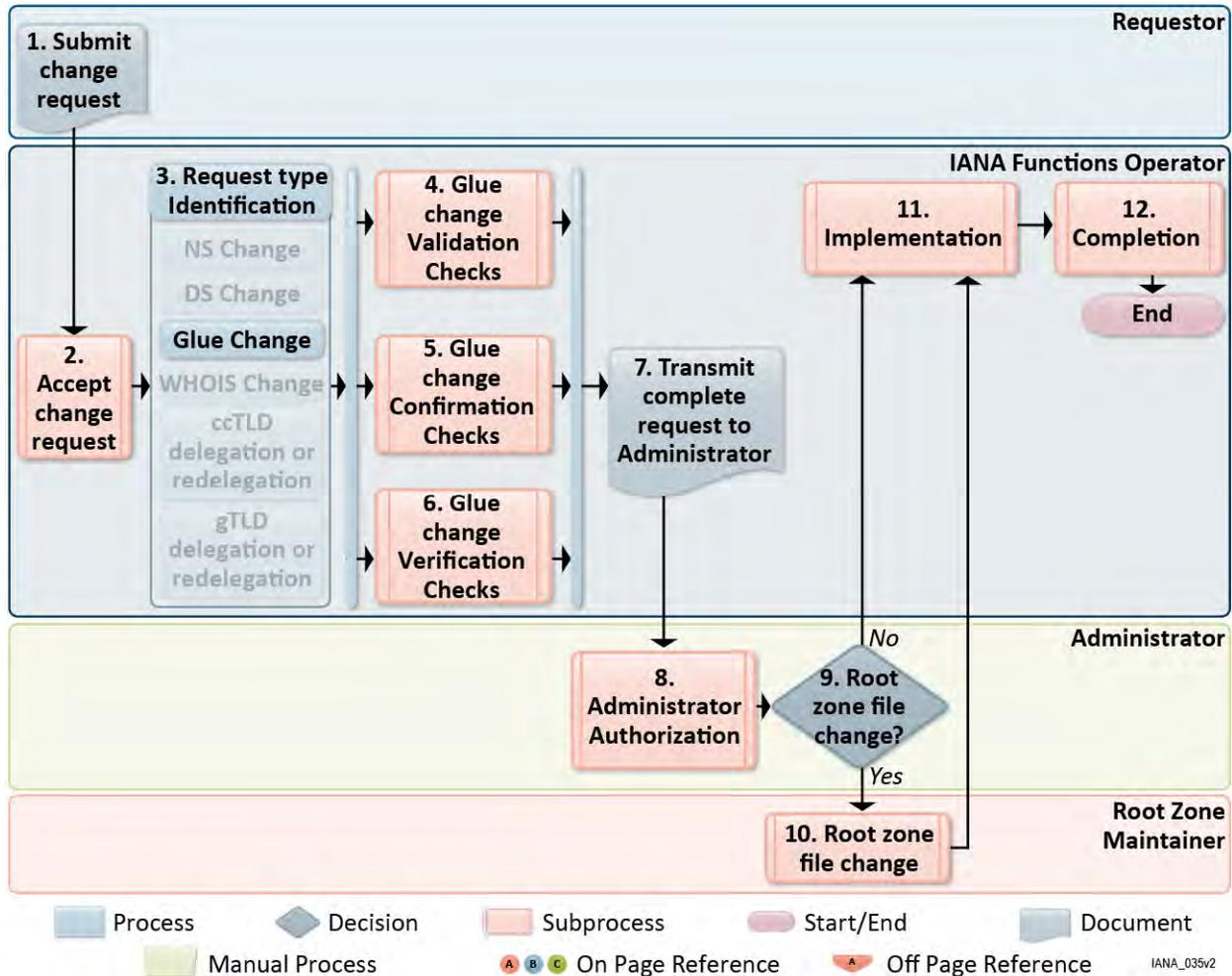


Figure 1.2-47. Glue Change Root Zone Management Process Flow

Figure 1.2-48. Glue Change Root Zone Management Step-by-Step Description

| 1           | SUBMIT CHANGE REQUEST   |
|-------------|---|
| Description | A change request will be created when a requestor lodges it with ICANN. These requests will typically be lodged through ICANN’s IANA Root Zone Management website. The software used for processing standard root zone change requests is an existing system that was developed by ICANN and coordinates operations for updating the root zone with the Administrator and Root Zone Maintainer. Should a requestor not to use this system, the request may be emailed to <a href="mailto:root-mgmt@iana.org">root-mgmt@iana.org</a> , submitted via facsimile or postal mail. |
| 2           | ACCEPT CHANGE REQUEST   |
| Description | A change request is accepted.   |
| 3           | REQUEST TYPE IDENTIFICATION   |
| Description | This type of change request is classified as relating to a glue record change.  |
| 4           | GLUE VALIDATION CHECKS  |

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|                    |  |
|--------------------|--|
| <b>Description</b> | Checks for request completeness are conducted against the supplied IP addresses, such that they are comprised of properly formed IPv4 or IPv6 addresses. A set of technical checks are performed. Failures against these technical checks are reported to the requester to remedy. In certain circumstances, some of these requirements can be waived if the applicant can satisfactorily demonstrate the implications are fully understood, and there is no adverse impact on DNS operation in implementing the change. |
| <b>5</b>           | <b>GLUE CONFIRMATION CHECKS</b>  |
| <b>Description</b> | Standard confirmations, as described in our response to C.2.9.2, are conducted. In addition, glue records can be shared amongst two or more top-level domain operators. If there is a request to alter a glue record that impacts third-party top-level domains, those third-party top-level domains are asked to also consent to the proposed glue change.  |
| <b>6</b>           | <b>GLUE VERIFICATION CHECKS</b>  |
| <b>Description</b> | Standard verification checks, as described in the response to Requirement C.2.9.2, are conducted. There are no additional specific verification checks unique to glue record changes.  |
| <b>7</b>           | <b>TRANSMIT REQUEST</b>  |
| <b>Description</b> | Changes to glue records are transmitted to the Administrator for authorization.  |
| <b>8</b>           | <b>AUTHORIZATION</b>   |
| <b>Description</b> | Glue record changes are transmitted to the Administrator for authorization. Such changes cannot be enacted without explicit positive authorization from the Administrator.   |
| <b>9</b>           | <b>ROOT ZONE FILE CHANGE?</b>  |
| <b>Description</b> | If yes, go to Step 10.<br>If no, go to Step 11.  |
| <b>10</b>          | <b>ROOT ZONE FILE CHANGE</b>   |
| <b>Description</b> | Glue record changes are conducted by the Root Zone Maintainer following authorization by the Administrator.  |
| <b>11</b>          | <b>IMPLEMENTATION</b>  |
| <b>Description</b> | Glue record changes in the Root Zone File are cross-verified by ICANN to ensure they were enacted correctly. Any potential implementation issues are identified, researched, and if necessary, remedied through mutual communication between the parties.  |
| <b>12</b>          | <b>COMPLETION</b>  |
| <b>Description</b> | The Root Zone Maintainer propagates changes to the Root Zone File to the Authoritative Root Zone Servers; and changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at ICANN's <i>whois.iana.org</i> . The requester is informed that the request is completed.   |

**1.2.9.2.a.4 Processing changes as expeditiously as possible**

ICANN will assign staff to the Root Zone Management function, and their goal will be the timely and correct execution of all requests received by the function. ICANN will review on a monthly basis the number of requests that are received and the time taken to execute the requests. According to this review, ICANN will project the number of requests anticipated for the future based on the number of TLDs, and the pipeline of potential known requests (based on such factors as the New gTLD Program, upcoming expected ccTLD delegations, and other policy development that may impact the Root Zone Management function). On the basis of this project, ICANN will review the number of staff, and if it is identified further staffing will be

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required to adequately support the timely execution of requests, ICANN will recruit additional staff.

All requests will be fully tracked in a ticket management system. This system, amongst other features, will record exact timestamps when all events in the processing in the ticket occur. This provides for an accurate record of how long the various steps in the process took. TLD Managers will be able to inspect this timeline for any of their own requests through the web-based interface that ICANN will provide, as well as through a summary that ICANN will email the TLD manager at the conclusion of a request.

In accordance with the increased reporting provisions elsewhere in this proposal, improved information on how ICANN is executing on the timely implementation of requests will be made available to the community of interested and affected parties. This information will help improve dialogue amongst these parties on the efficacy of ICANN's implementation, and will spur dialogue on any adjustments that need to be considered.

#### **1.2.9.2.b Root Zone "WHOIS" Change Request and Database Management**

ICANN has successfully performed the IANA Functions for more than 13 years, most recently in accordance with the 2006 contract. Consequently, many of the processes defined within this response have been historically documented and implemented by ICANN, relying on the deep understanding that ICANN brings to the non-obvious complexities of the IANA Functions. The proposed workflow for Requirement C.2.9.2 reflects the process currently used in operating the Administrative Functions associated with Root Zone Management, and ICANN will continue to use this workflow. This will be fully conformant with the overall workflow described in the Solicitation, and the illustration in Appendix 1 of the Statement of Work.

During the last 13+ years, ICANN has improved performance to accommodate the growing complexity and requirements of the Root Zone Management task. Some of the new demands that did not exist in 1998 include the complex operational requirements of DNSSEC, introduction of IPv6 records, increased speed at which changes need to be implemented, requirements of introducing new gTLDs in two separate rounds (in 2000 and 2004), and introduction of Internationalized Domain Names.

All of these new services have been introduced successfully by ICANN in performing the IANA Functions in a timely fashion. To support this, ICANN has implemented new systems to optimize the process and improve accuracy. When ICANN took over IANA Functions in 1999, the Root Zone Management process was completely manual and paper-based. During ICANN's stewardship, the process has evolved with new tools including a dedicated Root Zone Database management system deployed in 2000, a fully electronic ticket tracking system in 2005, implementation of automation and fully objective technical tests in 2007, and migration to an automated workflow management system that was deployed in 2011.

ICANN has a deep and thorough understanding of the requirements of the DNS Root Zone Management process. As the IANA Functions operator, ICANN has many years of practical experience in the unique requirements of the Root Zone process, including the historical legacy that is the basis upon which many of the details of the functions are executed. The staff and management are comprised of experts with many years of experience in managing root zone

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processes and maintaining personal relationships with the majority of TLD Managers and other actors involved in the process.

### ***Understanding the Requirement***

To execute the Root Zone Management functions in a responsible way, ICANN recognizes the most important criteria is the technical stability of the Root Zone. Without a correctly functioning Root Zone, the ongoing stability of the Domain Name System (DNS) is compromised. The series of checks-and-balances in the process will ensure changes are reviewed several times by multiple parties, and will not impact secure and stable Root Zone operation before implementation. The process also will ensure accuracy for the changes by ensuring that TLD Managers review and positively confirm the correctness and accuracy of the changes by using the DNS protocol to reconcile the proposed changes to the DNS Root Zone, with the contents of the TLD's NS, A, AAAA, and DNSKEY records obtained independently from other DNS zones. As the DNS Root Zone is designed to reflect existing information located elsewhere in the DNS, this form of checking will act as an important indicator that any request is properly implemented and accurately reflects the wishes of the operator.

The requirements for a deliberate process are tempered by the recognition that TLD Managers require timely service to maintain ongoing stable operation of their individual registries. Therefore, ICANN will implement a service that minimizes the amount of time that a request requires processing by ICANN staff to that which is necessary to correctly execute the function.

To ensure timely operation, the process will be predictable, repeatable, and well understood by the various parties. ICANN notes that a common cause of delay when processing requests is TLD Managers submitting incomplete or inaccurate requests. Ensuring that process and requirements are fully understood will help reduce that delay and allow TLD Managers to better plan for the process.

ICANN also recognizes accountability will be essential to maintain the trust required by the community to successfully operate the function. ICANN provides a comprehensive level of detail to TLD Managers about how their requests will be processed, including regular status updates and a complete timeline describing the processing of a request. ICANN will report to the community its execution of the function through a combination of presentations and regular reporting.

### ***Technical Approach***

ICANN's approach to this requirement will be to conduct a review of a Change Request to ensure it is consented to by the relevant parties, and that the proposed contact details are functional and complete. A small number of checks will be performed, particularly in relation to the requirement that ccTLD administrative contacts be "based in country."

#### ***1.2.9.2.b.1 Maintaining and Updating a Root Zone WHOIS Database***

The specific approach to Root Zone Change files will be based on the general process described in Section 1.2.9.2, with specific processing elements specific to WHOIS Change requests. See **Figures 1.2-49 and 1.2-50**.

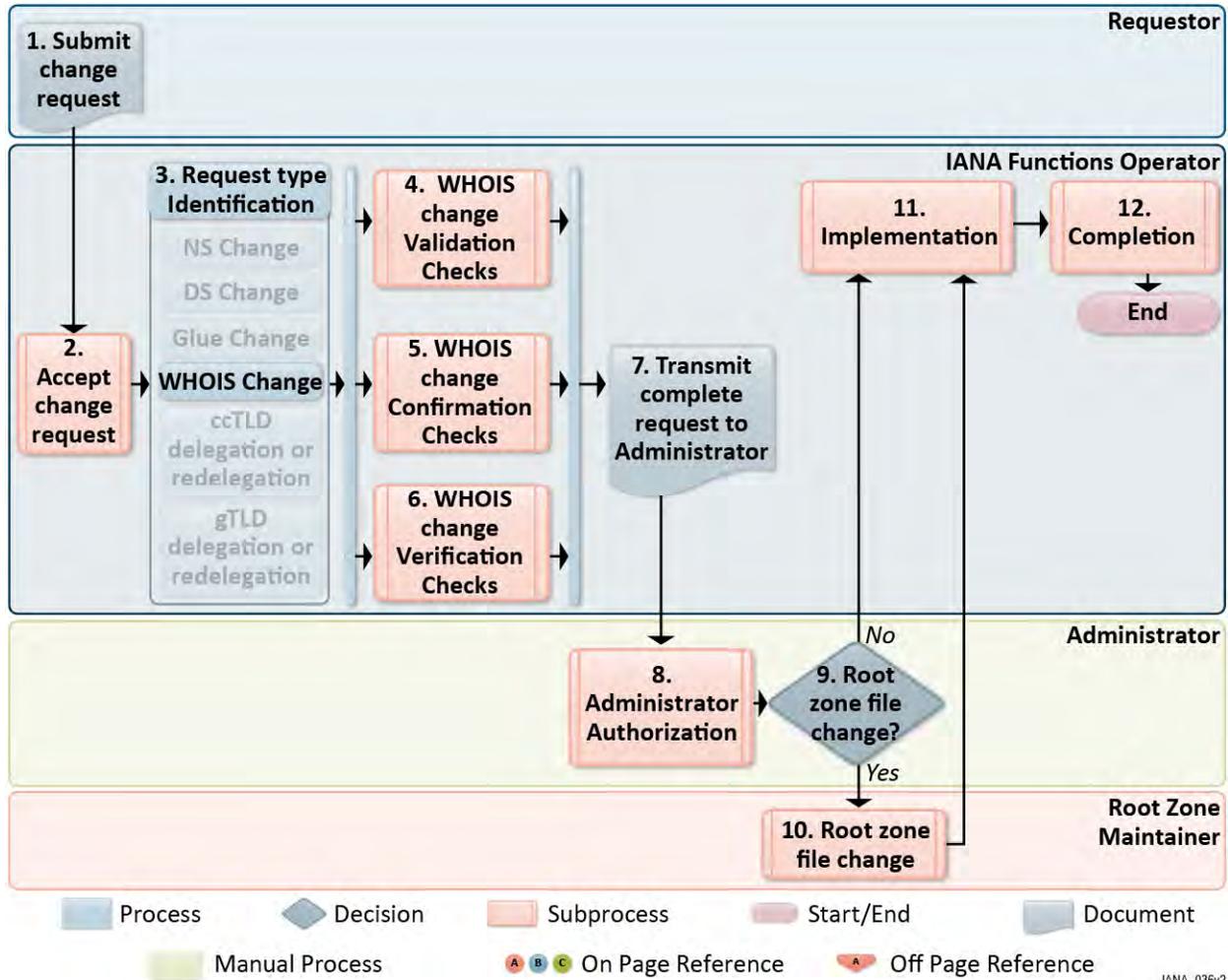


Figure 1.2-49. WHOIS Change Root Zone Management Process Flow

Figure 1.2-50. WHOIS Change Root Zone Management Step-by-Step Description

| 1           | SUBMIT CHANGE REQUEST   |
|-------------|---|
| Description | A change request will be created when a requestor lodges it with ICANN. These requests will typically be lodged through ICANN’s IANA Root Zone Management website. The software used for processing standard root zone change requests is an existing system that was developed by ICANN and coordinates operations for updating the root zone with the Administrator and Root Zone Maintainer. Should a requestor not to use this system, the request may be emailed to <a href="mailto:root-mgmt@iana.org">root-mgmt@iana.org</a> , submitted via facsimile or postal mail. |
| 2           | ACCEPT CHANGE REQUEST   |
| Description | A change request is accepted.   |
| 3           | REQUEST TYPE IDENTIFICATION   |
| Description | This type of change request is classified as relating to a WHOIS record change.   |
| 4           | WHOIS CHANGE VALIDATION CHECKS  |
| Description | Checks for request completeness are conducted against the supplied contact details. Contact details need to be provided in Latin script (i.e., English) for listing in the WHOIS, email addresses provided must be valid email addresses, and provided telephone and facsimile numbers must be  |

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|                    |   |
|--------------------|---|
|                    | valid, internationally callable telephone numbers (i.e., adhering to the E.164 standard ).  |
| <b>5</b>           | <b>WHOIS CHANGE CONFIRMATION CHECKS</b>   |
| <b>Description</b> | Standard confirmations, as described in our response to C.2.9.2, are conducted.   |
| <b>6</b>           | <b>WHOIS CHANGE VERIFICATION CHECKS</b>   |
| <b>Description</b> | Specific technical checks are not conducted for changes to WHOIS data that does not appear in the DNS Root Zone, i.e., for contact names and addresses. Changes are reviewed to ensure the WHOIS data changes do not reflect a substantive change of control of the top-level domain, under which it is classified as a redelegation as specified in C.2.9.2.c and C.2.9.2.d. Changes are reviewed for compliance with the requirement, noted in RFC 1591 and other documents that the Administrative Contact for country-code top-level domains is based in the country to which the domain is designated. |
| <b>7</b>           | <b>TRANSMIT REQUEST</b>   |
| <b>Description</b> | Changes to WHOIS records are transmitted to the Administrator for authorization.  |
| <b>8</b>           | <b>AUTHORIZATION</b>  |
| <b>Description</b> | WHOIS record changes are transmitted to the Administrator for authorization. Such changes cannot be enacted without explicit positive authorization from the Administrator.   |
| <b>9</b>           | <b>ROOT ZONE FILE CHANGE?</b>   |
| <b>Description</b> | If yes, go to Step 10.<br>If no, go to Step 11.   |
| <b>10</b>          | <b>CHANGE ROOT ZONE FILE</b>  |
| <b>Description</b> | WHOIS record changes are conducted by the Root Zone Maintainer following authorization by the Administrator.  |
| <b>11</b>          | <b>IMPLEMENTATION</b>   |
| <b>Description</b> | Changes to the WHOIS database are implemented by ICANN following positive authorization by the Administrator.   |
| <b>12</b>          | <b>COMPLETION</b>   |
| <b>Description</b> | Changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at ICANN's <i>whois.iana.org</i> . The requester is informed that the request is completed.  |

**1.2.9.2.b.2 Making publicly accessible a Root Zone WHOIS Database**

ICANN will make the contents of the WHOIS database publically available using standard WHOIS protocol. The WHOIS database, as the name suggested, will be presented as standard via this protocol. This protocol is used by almost all other domain registries as the standard way of transmitting the “WHOIS” information for a given domain or network object.

ICANN will operate this WHOIS server at *whois.iana.org* on port 43, in accordance with RFC 3912.

As an additional service, ICANN will also publish extracts of the WHOIS data on its website. This will provide an additional, customer friendly, interface to the data and also will provide for more interactivity that the WHOIS protocol does not allow for. For example, searches conducted on other attributes such as when the TLD’s data was last updated, the country to which the TLD is designated, or sorting the TLDs by language/script will be possible.

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1.2.9.2.b.3 Contents of the Root Zone WHOIS Database

ICANN will make available all of the elements available via its web-based interface, namely:

- “TLD Name,” i.e., the domain label listed in the DNS Root Zone, in both “A-label” and “U-label” form in the case of Internationalised Domain Names.
- IP addresses and corresponding names of all authoritative name servers for a given TLD (including those that may have been nominated as the “primary” and “secondary” nameservers).
- Complete contact details for the administrative contact of the TLD, including the name, address, email address, telephone, and fax numbers.
- Complete contact details for the technical contact for the TLD, including the name, address, email address, telephone, and fax numbers.
- Reports that have been compiled by IANA that pertain to the specific TLD.
- Dates relating to the record, including the creation date and last modified date.
- Other informational fields that are helpful to the community in learning about the function of the TLD, such as the website for the domain registry, the location of the WHOIS server for the given TLD, references to a list of registrars where domain registrations may be made (in the case of registries that use ICANN-accredited registrars).

ICANN will make publically available all the elements of the WHOIS Database via the WHOIS protocol, with the exception of “reports.” As the WHOIS protocol can only transmit plain text, it is not technically possible for reports (which are contained in more complex formats like HTML and PDF) through a WHOIS server. These reports will still be made available via ICANN’s IANA website. The website will provide ready access to these reports by providing links to the reports for a specific top-level domain from the web-based presentation of that TLD’s information. See **Figures 1.2-51 and 1.2-52.**

## IANA WHOIS Service

The IANA WHOIS Service is provided using the WHOIS protocol on port 43. This web gateway will query this server and return the results. Accepted query arguments are domain names, IP addresses and AS numbers.

```
% IANA WHOIS server
% for more information on IANA, visit http://www.iana.org
% This query returned 1 object

domain:      CN

organisation: Computer Network Information Center, Chinese Academy of Sciences
address:     No.4, South 4th Street
address:     Zhong Guan Cun
address:     Beijing 100080
address:     China

contact:     administrative
name:        Xiangyang Huang
organisation: Computer Network Information Center,
organisation: Chinese Academy of Sciences
address:     No.4, South 4th Street
address:     Zhong Guan Cun
address:     Beijing 100190
address:     China
phone:       +86 10 58812210
fax-no:      +86 10 58812666
e-mail:      huangxy@cnnic.cn

contact:     technical
name:        Wang Wei
organisation: China Internet Network Information Center
address:     No.4, South 4th Street
address:     Zhong Guan Cun
address:     Beijing 100190
address:     China
phone:       +86 10 58813101
fax-no:      +86 10 58812666
e-mail:      wangwei@cnnic.cn

nserver:     A.DNS.CN 2001:dc7:0:0:0:0:1 203.119.25.1
nserver:     B.DNS.CN 203.119.26.1
nserver:     C.DNS.CN 203.119.27.1
nserver:     D.DNS.CN 2001:dc7:1000:0:0:0:1 203.119.28.1
nserver:     E.DNS.CN 203.119.29.1
nserver:     NS.CERNET.NET 202.112.0.44

whois:       whois.cnnic.cn

status:      ACTIVE
remarks:     Registration information: http://www.cnnic.cn/

created:     1990-11-28
changed:     2012-04-11
source:      IANA
```

IANA\_083v2

Figure 1.2-51. A Sample WHOIS Output

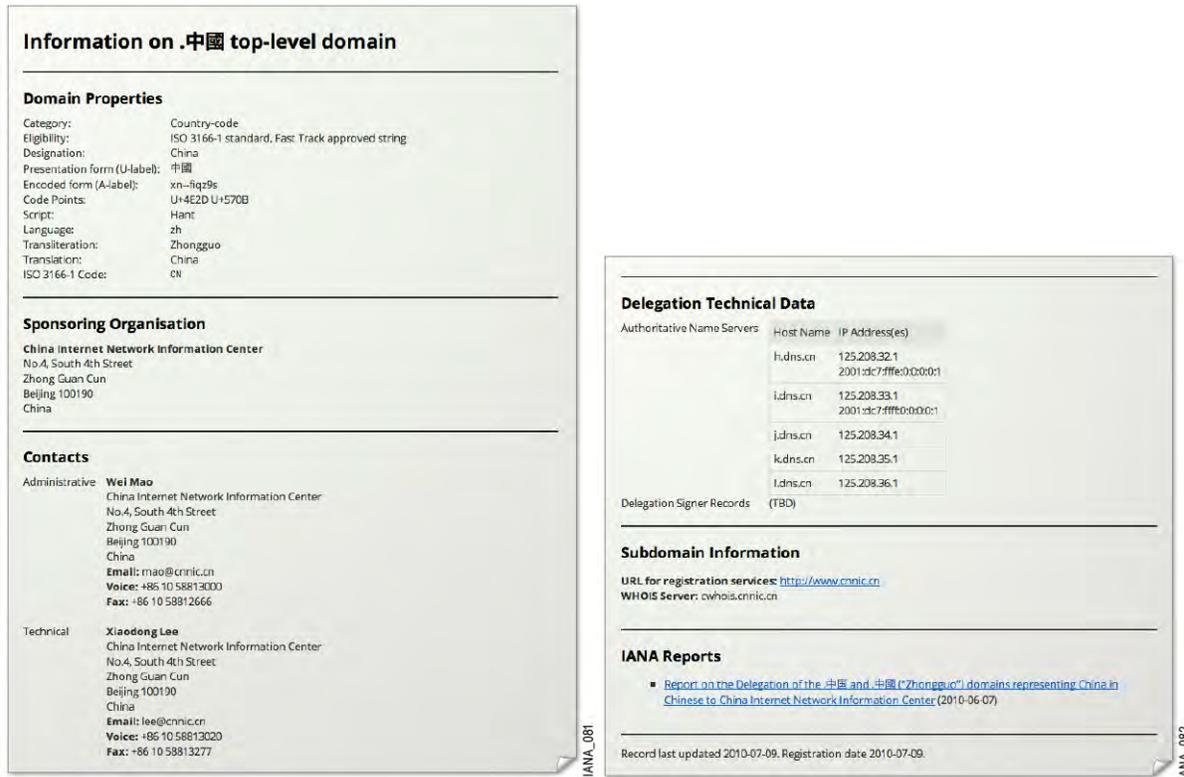


Figure 1.2-52. A Sample Web-based View

#### 1.2.9.2.b.4 Receiving and processing Root Zone WHOIS Change Requests

ICANN will receive and process Root Zone WHOIS Change Requests according to all the mechanisms described in its approach to 1.2.9.2. Specifically, the ordinary mechanisms for other Root Zone related changes — such as email, and lodgment via the web-based interface — will allow for the submission of Root Zone Change requests to ICANN.

#### 1.2.9.2.c Delegation and Redellegation of a Country Code Top-Level Domain (ccTLD)

In executing the IANA Functions, ICANN has always paid careful consideration in how it performs the delegation and redelegation of country-code top-level domains. ICANN recognizes it as an important focal point where the interests of different countries and various actors converge, and there is great sensitivity in how the task is conducted.

In ICANN’s execution of this responsibility, it has evolved the process from one that was ad-hoc and poorly documented, to one that is executed in a consistent manner while evolving to meet the growing requirements from the community of interested and affected parties. For example, the role of Governments was not defined in the operating procedures prior to 1997, but the process has been evolved to make the concerns of government a specific part of the evaluation process.

#### Understanding the Requirement

In performing the IANA Functions since 1998, ICANN has been responsible for conducting due diligence in relation to applications to either instantiate a new country-code top-level domain

(ccTLD) in the DNS Root Zone (known as a “delegation”), or enact any change that will facilitate a substantive change of operation of the domain (known as a “redelegation”).

ICANN’s approach to conducting this review will be to assess the various requirements of a regular root zone change request (i.e., that it meets the requirements identified in C.2.9.2.a and C.2.9.2.b), as well as assess how the request meets a number of public interest criteria that have been reflected in documents such as RFC 1591 and the GAC Principles and Guidelines for the Delegation and Administration of Country Code Top Level Domains. After analysis, a report on these items will be presented to the ICANN Board of Directors for consideration. After approval by the ICANN Board, such requests will be transmitted with a Delegation and Redelegation Report to the Administrator for authorization, and then will be implemented in the same fashion as routine requests under C.2.9.2.a and C.2.9.2.b. ICANN’s own structures, the Country Code Name Supporting Organization (ccNSO) and Governmental Advisory Committee (GAC), currently are developing improved guidance via a Policy Development Process (PDP) that will be fed into the future evolution of how the assessment criteria is applied. Once this guidance is ratified through the ICANN process by the ICANN Board, a proposed implementation plan will be developed.

### ***Technical Approach***

ICANN describes our technical approach to meeting this requirement in the following sections.

Figures 1.2-53 and 1.2-54 depict workflows. Figure 1.2-55 is a step-by-step description. A sample report is in Appendix B.

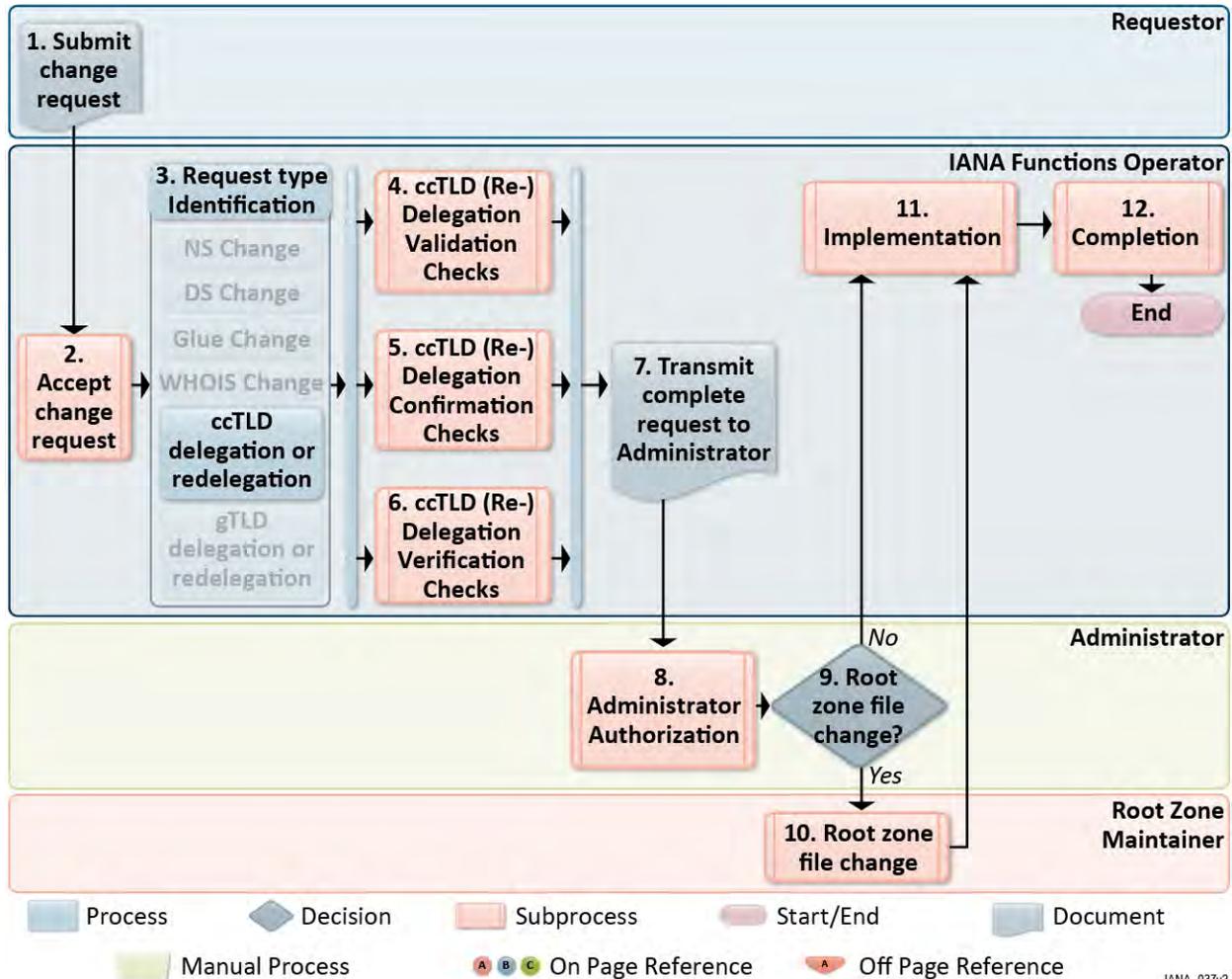


Figure 1.2-53. Process Workflow for Country-Code Top-Level Domain Delegation and Redlegation Requests

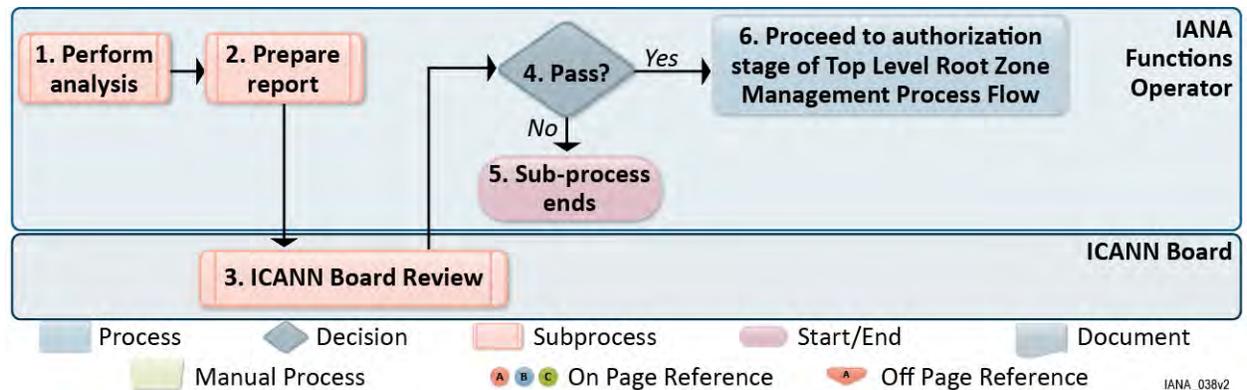


Figure 1.2-54. ccTLD Review Root Zone Management Sub-Process Flow

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**Figure 1.2-55. ccTLD Review Root Zone Management Sub-Process Step-by-Step Description**

|                      |  |
|----------------------|--|
| <b>1</b>             | <b>SUBMIT CHANGE REQUEST</b>   |
| <b>Description</b>   | A change request will be created when it is lodged with ICANN. These requests will typically be lodged through ICANN’s IANA Root Zone Management website. Should a TLD operator choose not to use this system, the request can be emailed to root-mgmt@iana.org, or submitted via facsimile or postal mail. In addition to describing the particulars of the proposed change, the requester is required to tender documentation that allows the request to be reviewed in line with the delegation/redelegation assessment criteria. |
| <b>2</b>             | <b>ACCEPT CHANGE REQUEST</b>   |
| <b>Description</b>   | A change request is accepted.  |
| <b>3</b>             | <b>REQUEST TYPE IDENTIFICATION</b>   |
| <b>Description</b>   | This type of change request is classified as relating to the delegation or redelegation of a country-code top-level domain.  |
| <b>4</b>             | <b>CCTLD DELEGATION/REDELEGATION VALIDATION CHECKS</b>   |
| <b>Description</b>   | As delegations and redelegations involve changes to the DNS Root Zone File, and the WHOIS Database, the standard checks that are performed in sections C.2.9.2.a and C.2.9.2.b are performed. In addition, the request is reviewed to ensure supporting documentation has been provided by the requester as required.  |
| <b>5</b>             | <b>CCTLD DELEGATION/REDELEGATION CONFIRMATION CHECKS</b>   |
| <b>Description</b>   | Standard confirmations, as described in our response to C.2.9.2, are conducted. The consent of the relevant directly involved actors is one of the assessment criteria involved in performing a ccTLD delegation or redelegation, and will be referenced in the related Delegation and Redelegation Report.  |
| <b>6</b>             | <b>CCTLD DELEGATION/REDELEGATION VERIFICATION CHECKS</b>   |
| <b>Description</b>   | As delegations and redelegations involve changes to the DNS Root Zone File and the WHOIS Database, the standard checks listed in sections C.2.9.2.a and C.2.9.2.b are performed.   |
| <b>SUB-PROCESS 1</b> | <b>PERFORM ANALYSIS</b>  |
| <b>Description</b>   | Significant additional processing of this type of request involving staff analyzing the request against a number of public interest criteria. This evaluation is described in detail below.  |
| <b>SUB-PROCESS 2</b> | <b>PREPARE CCTLD DELEGATION OR REDELEGATION REPORT</b>   |
| <b>Description</b>   | A distillation or Report of the relevant criteria is produced by ICANN. This Report and relevant supporting information is presented to ICANN’s Board of Directors for acceptance, and is later presented to the Administrator as part of the request for authorization.   |
| <b>SUB-PROCESS 3</b> | <b>ICANN BOARD REVIEW</b>  |
| <b>Description</b>   | Upon completion of the Delegation or Redelegation Report, it is transmitted to ICANN’s Board of Directors for review and consideration. The Board may request additional information before making a determination.  |
| <b>7</b>             | <b>TRANSMIT REQUEST</b>  |
| <b>Description</b>   | Changes are transmitted to the Administrator for authorization.  |
| <b>8</b>             | <b>AUTHORIZATION</b>   |
| <b>Description</b>   | Delegation and Redelegation requests for ccTLDs are transmitted to the Administrator for authorization, including the Delegation and Redelegation Report. Such changes cannot be enacted without explicit positive authorization from the Administrator.   |
| <b>9</b>             | <b>ROOT ZONE FILE CHANGE?</b>  |
| <b>Description</b>   | If yes, go to Step 10.   |

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|                    |   |
|--------------------|---|
|                    | If no, go to Step 11.   |
| <b>10</b>          | <b>CHANGE ROOT ZONE FILE</b>  |
| <b>Description</b> | Root Zone File changes are conducted by the Root Zone Maintainer following authorization by the Administrator.  |
| <b>11</b>          | <b>IMPLEMENTATION</b>   |
| <b>Description</b> | Changes in the Root Zone File are cross-verified by ICANN to ensure they were enacted correctly. Any potential implementation issues are identified, researched, and if necessary remedied through mutual communication between the parties.  |
| <b>12</b>          | <b>COMPLETION</b>   |
| <b>Description</b> | The Root Zone Maintainer propagates changes to the Root Zone File to the Authoritative Root Zone Servers and changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at ICANN's <i>whois.iana.org</i> . The Delegation and Redelegation Report for the request is posted on ICANN's IANA website. The requester is informed that the request is completed. |

1.2.9.2.c.1 Performing the review and analysis

ICANN will apply existing policy frameworks and precedents in processing requests relating to the delegation and redelegation of a ccTLD. The areas of assessment are as follows:

- (a) Whether the proposed request meets the standard root zone change criteria, described in 1.2.9.2.a and 1.2.9.2.b.
- (b) Whether the proposed string is eligible for delegation under the ICANN policies, which currently means it is either (i) a current alpha-2 code listed in the ISO 3166-1 standard; (ii) an approved "IDN Fast Track" string for a country or territory currently listed in the ISO 3166-1 standard; (iii) a reserved code under the definition in ICANN Board Resolution 00.74 (currently applicable to "EU"); or (iv) a grandfathered TLD that was considered an "exceptionally reserved" code at the time of its initial delegation, prior to the existence of ICANN (currently applicable to "UK" and "AC").
- (c) Whether the proposed contacts for the domain consent to their responsibilities.
- (d) Whether there is documented support from significantly interested parties in the local Internet community.
- (e) Whether the relevant government or public authority provides support or non-objection.
- (f) Whether the proposed operation is accountable under local law to the local Internet community.
- (g) Whether the request is compatible with any specific laws regarding how the ccTLD is operated in the country.
- (h) Whether the proposal provides for fair and equitable treatment of registrants.
- (i) Whether the registry and/or its representatives, notably the administrative contact, are based in the country.

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- (j) Whether the request is consented or contested by significantly interested parties, including the current operator (if any).
- (k) Whether there are any specific stability risks associated with the application that need to be considered.
- (l) Whether the proposed registry is properly configured and technically ready.
- (m) Whether an acceptable technical plan has been developed to support proper registry operation.
- (n) Whether an acceptable operational plan has been provided to support proper registry operation.
- (o) Whether there is an appropriate transition plan, which ensures existing registrations are not adversely impacted should the proposal be implemented.

#### 1.2.9.2.c.2 Application of existing policy frameworks and clarifications

The current procedures associated with delegation and redelegation of ccTLDs is the result of the evolution of the process over the past 30 years. While there has been no definitive policy document published that represents all factors that must be considered, a number of notable documents are considered references that influence how the process is conducted:

- RFC 1591, an articulation written by staff performing the IANA Functions of what the procedures and policy considerations were as of 1994
- ccTLD Memo #1, an articulation that governments had a role to play in determining how ccTLDs are operated, written by staff performing the IANA Function in 1997
- The Principles and Guidelines for Delegation and Administration of ccTLDs, a framework developed by governments for the relationship between governments, ccTLD managers and ICANN.

ICANN will continue to implement the procedures based on these key documents, and the significant amount of precedent that has been developed through the execution of many ccTLD delegations and redelegations. Furthermore, ICANN will continue to support efforts — such as the work being conducted by the Framework of Interpretation Working Group — to clarify the interpretation of these frameworks by the community to better inform the work of the IANA Functions.

#### 1.2.9.2.c.3 Consultation with interested and affected parties

The process which will be undertaken involves consulting with interested and affected parties. Specifically, the process always involves communication with the parties who are proposed to operate the ccTLD; and the parties who currently operate the ccTLD (if any). Applicants are required to document a number of factors involving interested and affected parties, including the disposition of the relevant local government, and significantly interested parties in the local Internet community.

ICANN notes that the Framework of Interpretation Working Group is actively evaluating exactly what kinds of consultation ICANN should conduct with interested and affected parties during

the evaluation of a delegation or redelegation request. Its guidance on the matter will inform future procedures in this area.

1.2.9.2.c.4 Consideration of relevant national frameworks and applicable laws

The process of evaluating requests asks the applicant to identify relevant regulations and laws that govern how a specific country-code top-level domain is operated. These will be an important part of the review of any specific request. It is expected that ccTLDs will be operated under the relevant laws of the country concerned. While there are a small number of ccTLDs operated outside of a specific country, these are rare and largely historical, relating to the fact that the specific country has had inadequate Internet infrastructure to sustain a reliable registry function. In such cases, the local Internet community is encouraged to consider locally-appropriate arrangements (such as data escrow) to ensure they retain ongoing availability of registry data.

In presenting the details of the evaluation of an individual request, the relevant laws and other regulations will be identified in the delegation and redelegation report in relation to how they impacted the assessment of the request.

1.2.9.2.c.5 Submission of recommendations via a Delegation and Redelegation Report

For each application to delegate a new ccTLD, or redelegate an existing country code top level domain, a Delegation and Redelegation Report will be developed for transmittal to the Administrator. This report will identify at a minimum the following elements:

- a) The applied-for string
- b) The identity of the organization seeking delegation of the string
- c) The identity of the proposed administrative and technical contacts for the string
- d) When the request to the IANA Functions Operator was lodged to obtain the delegation or redelegation
- e) The evaluation of relevant facts pertaining to the assessment criteria described in 1.2.9.2.c.1
- f) The date ICANN's Board of Directors reviewed and approved the application.

This proposed report format will demonstrate that the IANA Functions Operator followed the policy framework in processing the request.

The template for the delegation and redelegation report is as follows. ICANN anticipates that on the basis of ongoing work to refine policies, it will receive revised guidance in the future that will necessitate changes to this format. Any such changes will be agreed with NTIA in accordance with the appropriate change control process, in order to adhere to the requirement that ICANN implement policy guidance and clarifications, described in 1.2.9.2.c.2; and in consultation with parties described in 1.2.9.2.c.3.

See **Appendix B** for Sample Delegation Report.

#### **1.2.9.2.d Delegation and Redelegation of a Generic Top Level Domain (gTLD)**

Generic top-level domains (gTLDs) represent the other major category of top-level domains on which ICANN, in performance of the ICANN Functions, is required to provide recommendations for delegation and redelegation. In executing the IANA Functions, ICANN has successfully processed these requests for delegation of gTLDs in a manner consistent with ICANN policy during the two previous phases of creating new gTLDs — namely the “proof-of-concept round” in 2000 which resulted in seven new top-level domains such as .INFO, and .MUSEUM; and the “sponsored round” of 2004 which resulted in eight new top-level domains such as .MOBI and .TEL. In addition, ICANN has processed requests to redelegate generic top-level domains when the contracted party responsible for their operation has requested that a change of control be implemented. In each case, the action was reflected through a change to the Root Zone “WHOIS” Database.

##### ***Understanding the Requirement***

In contrast with the approach for ccTLDs described in 1.2.9.2.c, requestors for delegation of a gTLD must have completed an evaluation for the eligibility as a registry operator with ICANN prior to lodging a Root Zone Change Request. In the case of the current “New gTLD Program,” this means they must have successfully concluded the relevant evaluation process, and have executed a registry agreement with ICANN, before a Root Zone Change can be considered. The process guiding eligibility for root zone delegations resulting from the New gTLD Program is defined in ICANN’s New gTLD Applicant Guidebook. The processes for the 2000 and 2004 rounds are documented elsewhere on the ICANN website.

For a request to redelegate an existing gTLD, the role of the IANA Functions will be to process requests that relate to the change of control provisions in the gTLD registry agreement with ICANN.

In performing the IANA Functions, ICANN will verify that all delegation and redelegation requests under C.2.9.2.d are consistent with the approved processes and, with respect to delegation requests resulting from the New gTLD Program, will demonstrate how the process provided the opportunity for input from relevant stakeholders and was supportive of the global public interest. This review will be distilled into a Delegation and Redelegation Report which will be presented to the Administrator, and upon authorization, published on ICANN’s IANA website.

##### ***Technical Approach***

The process for handling requests to delegate and redelegate a generic top-level domain will be modeled on the top-level process flow described in section 1.2.9.2. While some of the individual elements will be the same as other types of changes — such as ensuring the correct configuration according to the technical requirements — it introduces specialized handling at steps of the process that will relate specifically to eligibility to delegate or redelegate the gTLD. See **Figures 1.2-56, 1.2-57, and 1.2-58**. A sample report is in **Appendix B**.

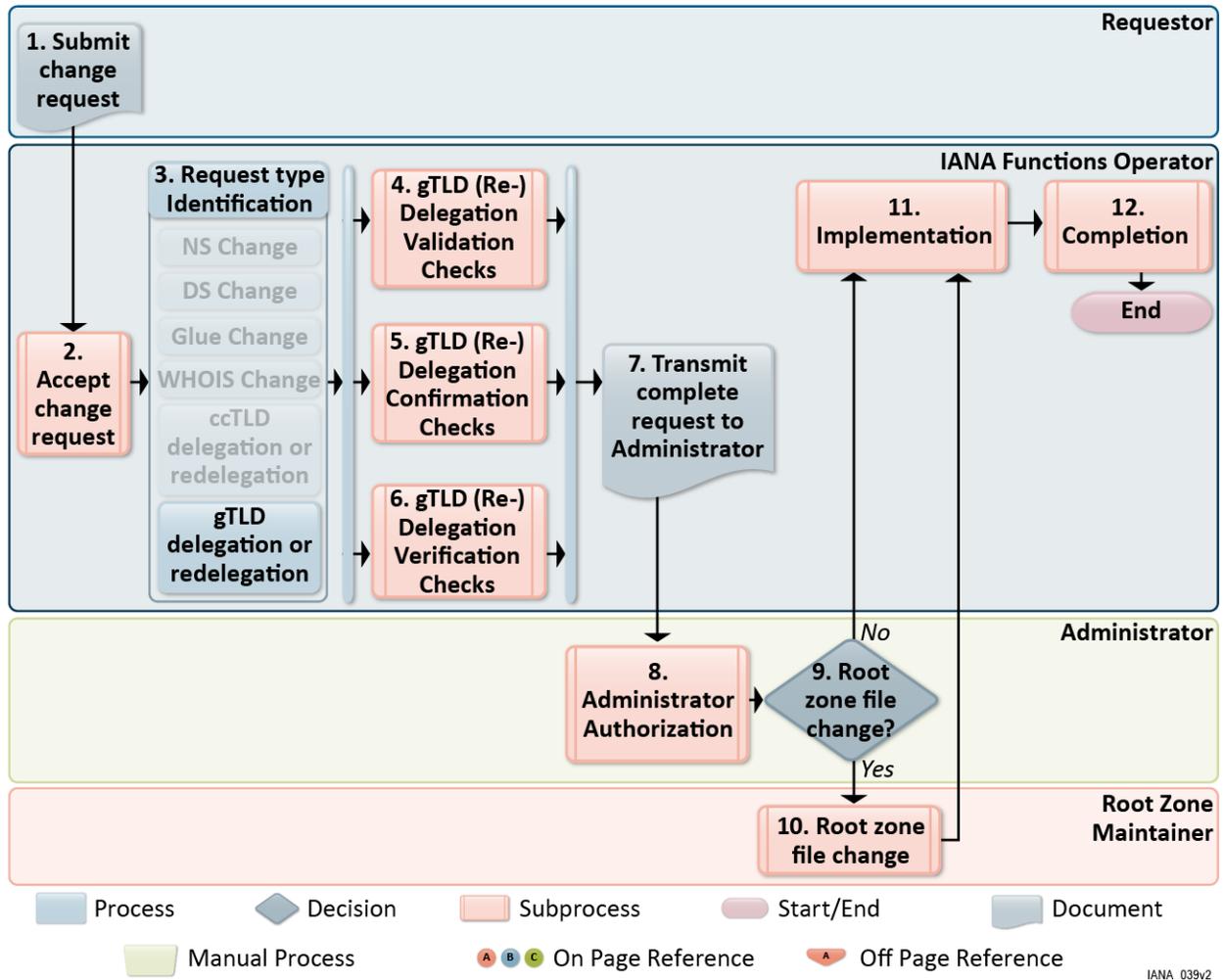


Figure 1.2-56. gTLD Delegation and Redelegation Root Zone Management Process Flow

Figure 1.2-57. gTLD Delegation and Redelegation Root Zone Management Step-by-Step Description

| 1           | SUBMIT CHANGE REQUEST   |
|-------------|---|
| Description | A change request will be created when it is lodged with ICANN. These requests will typically be lodged through ICANN’s IANA Root Zone Management website. Should a TLD operator choose not to use this system, the request can be emailed to root-mgmt@iana.org, or submitted via facsimile or postal mail. |
| 2           | ACCEPT CHANGE REQUEST   |
| Description | A change request is accepted.   |
| 3           | REQUEST TYPE IDENTIFICATION   |
| Description | This type of change request is classified as relating to the delegation or redelegation. See Figure 2.1-50.   |
| 4           | gTLD DELEGATION/REDELEGATION VALIDATION CHECKS  |
| Description | As delegations and redelegations involve changes to the DNS Root Zone File and the WHOIS Database, the standard checks in sections C.2.9.2.a and C.2.9.2.b are performed. These checks are designed to ensure the request is technically accurate and complete, and to                                      |

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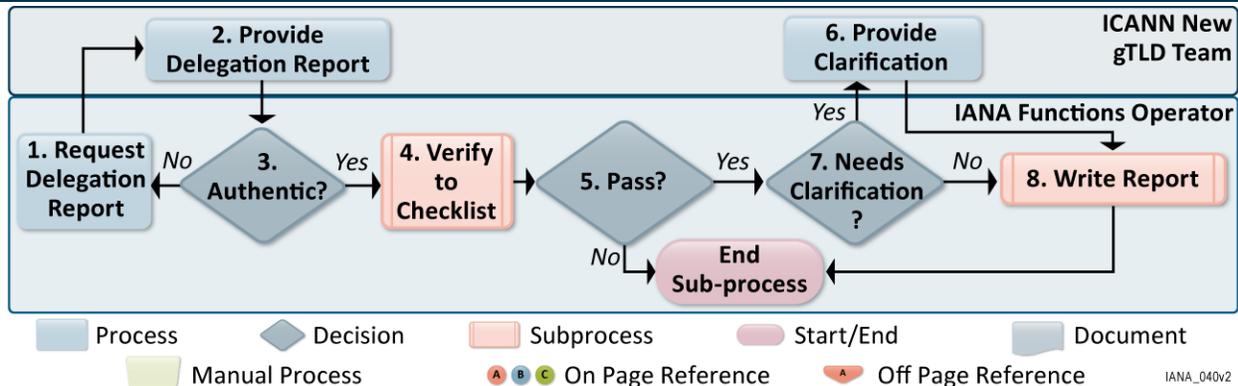
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|                      |   |
|----------------------|---|
|                      | ensure the ongoing stability of the DNS Root Zone.  |
| <b>5</b>             | <b>GTLD DELEGATION/REDELEGATION CONFIRMATION CHECKS</b>   |
| <b>Description</b>   | Standard confirmations, as described in our response to C.2.9.2, are conducted. These checks ensure the consent of the various parties involved in the process.   |
| <b>6</b>             | <b>GTLD DELEGATION/REDELEGATION VERIFICATION CHECKS</b>   |
| <b>Description</b>   | As delegations and redelegations involve changes to the DNS Root Zone File and the WHOIS Database, the standard checks that are performed in sections C.2.9.2.a and C.2.9.2.b are performed.  |
| <b>SUB-PROCESS 1</b> | <b>REQUEST GTLD DELEGATION REPORT</b>   |
| <b>Description</b>   | Staff compiles pertinent documentation to demonstrate that ICANN's process was followed for the particular gTLD.  |
| <b>SUB-PROCESS 4</b> | <b>VERIFY TO CHECKLIST</b>  |
| <b>Description</b>   | If there is any question about conformance with process, clarification is requested from relevant parties.  |
| <b>SUB-PROCESS 8</b> | <b>PREPARE REPORT</b>   |
| <b>Description</b>   | ICANN prepares a Report for the Administrator.  |
| <b>7</b>             | <b>TRANSMIT REQUEST</b>   |
| <b>Description</b>   | Changes are transmitted to the Administrator.   |
| <b>8</b>             | <b>AUTHORIZATION</b>  |
| <b>Description</b>   | Delegation and Redelegation requests for gTLDs are transmitted to the Administrator for authorization, including the gTLD Delegation and Redelegation Report. Such changes cannot be enacted without explicit positive authorization from the Administrator.  |
| <b>9</b>             | <b>ROOT ZONE FILE CHANGE?</b>   |
| <b>Description</b>   | If yes, go to Step 10.<br>If no, go to Step 11.   |
| <b>10</b>            | <b>ROOT ZONE FILE CHANGE</b>  |
| <b>Description</b>   | Root Zone File changes are implemented by the Root Zone Maintainer following authorization by the Administrator.  |
| <b>11</b>            | <b>IMPLEMENTATION</b>   |
| <b>Description</b>   | Changes in the Root Zone File are cross-verified by ICANN to ensure the changes were enacted correctly. Any potential implementation issues are identified, researched, and if necessary remedied through mutual communication between the parties.   |
| <b>12</b>            | <b>COMPLETION</b>   |
| <b>Description</b>   | The Root Zone Maintainer propagates changes to the Root Zone File to the Authoritative Root Zone Servers; and changes to the Root Zone WHOIS Database are propagated to the WHOIS server located at ICANN's whois.iana.org. The Delegation and Redelegation Report for the request is posted on ICANN's IANA website. The requester is informed by ICANN that the request is completed. |

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**Figure 1.2-58. Root Zone Management gTLD Review Sub Process Flow**

1.2.9.2.d.1 Verifying consistency with ICANN’s processes

With respect to TLDs, including new gTLDs, ICANN adopts processes and procedures in consultation with the stakeholders of ICANN in support of the global public interest. ICANN commits to implementing those processes and procedures, and ICANN will verify that it has followed them at all stages of the validation and delegation process.

ICANN recognizes there are several different classes of generic top-level domains, depending on the terms of their agreement, that will require processing under the provisions of Section C.2.9.2.d. These include the early gTLDs assigned before ICANN was established, those from the “proof of concept” round in 2000, those from the “sponsored TLD” round in 2004, and those anticipated from the New gTLD Program rounds. The different processes applicable to different gTLDs will be considered during the review of a delegation or redelegation request for a gTLD.

During the “Staff Review” phase, ICANN will be responsible for validating that the application meets the following criteria:

- The string is eligible for delegation, as it has passed the appropriate and approved evaluation process
- The entity applying for delegation is the same entity that matches the party with which ICANN has executed the relevant registry agreement
- ICANN has documentation demonstrating that its process has been followed

For the redelegation of existing gTLDs, the central role of verifying the request will be ensuring that the proposed new registry operator has been properly evaluated and that an appropriate contract amendment process was conducted and documented.

1.2.9.2.d.2 Documentation verifying ICANN followed its Process

ICANN will review all requests to either delegate a new gTLD or to redelegate an existing gTLD in order to ensure that the approved ICANN process that led to the Root Zone Change Request was followed. In doing so, ICANN will evaluate the request in the context of such factors as: (i) which new gTLD round the TLD is the product of; (ii) the current state of ICANN policy that governs gTLDs; and (iii) the contractual status of the specific gTLD registry operator. The review will also rely on the various outputs of the evaluation process that has been conducted prior to

the submission of the Root Zone Change Request, namely, the outcomes of review panels and other processes that have been conducted.

As the majority of requests for delegation or redelegation for gTLDs in the IANA Functions contract period covered by the RFP will be subject to the process established for the New gTLD Program, it is important to consider that a few elements of the New gTLD Program are still under development and subject to change, although none are expected to materially affect the delegation or redelegation process.

For redelegations, ICANN will ensure that the evaluation process that is currently in place was and will continue to be followed.

For the delegations under the New gTLD Program ICANN will compile documentation to demonstrate that ICANN complied with the evaluation process leading to contract execution, including the following:

- Whether a background check was required, and if so, that it was conducted and the application passed.
- The applicant and the application passed evaluation on required aspects (i.e., DNS, Registry, Geographic Names, Financial, Technical, and String Similarity).
- Evaluation panels had access to any application comments that were provided in a timely manner.
- Under the GAC Early Warning System, notice was provided to the GAC, and if the process was invoked, whether the applicant amended the application in response.
- If the Governmental Advisory Committee provided advice on a given application, ICANN followed its Bylaws in considering that advice.
- If objections were filed, the results were available to ICANN before the string was approved and the registry agreement was executed.
- ICANN approved the application.
- ICANN has executed a registry agreement with the party requesting delegation.
- Applicant has successfully concluded all of its pre-delegation testing.

For each request to delegate a new gTLD, or redelegate an existing gTLD, an ICANN “Delegation and Redelegation Report” will be developed for transmittal to the Administrator. Sample reports can be found in **Appendix B**. This report will identify at a minimum the following elements:

- The TLD string
- The identity of the organization seeking delegation or redelegation of the string
- The identity of the proposed administrative and technical contacts for the string
- When the delegation or redelegation request to ICANN was lodged

For delegation requests for gTLDs resulting from the New gTLD Program, there will be additional considerations that will be identified in the Report. ICANN will: (i) identify in the Report all relevant processes in place at the time of the proposed delegation; (ii) verify that those processes were followed; and (iii) provide documentation of how the processes were followed.

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ICANN will finalize the checklist and format of the Reports prior contracting with any registry operators resulting from the New gTLD Program. ICANN will review the format and details of the checklist with the NTIA COR before implementation.

#### 1.2.9.2.d.3 Submitting a Delegation and Redelegation Report

Upon completion of the review for sufficiency, the Delegation and Redelegation Report will be finalized for transmittal to the Administrator. See **Appendix B** for a sample Delegation Report for new gTLDs. Any such changes to the template will be agreed with NTIA in accordance with the appropriate change control process.

#### 1.2.9.2.e Root Zone Automation

Since 2006, ICANN has — in its role as the incumbent IANA Functions Operator — collaboratively worked with the TLD management community, Verisign as the Root Zone Maintainer, and NTIA as the Administrator, to develop and deploy an automated workflow management system for the Root Zone Management tasks. The system automated all practicable steps of the workflow while not impeding the ability of the parties to execute the established Root Management workflow. ICANN, NTIA, and Verisign completed the deployment in July 2011. Today, the majority of root zone change requests are lodged through this online system with the remainder manually entered into the system by ICANN staff. TLD managers that use the system have been overwhelming in their feedback that the new system has greatly improved their interactions with the Root Zone Management functions.

#### ***Understanding the Requirement***

ICANN recognizes the significant benefits of an automated root zone management system. It has championed the deployment of such a system and, since 2006, led the deployment of a system that meets the various criteria of C.2.9.2.e.

In developing the system, ICANN focused on a comprehensive set of requirements that delivered on the wishes of TLD managers, Verisign, and NTIA:

- **Speed of processing.** A key focus of the system was to improve processing times as much as possible, without compromising the integrity of the process or the system. Some of the key methods of improving processing time was the automated system sending emails and processing tasks that previously were manually performed by ICANN Staff. The ability of TLD managers to submit their requests and get immediate automatic feedback from the system regarding any errors on their submission also reduces the amount of time taken to process a request.
- **Elimination of unnecessary manual effort.** While some of the steps of the process require manual review, many of the process steps can be objectively performed in a fully automated fashion. ICANN sought to identify all such steps, and then implemented automated approaches for all of them.
- **Accuracy.** The system had to maintain accuracy of the process, and in fact enhances accuracy. The details of a request are only entered into the system once, by the requestor at the beginning of the process. This is an improvement on the previous process that involved re-entry of the data by ICANN, Verisign, and potentially others. By ensuring data is

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automatically transmitted between the parties, a class of potential errors associated with mis-transcription is eliminated.

- **Real-time status.** Historically, TLD managers who wish to enquire regarding the status of an ongoing request would need to consult with ICANN. ICANN felt functionality was critical to allow TLD managers to log in at any time to review the current status of a request, without needing to talk to staff.
- **Ease of use.** ICANN modeled user interactions with the system by creating an experience that was intuitive and did not require training to use. As such, TLD managers that utilize the system are presented with a straight-forward and easy-to-use interface that greatly reduces the amount of explanation required. The interface allows TLD managers to prepare requests effortlessly, review them before submission, and then track them after submission through to completion. The system also allows TLD managers to test their proposed changes and receive immediate feedback on any technical check issues prior to processing.
- **Integration.** As there are multiple parties involved in the Root Management workflow, the system focuses on cleanly integrating the ICANN components of the workflow, with those conducted by NTIA and Verisign. Notably, ICANN developed a system that uses the established EPP protocol to communicate with Verisign. In tandem with this, ICANN co-developed with Verisign an application for NTIA to use to interact with the system according to NTIA's specific requirements.
- **Security.** It is important to preserve and enhance the security associated with the Root Zone Management function so that trusted representatives of the TLD Manager are able to perform functions, but unauthorized actors are not. The system was designed to use established secure protocols such as SSL for security, and is extensible to allow for future security additions such as two-factor security. The software operational model is designed so that the public customer-facing component is isolated from the internal workflow management component, reducing security exposure of the core management systems.

### **Technical Approach**

The current system comprises multiple components that interconnect to form a cohesive functioning Root Zone Management system. These components are as follows:

- **"ICANN User Application"** — A user facing application, available on the web at <https://rzm.iana.org/>, which allows TLD managers to log in through a secure protected interface and manage their delegations in the root zone. Functionality of this application includes reviewing current details for their TLD in the Root Zone and ICANN's IANA WHOIS Database, lodging a Change Requests to these details through an interactive and intuitive process, testing any proposed technical changes for defects in accordance with the various technical requirements, monitoring the status of the request through the lifetime of the change, and reviewing a history of changes that have been conducted.
- **"ICANN Administrative Application"** — This interface is provided to ICANN staff to perform their roles in the administration of change requests. ICANN staff roles include lodging requests that have been tendered through means other than the ICANN User Application (e.g., those submitted via email, facsimile, telephonic, or postal means), reviewing and

processing in-process requests, checking system status, and obtaining relevant statistics for various reporting requirements.

- **“ICANN Backend Application”** — The internal application that manages the business logic and lifecycle of a Root Zone or Root Database change request. This system performs workflow management on any given change request. The application is also responsible for communication with the other systems (i.e., the User Application, Administrative Application, the NTIA Application, and the Verisign Application).
- **“ICANN Ticketing Application”** — The internal application is responsible for keeping a record of all email, facsimile, and postal communication ICANN receives and transmits in executing IANA Functions. Its functions include recording unique reference numbers for particular requests, storing a complete audit trail of each request, and facilitating management of the various queues of ICANN work. The ICANN Ticketing Application is integrated with the ICANN Administrative Application, such that the two systems are fully informed of Root Zone Change Requests. The Ticketing Application is used for other aspects of performance of the IANA Functions, such as protocol parameter assignments and number resource allocations.
- **“NTIA Application”** — A dedicated application, jointly developed and managed by ICANN and Verisign, to provide NTIA with a Dashboard of requests outstanding that require NTIA’s authorization in accordance with the workflow. NTIA staff has secure access to the system, and can use it to authorize change requests and perform other functions associated with their role on specific change requests. This system was developed in accordance with NTIA’s requested functionality, and will be updated in the future in accordance with new system requirements.
- **“Verisign Application”** — A dedicated workflow management system for accepting proposed root zone change requests from ICANN after they are validated, performing Verisign’s internal processing on the request, and updating the contents of the DNS Root Zone. The ICANN Backend Application communicates with the Verisign Application via a secure pathway using the Extensible Provisioning Protocol (EPP), with custom extensions to accommodate the unique root zone workflow.

In addition to the benefits conferred by the automation system, ICANN understands the importance of preserving all legacy methods of interaction with its customers. Customers will be able to submit requests via email, for example, using this traditional methodology. The system has been designed to provide full flexibility in this regard.

For changes to the Root Zone File, Verisign is required to implement the changes to the file itself. ICANN’s systems will monitor status of this process using the EPP protocol to provide timely updates to the requestor on the status of their request. ICANN’s systems will recognize what the resulting root zone will look like once a change is conducted. Once Verisign’s systems indicate via EPP that the root zone file change has been implemented, ICANN’s systems will automatically obtain the revised file and cross-verify its contents with what ICANN’s systems expect will be the product of the change. Only once ICANN’s and Verisign’s systems concur on the correct implementation of a change will it be deemed implemented and complete.

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**Technical Approach**

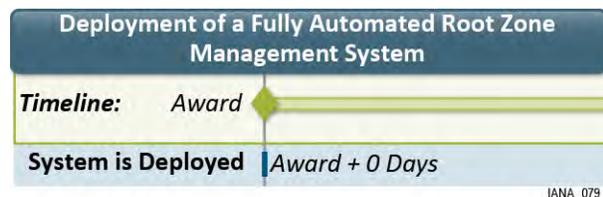
ICANN describes our technical approach to meeting this requirement below.

1.2.9.2.e.1 Deployment of a Fully Automated Root Zone Management System

ICANN will deploy a fully automated root zone management system on the first day.

ICANN will do this by continuing to operate the deployed automated root zone management system it co-developed with NTIA and Verisign and will deploy incremental updates to the system to accommodate changes to the management workflow and requirements. The system as deployed today meets and exceeds the requirements described in the RFP.

As this system is in place and functioning, it will therefore be available at the time of the award of the contract (see **Figure 1.2-59**). This is in full conformance with the requirement that the system be deployed within nine months. ICANN will continue to develop and refine the system in light of customer feedback, in adherence with the requirements of this contract.



**Figure 1.2-59. Root Zone Management System Deployed at Award of Contract**

1.2.9.2.e.2 Secure (Encrypted) System for Customer Communications

ICANN will continue to provide the secure and encrypted mechanisms that are in place in its current automation systems. All TLD operators have been, and will continue to be, provided with access to a secure web-based portal that is encrypted via the HTTPS protocol and requires authentication using a unique username and password for each TLD contact.

ICANN will also explore with the TLD operator community adding new methods for secure communication. In particular, ICANN will investigate with the various parties adding two-factor authentication mechanisms to the existing systems. This will be available for TLD managers on an opt-in basis and, once chosen, will require the execution of additional security protocols before a Root Zone Change Request can be made. Its introduction must be carefully considered in liaison with TLD managers to ensure the correct procedures are in place to make certain unauthorized requests are not executed, while not unduly impeding requests from parties that have lost or misplaced their security credentials.

1.2.9.2.e.3 Automated Provisioning Protocol for Customers

ICANN will continue to provide a secure, fully automated web-based interface for customers (i.e., TLD managers) to interact with the root zone management system to submit their requests. The interface was developed in conjunction with users to fully support the needs they had expressed to ICANN as the incumbent IANA Operator in previous years. ICANN will continue to solicit feedback from users of the system to inform future upgrades and feature improvements to improve the system’s utility and easy of use.

1.2.9.2.e.4 Online Database of Change Requests

ICANN will continue to provide secured access to the history of user-submitted requests to the Root Zone Management system. This system allows for credentialed users to login and review

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both pending and historical root zone change requests. The interface provides significant detail of the request, including exactly what was requested, and the numerous events that occurred in the lifecycle of a request. For example, when the request was lodged, when confirmations were performed and by whom, and when the request was implemented.

#### 1.2.9.2.e.4 Test System for Checking Technical Requirements

ICANN will continue to provide an interface for TLD managers to enter in their proposed technical changes to the root zone and obtain immediate feedback on what technical errors ICANN's systems detect with their configuration. This interface will allow TLD managers to immediately remedy any technical defect, or commence a dialogue with ICANN to better understand the issues that have been identified. **Figure 1.2-60** shows a sample of the diagnostic output a user will see.

ICANN recognizes the importance of ensuring technical errors to not enter the root zone, while continuing to provide a responsive and accountable service to TLD managers. In addition to providing this tool, ICANN openly will publish a detailed explanation of the technical checks it performs, which will allow for third parties to independently perform the checks without being dependent on ICANN's systems. In order to provide a safeguard for the root zone management process, Verisign has already independently re-implemented the checks published by ICANN in order to be satisfied of the correctness of proposed root zone changes.

ICANN will also consult with its user communities about further refinements to the interface for performing technical checks.

As the incumbent manager, ICANN has received feedback on how the interface for conducting checks could be improved and will implement revisions to reflect these areas of improvement.

#### 1.2.9.2.e.5 Internal Interface for Secure Communications

ICANN will continue to operate and provide a secure communications interface between NTIA, Verisign and ICANN. This interface is currently deployed and is composed of the multiple components described earlier.

```
Sample output (for valid input)
Domain: lb (parent: .)
Current authorities from parent (from zone file with serial 2012051400):
- arizona.edu (128.196.128.233)
- fork.sth.dnsnode.net (2a01:3f0:0:306::53, 77.72.229.254)
- ns1.dns.aq (203.119.56.132)
- rip.psg.com (147.28.0.39, 2001:418:1::39)
- zeina.aub.edu.lb (193.188.128.14)
Proposed authorities:
- fork.sth.dnsnode.net (2a01:3f0:0:306::53, 77.72.229.254)
- ns1.dns.aq (203.119.56.132)
- rip.psg.com (147.28.0.39, 2001:418:1::39)
- zeina.aub.edu.lb (193.188.128.14)
Changes between current and proposed:
- Remove authority arizona.edu
Siblings affected by glue changes:
(None.)
Issue summary:
(No issues, everything is OK.)

Sample output (for invalid input)
Domain: lb (parent: .)
Current authorities from parent (from zone file with serial 2012051400):
- arizona.edu (128.196.128.233)
- fork.sth.dnsnode.net (2a01:3f0:0:306::53, 77.72.229.254)
- ns1.dns.aq (203.119.56.132)
- rip.psg.com (147.28.0.39, 2001:418:1::39)
- zeina.aub.edu.lb (193.188.128.14)
Proposed authorities:
- arizona.edu (128.196.128.233)
- fork.sth.dnsnode.net (2a01:3f0:0:306::53, 77.72.229.254)
- ns1.dns.aq (203.119.56.132)
- rip.psg.com (147.28.0.39, 2001:418:1::39)
- zeina.aub.edu.lb (193.188.128.14)
Changes between current and proposed:
- Change glue for fork.sth.dnsnode.net (2a01:3f0:0:306::53, 77.72.229.254
  -> 2a01:3f0:0:306::53, 77.72.229.254)
Siblings affected by glue changes:
aq: fork.sth.dnsnode.net
gh: fork.sth.dnsnode.net
gn: fork.sth.dnsnode.net
lr: fork.sth.dnsnode.net
pn: fork.sth.dnsnode.net
ps: fork.sth.dnsnode.net
Issue summary:
1. fork.sth.dnsnode.net[77.72.229.254/udp] did not respond to queries,
nameservers must be reachable (2.3)
2. fork.sth.dnsnode.net[77.72.229.254/tcp] did not respond to queries,
nameservers must be reachable (2.3)
3. Glue IP addresses for fork.sth.dnsnode.net do not match between parent
(2a01:3f0:0:306::53, 77.72.229.254) and child (77.72.229.254,
2a01:3f0:0:306::53) (2.6)
4. Delegation NS set does not match NS set served by authorities
(fork.sth.dnsnode.net, ns1.dns.aq, rip.psg.com, zeina.aub.edu.lb) (2.7)
```

Figure 1.2-60. Sample Diagnostic Output

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Fundamentally, the internal interface between the parties involves transmissions using the standardized Extensible Provisioning Protocol (EPP) between the components of the system operated by ICANN and Verisign. The EPP protocol will avoid potential errors in communication between the parties by using a standardized way of expressing the nature of a requested change and its status. The EPP protocol also will provide inherent mechanisms for ensuring the integrity and authenticity of the communications.

ICANN, in partnership with Verisign, also provides the “NTIA Application,” which allows for authorized NTIA personnel to execute many of their functions by logging into the system. When logged into the system, the NTIA personnel will review requests that are pending for NTIA action and perform those actions. This application was developed through consultation with NTIA on what their requirements were.

In addition to the online interfaces, it is recognized that there has been, and will continue to be occasions where there needs to be formal communications that are beyond the scope of the automation system. Such scenarios include requests that have unique concerns such as questions to be resolved between the various parties. ICANN will secure its communications using PGP email signing using known keys that have been mutually shared between NTIA personnel, Verisign personnel and ICANN. These transmissions will be conducted using dedicated email addresses devoted to the purpose of secured communications relating to Root Zone Management between NTIA, Verisign and ICANN. This method will also be retained for use in the unlikely event a major outage of the automation system necessitates the use of more manual processing.

#### **1.2.9.2.f Root Domain Name System Security Extensions (DNSSEC) Key Management**

ICANN has been a leader in the deployment of DNSSEC in the Authoritative Root Zone, including an inclusive project that saw publication of a signed DNS Root Zone starting in July 2010 after a successful collaboration between ICANN, Verisign (acting as Root Zone Maintainer) and NTIA. This process involved implementing and having ICANN’s processes deemed compliant with the requirements specified by NTIA in 2009, which match those specified in Appendix 2 of the RFP. ICANN has been responsible for the management of the root zone Key Signing Key (KSK), including generation, publication and use for signing the Root Keyset since deployment, and ICANN commits to continue performing this role.

A major component of this deployment was developing processes and systems to support the secure generation and management of the KSK. The systems, procedures and policies used in the performance of this function have been subject to extensive external review and include the following:

- U.S. Department of Commerce NTIA
- U.S. Department of Commerce NIST
- Attendees at numerous technical conferences
- Subscribers of various technical e-mail lists
- All Root Server Operators
- The general public, via a dedicated website for the project

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Comments on the proposed implementation were solicited from these stakeholders before deployment, and all the concerns communicated to ICANN were addressed. The public part of the KSK key-pair (the root zone trust anchor) was published in accordance with documented procedures on July 15, 2010.

The generation and use of the KSK for signing the Root Keyset has occurred at regular, scheduled Key Ceremonies. All Key Ceremonies have been executed successfully. A Key Ceremony Script is in **Appendix A**. See **Figure 1.2-61**.

**Figure 1.2-61. Key Ceremonies**

| CEREMONY | LOCATION       | DATE       | ACTIONS  |
|----------|----------------|------------|--|
| 1        | Culpeper, VA   | 2010-06-16 | Initialization, enrollment, key generation, KSR processing (Q3/2010) |
| 2        | El Segundo, CA | 2010-07-12 | Initialization, enrollment, key delivery, KSR processing (Q4/2010)   |
| 3        | Culpeper, VA   | 2010-11-01 | KSR processing (Q1/2011)   |
| 4        | El Segundo, CA | 2011-02-07 | KSR processing (Q2/2011)   |
| 5        | Culpeper, VA   | 2011-05-11 | KSR processing (Q3/2011)   |
| 6        | El Segundo, CA | 2011-07-20 | KSR processing (Q4/2011)   |
| 7        | Culpeper, VA   | 2011-09-30 | KSR processing (Q1/2012)   |
| 8        | El Segundo, CA | 2012-02-02 | KSR processing (Q2/2012)   |

Ceremonies are for ongoing key management functions, including key generation and use of the KSK for signing the Root Keyset as appropriate.

ICANN’s execution of the systems, procedures and policies used in the performance of this function have been subject to extensive external review and include the following:

- Trusted Community Representatives (all ceremonies)
- External Witnesses (all ceremonies)
- Representatives of the Root Zone Maintainer (all ceremonies)
- The general public via archived video footage, logs, software, and annotated scripts (all ceremonies)
- The general public, via live Internet video stream (starting with ceremony three and including all subsequent ceremonies)
- PricewaterhouseCoopers, acting as SysTrust auditors

As part of this initiative, ICANN has established a comprehensive array of procedures for managing the KSK. Central to this is ICANN’s “DNSSEC Practice Statement for the Root Zone KSK Operator” (DPS). No concerns have been communicated to ICANN, NTIA or the Root Zone Maintainer relating to the accuracy with which published procedures have been followed by ICANN in Key Ceremonies.

ICANN’s processes have been reviewed for availability, processing integrity and security objectives, and this has resulted in ICANN being awarded SysTrust certification by

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PricewaterhouseCoopers. This certification means that ICANN's processes passed a rigorous independent review and provides assurance that ICANN's systems are reliable and the procedures have been followed accurately. ICANN has been certified with this certification for both its first and second year of operation.

### ***Understanding the Requirement***

ICANN understands that it is required to be responsible for the management of the root zone KSK, including generation, publication and use for signing the Root Keyset. ICANN further understands that the technical approach used to perform such management functions must comply with the document included as Appendix 2 in the Scope of Work. ICANN understands the requirement to work collaboratively with NTIA and the Root Zone Maintainer in the performance of this function.

### ***Technical Approach***

ICANN describes our technical approach to meeting this requirement in the following sections.

#### ***1.2.9.2.f.1 Management of the Root Zone Key Signing Key***

The key management methodology used in the Root Zone Key Signing Key operations will be based on standards such as ISO 21188 and ANSI X9.79: 2001. These represent best practices for key management in the industry and are adopted by financial institutions and commercial Certification Authorities (CAs). Every element of key management will be rigorously documented and executed in a highly secure and fully auditable manner. In addition, ICANN will demonstrate the transparency of the process by making ceremony footage, ceremony scripts and signing software publicly available after the ceremony.

##### ***1.2.9.2.f.1.1 Root Zone Key Signing Key Generation and Signing Operations***

Root Zone Key Signing Key (KSK) key pair generation and the Key Signing Request (KSR) signing will be performed by multiple pre-selected, trained and trusted individuals using Trustworthy Systems and processes that provide for the security and required cryptographic strength for the generated keys.

All KSK related operations are executed in pre-planned Key Ceremonies in accordance with the requirements of the Key Ceremony Reference Guide. The activities performed in each key ceremony are recorded, dated and signed by the Ceremony Administrator and the Internal Witness.

##### ***1.2.9.2.f.1.2 Publication of the Root Zone Key Signing Key***

ICANN will publish the public component of the Root Zone Key Signing Key using a number of secure methods, consistent with the published specification for trust anchor publication. The Trust Anchor set will be published in two formats:

1. In DS record format (i.e., as the hashes of corresponding individual DNSKEY resource record sets in DS format)
2. As Certificate Signing Requests (CSRs) in PKCS#10 format for further processing by Certificate Authorities and validation of proof of possession of each corresponding private key

Paper-copy representations of trust anchors will be distributed to Key Generation Ceremony participants when the corresponding keys are generated. These participants may attest to the generated key in any way they find suitable.

Trust anchor sets and shorthand representations thereof will be distributed among the Key Generation Ceremony participants. These participants may attest to the generated key in any way they find suitable.

In addition, the Trust Anchor set will be transported to the ICANN Trust Anchor signing infrastructure (separate from the DNSSEC signing infrastructure) in a secure manner to preclude substitution attacks. These signed Trust Anchor sets will then be published with these signatures along with the original Certificate Signing Request.

Signed key sets will be made available by HTTP. The various components will be published as:

- The Uniform Resource Locator (URL) for retrieving the CSR will be *<http://data.iana.org/root-anchors/<key-label>.csr>*.
- The URL for retrieving the ICANN signed Certificate will be *<http://data.iana.org/root-anchors/<key-label>.crt>*.
- The URL for retrieving the complete trust anchor set will be *<http://data.iana.org/root-anchors/root-anchors.xml>*.
- The URL for a detached S/MIME signature for the current trust anchor set will be *<http://data.iana.org/root-anchors/root-anchors.p7s>*.
- The URL for a detached OpenPGP signature for the current trust anchor set will be *<http://data.iana.org/root-anchors/root-anchors.asc>*.

The current root zone trust anchor set is published using the mechanisms described above. All future new trust anchor sets will be published using compatible mechanisms.

The methodology used by ICANN to publish the Key Signing Key is supported by vendors that have implemented DNSSEC in their software. The methodology used was reviewed by the community of stakeholders as part of the process to design to Root Zone Key Signing Key management process.

#### 1.2.9.2.f.2 Collaborating with NTIA and the Root Zone Maintainer

ICANN will continue to collaborate with NTIA and the Root Zone Maintainer as it has during the design and development of its RZ KSK system as advancements in technology, processes and procedures necessitate. For instance, ICANN will work closely with both parties to perform business continuity exercises to test the effectiveness of the business continuity plan and improve the resiliency of the overall Root Zone operation.

#### 1.2.9.2.f.3 Requirements outlined in Appendix 2

ICANN's technical approach to the specific requirements in Appendix 2 of the Scope of Work is enumerated below. ICANN will fully adhere to these requirements.

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#### 1.2.9.2.f.3.1 Overall Security Lifecycle

ICANN has developed and will continue to maintain an Information Security Management System (ISMS) based on ISO 27001 to manage the lifecycle of the overall security for the Root DNSSEC operations.

#### 1.2.9.2.f.3.2 Technical Security Controls required by a HIGH IMPACT system

As per the original baseline requirements, ICANN's RZ KSK root operations are designed to meet technical security controls described in NIST 800-53 for HIGH IMPACT systems. These Special Publications documents represent guidelines and recommendations to establishing a viable IT security policy.

#### 1.2.9.2.f.3.3 Security Authorization and Management Policy

ICANN will develop, implement and maintain a series of security policies that will cover all aspects of the Root Zone KSK operation. The primary purpose is to get management's commitment to reserve the resources required to maintain and enhance the secure operation. ICANN recognizes that proper policy settings are extremely significant in case an unplanned event, such as when incidents and disasters occur.

The security policies for the Root Zone KSK operations will include but are not limited to the following:

- Root Zone KSK Operator Function Information Security Policy
- Root Zone KSK Operator Function Audit and Accountability Policy
- Root Zone KSK Operator Function Key Management Policy
- Root Zone KSK Operator Function Physical Security Policy
- Root Zone KSK Operator Function Policy Management Authority Charter
- Root Zone KSK Operator Function Personnel Security Policy
- Root Zone KSK Operator Function Business Continuity Policy
- Root Zone KSK Operator Function Incident Response Policy
- Root Zone KSK Operator Function Document Management Policy

All documents are, and will be, managed in accordance with the Root Zone KSK Operator Document Management Policy, which is a document designed to ensure that the processes are properly documented and are compliant with the requirements. This policy encompasses all range of requirements including but not limited to regulatory, technical and consistency with the governing document. The aim of this policy is to make sure the actual operation reflects what is documented and vice versa, so either the process or the document can be corrected. All documents will be reviewed, updated and approved as appropriate to maintain its effectiveness and practicality.

#### 1.2.9.2.f.3.4 IT Access Control

The signer system that includes the ceremony laptop, HSM and the OS/DVD will be completely offline and will never be connected to the Internet. Because of this, it is virtually impossible to perform a cyber attack on the signer system; therefore, it is only protected by rigorous the physical countermeasures described in 1.2.9.2.f.3.7.

Communication of ZSK Key Signing Requests (KSR) from the Root Zone Maintainer/Zone Signing Key (ZSK) Operator will be done using a separate TLS client-side authenticated web server that resides on ICANN's production network. Transfer of a KSR from the web server to the signer system is performed manually using removable media.

ICANN's production network will be logically separated from other components. This separation will prevent network access except through defined application processes. ICANN will use firewalls to protect the production network from internal and external intrusion. These firewalls will limit the nature and source of network activities that may access production systems that are related to key signing activities.

#### *1.2.9.2.f.3.5 Security Training*

ICANN will develop and implement a training program that covers all personnel involved in the Root Zone KSK Operation. This training will take the form of an on-the-job training that will be provided to the personnel to perform their job responsibilities adequately, competently and satisfactorily. ICANN will periodically review and enhance its training programs upon necessity.

The training will be tailored for each role and responsibility listed below:

- Ceremony Administrator
- Internal Witness
- Safe Security Controller
- ICANN KSK Operations Security
- Crypto Officer
- Recovery Key Share Holder

The topics covered by the program will include but are not limited to the items below:

- Basic DNS/DNSSEC concepts
- Job responsibilities
- Use and operation of deployed hardware and software
- Key management concepts and principles
- Security and operational policies and procedures
- Incident and compromise reporting and handling procedures
- Disaster recovery and business continuity procedures

#### *1.2.9.2.f.3.6 Audit and Accountability Procedures*

ICANN will establish an Audit and Accountability policy in order to define the types of audit data and how it must be handled. ICANN recognizes that an Audit and Accountability policy is essential to assess the effectiveness of the implemented security controls and countermeasures. This content of the policy will include but are not limited to the following:

- Roles and responsibilities
- Scope of the audit
- Types of events recorded
- Frequency of processing log
- Retention period

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- Protection of audit log
- Audit log backup

The policy will be reviewed at least once a year to maintain its applicability and effectiveness.

The types of events that will be recorded for the annual security audit include but are not limited to the following:

- Specific auditing events related to KSK key lifecycle management
  - Key generation, backup, storage, recovery, archival, and destruction
  - Exporting of public key components
- KSK signing and management events
  - Key activation
  - Receipt and validation of public key material (i.e., from the ZSK holder)
  - Successful or unsuccessful signing requests
- Security related events
  - Assignment and revocation of credentials
  - Successful and unsuccessful system access attempts
  - Key and security system actions performed by trusted personnel
  - Security sensitive files or records read, written or deleted
  - Security profile changes
  - System crashes, hardware failures and other anomalies
  - Facility visitor entry and exit
  - System changes and maintenance / system updates
  - Incident response handling
- Log entries
  - Date and time of entry
  - Identity of the entity making the journal entry

If ICANN detects an event that has lead to, or could have lead to, a security compromise of any of the security mechanisms, an investigation will be performed to determine the nature of the incident. If the incident is suspected to have compromised the private component of an active KSK, the Emergency KSK rollover procedure will be executed.

Otherwise, the risk of the incident will be assessed and a remediation plan will be developed and executed. The plan will include additional countermeasures to prevent the event from repeating. The incident handling procedures include reporting of all events to ICANN KSK Operations Security (IKOS), which in turn reports to the Policy Management Authority (PMA). Depending on the severity of the event, it will be reported to the U.S. Department of Commerce (DoC) in a timeframe and format mutually agreed by the DoC, IANA Functions Operator and the Root Zone Maintainer.

An audit report will be created in collaboration with the COR and delivered monthly. Besides the periodical generation and submission of this report, ICANN will maintain the capability to generate ad-hoc audit reports. The audit reports will be made publicly available.

*1.2.9.2.f.3.7 Physical Protection Requirements*

All Root KSK operations will be conducted within a physically protected environment that is designed to deter, prevent and detect any unauthorized use, access, or disclosure of sensitive information and systems, whether covert or overt.

ICANN will maintain disaster recovery capabilities for its DNSSEC operations by maintaining more than one site with comparable physical security. The signer systems will be protected by a minimum of four tiers of physical security with access to lower tiers required before gaining access to higher tiers. Progressively more restrictive physical access controls to each tier are applied. Unauthorized access becomes increasingly difficult as one reaches higher tiers. Sensitive DNSSEC operational activity and any activity related to the lifecycle of the RZ KSK occur within these restrictive physical tiers.

Physical access will be automatically logged and video recorded. All tiers enforce individual access control through the use of two-factor authentication. Unescorted personnel, including visitors or employees without specific authorization, will not be allowed into such secured areas. The physical security system includes additional controls for tiers used for key management activity that serves to protect storage of Hardware Security Modules (HSMs) and keying material.

Areas used to create and store cryptographic material will enforce dual access control, each through the use of two-factor authentication. HSMs will be protected through the use of tamper-evident bags, locked safes, cabinets, and containers. Access to HSMs and keying material will be restricted in accordance with ICANN's segregation of duty requirements. The opening and closing of cabinets or containers in these tiers will be logged for auditing purposes.

ICANN's key management facilities are equipped with primary and backup power systems to ensure continuous, uninterrupted access to electric power and backup heating/ventilation/air conditioning systems to control temperature and relative humidity. ICANN will also take reasonable precautions to prevent and extinguish fires or other damaging exposure to flame or smoke. ICANN's fire prevention and protection measures have been designed to comply with local fire safety regulations.

*1.2.9.2.f.3.8 Maintenance and Update Procedures*

The signer system will be designed to require a minimum of maintenance. Updates critical to the security and operations of the signer system will be applied after formal testing and approval. The origin of all software and firmware will be securely authenticated by available means.

Critical hardware components of the signer system will be procured directly from the manufacturer and transported in tamper-evident bags to their destination in the secure facility. Any hardware will be decommissioned well before the specified life expectancy.

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ICANN's Software Development Life-Cycle (SDLC) procedures for the Root Zone KSK key generation and signer software will implement relevant parts of NIST SP 800-64 for incorporating security and trustworthiness into the SDLC.

In addition, all critical parts of the signers modules developed by ICANN will be subject to external code review. The code review is required to certify the following:

- There is a documented architectural design describing the security domains and functions maintained by the signer.
- The architectural design demonstrates that the signer system prevents bypass of the security-enforcing functionality.
- There is a functional specification completely representing the signer system and all operations associated with it.
- There is a modular design description and a one-to-one correspondence with the modular decomposition of the implementation.
- The implementation representation completely and accurately implements the security-enforcing functions.

The software developed by ICANN, when first loaded, will provide a method to verify that the software on the system originated from ICANN, has not been modified prior to installation and is the version intended for use.

#### *1.2.9.2.f.3.9 Requirements for Root Zone Key Signing Key (KSK) Holder*

ICANN acknowledges that the responsibility as the Root Zone KSK Holder is to generate and protect the private component of the RZ KSK, securely export or import any public key components, authenticate and validate the public portion of the RZ Zone Signing Key, and sign the Root Zone DNSKEY record.

The requirements that are specific to the Root Zone KSK holder are described in the following sections.

##### *1.2.9.2.f.3.9.1 Cryptographic Requirements*

The Root Zone KSK pair managed by ICANN is currently an RSA key pair with a modulus of 2048 bits. ICANN will generate all future Root Zone KSK pairs as RSA key pairs with a modulus not less than 2048 bits.

RSA Key Generation of the current Root Zone KSK met the requirements specified in FIPS 186-3, in particular the FIPS 186-3 requirements for exponent size and preliminary testing.

The current Root Zone KSK was generated and is stored on four FIPS 140-2 level 4 hardware cryptographic modules (HSM). All future Root Zone KSKs will be generated and stored on FIPS140-2 level 4 validated HSMs.

All signatures generated using the Root Zone KSK to date have used SHA-256. All future signatures generated using the current or future Root Zone KSKs will use SHA-256.

All cryptographic functions involving the private component of the Root Zone KSK to date have been performed within an HSM. All future such functions will be performed only within an HSM.

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The private component of the Root Zone KSK has only ever been exported from an HSM with appropriate controls (FIPS 140-2) for the purpose of key backup. The private component of the current Root Zone KSK or any future Root Zone KSK will only be exported from an HSM with the same controls for the same purpose.

*1.2.9.2.f.3.9.2 Multi-Party Control*

ICANN will implement technical and procedural mechanisms that require the participation of multiple trusted individuals to perform sensitive cryptographic operations.

The activation data needed to make use of the RZ KSK private key will be split onto separate smartcards controlled by Crypto Officers selected from members of the Internet community that are not part of root zone management operations. Specifically, organizationally separate parties, not affiliated with ICANN, the Root Zone Maintainer or the DoC. A threshold number of smartcards (m) out of the total number of smartcards created and distributed for a particular hardware security module (n) will be required to activate a RZ KSK private key stored on the module. The threshold number of cards required to sign an object out using the RZ KSK is three out of seven. A key possessed by the cardholder physically protects the smartcards.

The RZ KSK will be backed up on a total of four HSMs that are FIPS 140-2 level 4 overall compliant in two locations. In addition, encrypted copies of the RZ KSK private key will be backed up onto a smartcard. The key used to encrypt the private key will be backed up using a five-out-of-seven threshold scheme with smartcards distributed to trusted Recovery Key Share Holders that will be selected from members of the Internet community not already part of root zone management operations. Specifically, organizationally separate parties, not affiliated with ICANN, the Root Zone Maintainer or the DoC. The Recovery Key Share Holders will keep the cards in tamper-evident bags, stored in geographically dispersed location under their control.

Trusted personnel will be selected using the approach documented for selected Trusted Community Representatives (TCRs). ICANN's approach involves assessing TCRs based on the following attributes:

1. Persons of integrity, objectivity, and intelligence, with reputations for sound judgment and open minds
2. Persons with an understanding of the domain name system and the potential impact of DNSSEC operations on the global Internet community
3. Persons who can help ICANN represent the broadest cultural and geographic diversity consistent with meeting the other criteria set forth in this Section
4. Persons who, in the aggregate, have personal familiarity with the operation of gTLD and ccTLD registries and registrars; with IP address registries; with Internet technical standards and protocols; with policy-development procedures, legal traditions and the public interest; and with the broad range of business, individual, academic, and non-commercial users of the Internet
5. Persons who are willing to serve as volunteers without compensation other than the reimbursement of certain expenses
6. Persons who are able to work and communicate in written and spoken English

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ICANN KSK Operations Security (IKOS) will maintain a list of contact information for all personnel involved in the Root KSK operations.

#### *1.2.9.2.f.3.9.3 Root Zone KSK Rollover*

Root Zone KSK rollover will be executed as required or after five years of operation. Cryptographic algorithm rollover will also be taken into account when planning a RZ KSK rollover.

The RZ KSK rollover will be scheduled to facilitate automatic updates of the Trust Anchors in the DNS resolvers as described in RFC 5011 [RFC5011]. This rollover will allow seamless transition from the old Trust Anchor to the new Trust Anchor without jeopardizing the chain of trust. After a RZ KSK has been removed from the key set, it will be retained after its operational period until the next scheduled key ceremony, which is when the private component will be destroyed in a secure manner.

#### *1.2.9.2.f.3.9.4 Contingency Planning*

ICANN will develop, implement and maintain a Business Continuity Plan to mitigate the effects of natural, man-made or technological disasters or other disasters that requires temporary or permanent cessation of operations from any of ICANN's facilities. The Business Continuity Plan will be deployed to address the restoration of information systems services and key business functions. The plan will address the following:

- Roles and responsibilities in the event of a disaster
- Fallback procedures for restoring business-critical processes within acceptable times
- Resumption procedures for restoring normal operations
- The criteria for activating the plan

At a minimum, ICANN will maintain the capability to restore or recover essential operations within 48 hours following a disaster with support for the following functions:

- Public communications
- Ability to import KSRs and export SKRs
- Generation of KSK
- Processing and signing of KSR contents
- Publishing the Trust Anchor

The Business Continuity Plan will be designed to provide full recovery within one week at the alternative site following any incident or disaster occurring at any of ICANN's sites. When possible, operational status will be restored as soon as possible following any incident or disaster.

The plan will be periodically tested, validated and updated to be operational in the event of any incident or disaster. Results of such tests will be reviewed and kept for audit and planning purposes.

ICANN will also preserve the capability to generate and publish an interim Trust Anchor within 48 hours. This interim Trust Anchor will be used to facilitate an orderly RFC 5011 [RFC5011]

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automatic KSK rollover to a new and sanctioned Trust Anchor generated at an appropriately planned key ceremony held within a reasonable timeframe.

#### *1.2.9.2.f.3.9.5 DNS Record Generation*

The RZ ZSK public keys within the KSR will be self-signed by the Root Zone Maintainer with SHA-256 with RSA encryption to provide proof of possession of the corresponding private key.

The signature embedded in the KSR and the parameters will be automatically validated when the Root Zone Maintainer posts the KSR to a dedicated online system to exchange the KSR and SKR. Access to this system is protected with TLS client-side authentication. The signer software that will be used during the ceremony also performs the identical validation prior to processing the KSR during the key signing ceremony.

In addition, the RZ KSK Operator will verify the authenticity and integrity of the KSR by performing an out-of-band verification (verbally over the phone, by fax or by another appropriate and available method) of the hash of the KSR before processing the KSR in the key ceremony.

#### *1.2.9.2.f.3.9.6 Audit Generation and Review Procedures*

An independent accounting firm that is accredited by the American Institute of Certified Public Accountants (AICPA) will be selected to perform annual security compliance audits for the Root KSK operations. This accounting firm will not participate in the multi-person control for the RZ KSK or RZ KSK and will be a different accounting firm from the firm the Root Zone Maintainer has engaged.

ICANN will back up electronic archives of its audit information to an off-site secure facility after each key ceremony. Copies of paper-based records are also stored off-site and are maintained in the same manner. In addition, audit logs will be kept off-line and secured in accordance with an Audit Logging Procedure that describes the mechanisms to protect the log files from unauthorized viewing, modification, deletion, or other tampering.

ICANN will ensure that all audit data will be available for the CO and COR within a reasonable timeframe upon request. The audit data is considered confidential, thus it will be sent through encrypted channels.

#### *1.2.9.2.f.3.9.7 RZ KSK Public Key Distribution*

ICANN will publish the public component of the Root Zone Key Signing Key using a number of secure methods, consistent with the published specification for trust anchor publication. The Trust Anchor set will be published in two formats:

7. In DS record format (i.e., as the hashes of corresponding individual DNSKEY resource record sets in DS format)
8. As Certificate Signing Requests (CSRs) in PKCS#10 format for further processing by Certificate Authorities and validation of proof of possession of each corresponding private key

Paper-copy representations of trust anchors will be distributed to Key Generation Ceremony participants when the corresponding keys are generated. These participants may attest to the generated key in any way they find suitable.

Trust anchor sets and shorthand representations thereof will be distributed among the Key Generation Ceremony participants. These participants may attest to the generated key in any way they find suitable.

In addition, the Trust Anchor set will be transported to the ICANN Trust Anchor signing infrastructure (separate from the DNSSEC signing infrastructure) in a secure manner to preclude substitution attacks. These signed Trust Anchor sets will then be published with these signatures along with the original Certificate Signing Request.

Signed key sets will be made available by HTTP. The various components will be published as the following:

- The URL for retrieving the CSR will be `<http://data.iana.org/root-anchors/<key-label>.csr>`.
- The URL for retrieving the ICANN signed Certificate will be `<http://data.iana.org/root-anchors/<key-label>.crt>`.
- The URL for retrieving the complete trust anchor set will be `<http://data.iana.org/root-anchors/root-anchors.xml>`.
- The URL for a detached S/MIME signature for the current trust anchor set will be `<http://data.iana.org/root-anchors/root-anchors.p7s>`.
- The URL for a detached OpenPGP signature for the current trust anchor set will be `<http://data.iana.org/root-anchors/root-anchors.asc>`.

The current root zone trust anchor set is published using the mechanisms described above. All future new trust anchor sets will be published using compatible mechanisms.

The methodology used by ICANN to publish the KSK is supported by vendors that have implemented DNSSEC in their software. The methodology used was reviewed by the community of stakeholders as part of the process to design to Root Zone Key Signing Key management process.

#### *1.2.9.2.f.3.10 Requirements for Root Zone Zone Signing Key (RZ ZSK) Holder*

ICANN understands that this section of the requirements is intended for the Root Zone Maintainer; therefore, none of these requirements are applicable to the IANA Functions Operator.

ICANN will continue the technical dialogue with the Root Zone Maintainer as established during the deployment of DNSSEC in the root zone and will continue to verify that the systems and processes documented by the Root Zone Maintainer meet the corresponding requirements as set forth in Appendix 2 of the Scope of Work.

#### *1.2.9.2.f.3.11 Transition Planning*

ICANN will establish and implement a Root Zone KSK Operation Function Termination Plan that specifies the steps that ICANN will take if required to securely transition its duties and

responsibilities as the Root Zone KSK Operator to another entity in case ICANN is required to relinquish its role and associated duties as the Root Zone KSK Operator.

ICANN will be responsible for cooperatively transferring the Root Zone KSK Operator role and providing the successor with the relevant logs and audit information necessary to continue the operations.

The termination and transition process will be carefully planned and carried out in collaboration with the DoC.

Circumstances that may trigger a transition of duties may include, but are not limited to, a corporate merger, acquisition, bankruptcy, catastrophic disaster, or other situations that would require a permanent termination of the Root Zone KSK operations.

#### *1.2.9.2.f.3.12 Personnel Security Requirements*

ICANN has developed and will continue to maintain a Personnel Security Policy that sets the requirements for the background checks, segregation of duties matrix, training requirements, role assignment process, and other personnel security related provisions.

Tasks requiring separation of duties include, but are not limited to, the generation, use and destruction of Root Zone DNSSEC key material. Personnel holding a role in the multi-party access to the RZ KSK will not hold a role in the multi-party access to the RZ ZSK or vice versa. The auditor will not participate in the multi-person control for the RZ KSK or RZ ZSK. ICANN will assign a third-party auditor that is not selected by the Root Zone Maintainer.

All personnel that have access to the sensitive cryptographic materials are trained in accordance with section 1.2.9.2.f.3.5.

#### *1.2.9.2.f.3.13 Root Zone Maintainer Basic Requirements*

ICANN understands that this section of the requirements is intended for the Root Zone Maintainer; therefore, none of these requirements are applicable to the IANA Functions Operator.

ICANN will continue the technical dialogue with the Root Zone Maintainer that was established during the deployment of DNSSEC in the root zone and will continue to verify that the systems and processes documented by the Root Zone Maintainer meet the corresponding requirements as set forth in Appendix 2 of the Scope of Work.

#### *1.2.9.2.f.3.14 IANA Functions Operator Interface Basic Functionality*

Publishing a signed Delegation Signer (DS) resource record in the root zone forms the chain of trust in DNSSEC from the Root Zone to a Top Level Domain (TLD). The DS record is a cryptographic shorthand representation, or hash, of the TLD generated and controlled KSK.

The TLD manager will submit the DS record to request activation of DNSSEC. The identity and authority of the TLD manager will be verified using the appropriate method for that specific TLD. The DS resource record provided by the TLD Manager is authenticated and processed by the IANA Functions Operator and incorporated into a change request, requesting authorization from the DoC to make the change in the root zone.

The DS resource record must be valid and submitted in the DS RR Presentation Format as described in RFC 4034. As part of the vetting process, the DS record is checked against the TLDs DNSKEY keyset and signatures. After Root Zone Administrator authorization, the DS resource record is incorporated into the Root Zone and signed by the Zone Signing Key held by the Root Zone Maintainer.

The IANA Functions Operator will also take efforts to ensure the availability and integrity of the TLD by validating the DS resource record to the currently published Domain Name System Key (DNSKEY) Resource Record Signatures (RRSIGs). If a DS resource record does not validate, there will be an out-of-band process in order to confirm the authenticity and intention of publishing the DS resource record.

Only a TLD manager can request removal of DS resource records. DS removal requests will also be authenticated and processed by the IANA Functions Operator and authorized by the Root Zone Administrator like any other changes to the Root Zone file.

#### *1.2.9.2.f.3.15 Root Zone Management Requirements*

ICANN will manage the DS Resource Record sets for TLD delegations in accordance with its commitments described in section 1.2.9.2.a. The methodology used for management of DS records is part of the process for Root Zone File Change Request Management.

This process will provide for the ability and process to store TLD delegations and DS RRs, according to the process described in 1.2.9.2.a.1.2.

ICANN will support the ability to store multiple keys with different algorithms. The DNS Root Zone currently has a number of TLDs using both multiple keys and different algorithms that were submitted using the processes that ICANN will implement under this proposal.

ICANN will maintain a history of DS records used for a given TLD. This history is maintained in the system as described in 1.2.9.2.e.4.

ICANN will provide procedures and guidance to TLD managers regarding how to roll over TLD key materials, using the procedures described in 1.2.9.2.a.1.2. Further, ICANN will provide 24x7 operations as described in 1.2.9.2.2, which provides TLD managers with a 24x7 emergency contact number in order to reach the IANA Functions Operator to conduct an emergency key roll over.

ICANN will provide procedures and the ability for a TLD to be moved from signed to unsigned status, through the execution of a change in accordance with the process described in 1.2.9.2.a.1.2. To move to an unsigned status, the TLD manager makes a DS record change request to remove all DS records currently listed in the DNS Root Zone.

ICANN will provide procedures and the ability for the revocation of DNSSEC capability from the DNS Root Zone, which will return the root zone to its pre-signed state. To move to unsigned status, the process will include removing the DNSKEY records from the DNS Root Zone. ICANN recognizes this process involves coordination with the Root Zone Maintainer, which is responsible for the process of ceasing signing of the root zone itself.

**Experimental Use**

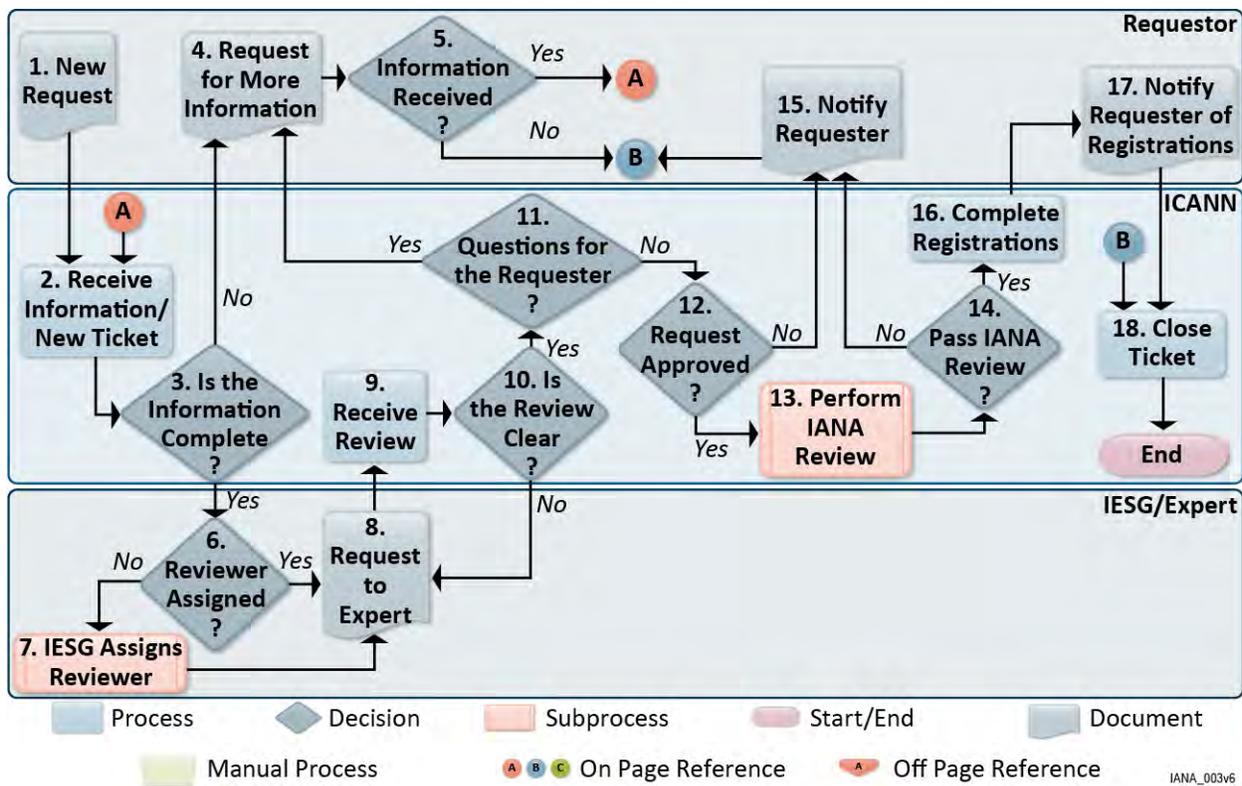
ICANN will register the Experimental Use policy in the appropriate registry in-line with instructions received from the IETF. These instructions will normally be in the form of a document approval and follow the process detailed in the Draft Approval process described previously.

**Expert Review (or Designated Expert)**

ICANN will register assignments made under the Expert Review policy in line with the Expert Review process described in the following section. Multicast addresses are assigned using the Expert Review process. Application templates for multicast IPv4 and IPv6 addresses are in **Appendix C**.

**Expert Review Process**

In the process shown in **Figures 1.2-75 and 1.2-76**, a potential registrant lodges a request via ICANN’s IANA website. ICANN reviews the request for completeness and addresses any deficiencies in that area with the registrant. Complete requests are forwarded to the IESG Designated Expert for review. Questions and comments are passed on to the requester and, based on the responses; the expert decides whether to approve the request. This is the process ICANN will follow for registries the IETF has designated with an Expert Review policy.



**Figure 1.2-75. Expert Review Process**

**CONFIDENTIAL & BUSINESS PROPRIETARY**

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

|   |  |  |  |   |               |   |
|---|--|--|--|---|---------------|---|
| <b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>   |  |  | 1. Contract ID Code                                      |   | Page of Pages |   |
|   |  |  |  |   | 1    2        |   |
| 2. AMENDMENT MODIFICATION NO.<br><p style="text-align: center;">0005</p>  |  | 3. EFFECTIVE DATE<br><p style="text-align: center;">OCT 21, 2016</p> |  | 4. REQUISITION/PURCHASE REQ. NO.<br><p style="text-align: center;">AA-NTI-WC-D-17-00190</p>   |               | 5. PROJECT NO. (if applicable)  |
| 6. ISSUED BY<br>U.S. DEPARTMENT OF COMMERCE<br>14TH & CONSTITUTION AVE. NW<br>ACQUISITION SERVICES RM 6520<br>WASHINGTON DC 20230<br>Sanestra Whiting 202-482-7847 swhiting@doc.gov   |  |  | 7. ADMINISTERED BY (If other than item 6)<br>See Block 6 |   |               | CODE  |
| 8. NAME AND ADDRESS OF CONTRACTOR (NO., Street, Country, State and ZIP Code)<br>INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS<br>12025 WATERFRONT DRIVE<br>SUITE 300<br>LOS ANGELES CA 90094<br><br>310-823-9358<br><br>CODE 00000428      FACILITY CODE  |  |  |  | (x)   |               | 9A. AMENDMENT OF SOLICITATION NO.   |
|   |  |  |  | (x)   |               | 9B. DATED (SEE ITEM 11)   |
|   |  |  |  | (x)   |               | 10A. MODIFICATION OF CONTRACT/ORDER NO.<br>SA1301-12-CN-0035                |
|   |  |  |  | (x)   |               | 10B. DATED (SEE ITEM 13)<br><p style="text-align: center;">OCT 01, 2012</p> |
| <b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>  |  |  |  |   |               |   |
| <input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.<br>Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:<br>(a) By completing items 8 and 15, and returning _____ copies of amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted;<br>or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE<br>RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OR OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF<br>YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each<br>telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified. |  |  |  |   |               |   |
| 12. ACCOUNTING AND APPROPRIATION DATA (If required)<br>See Schedule   |  |  |  |   |               | Modification Amount: \$0.00<br>Modification Obligated Amount: \$0.00        |
| <b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>  |  |  |  |   |               |   |
| Check One   | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.   |  |  |   |               |   |
|   | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |  |  |   |               |   |
|   | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:   |  |  |   |               |   |
| (x)   | D. OTHER (Specify type of modification and authority)<br>FAR: 4.804 Closeout Contract File   |  |  |   |               |   |
| E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.  |  |  |  |   |               |   |
| 14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible)  |  |  |  |   |               |   |
| The purpose of this modification is to Close Out contract SA1301-12-CN-0035 in its entirety.  |  |  |  |   |               |   |
| All other terms and agreements remain the same.<br>Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.   |  |  |  |   |               |   |
| 15A. NAME AND TITLE OF SIGNER (Type or print)   |  |  |  | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)  |               |   |
|   |  |  |  | Jon Gofus, Contracting Officer  |               |   |
| 15B. CONTRACTOR/OFFEROR   |  | 15C. DATE SIGNED   |  | 16B. UNITED STATES OF AMERICA   |               | 16C. DATE SIGNED  |
|   |  |  |  | <br>_____<br>(Signature of Contracting Officer) |               | OCT 21, 2016  |
| (Signature of person authorized to sign)  |  |  |  |   |               |   |

**SCHEDULE Continued**

| ITEM NO. | SUPPLIES/SERVICES   | QUANTITY | UNIT | UNIT PRICE \$ | AMOUNT \$ |
|----------|---|----------|------|---------------|-----------|
|          | <p>Contracting Officer: Jon Gofus</p> <p>Primary Contracting Officer Representative: Vernita D. Harris, 202-482-4686, vharris@NTIA.doc.gov</p> <p>Alternate Contracting Officer Representative(s): None</p> <p>Primary Technical Point of Contact: None</p> <p>Alternate Technical Point(s) of Contact: Vernita D. Harris, 202-482-4686, vharris@NTIA.doc.gov</p> |          |      |               |           |

[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)

Fri, Jan 24, 2014 at 5:23 PM

Once again, thank you Ms. Maureen Lewis, Ms. Suzanne Radell and Ms. Elizabeth Backon, for attending this morning's call with Moses and I. Ms. Maureen thank you for believing in us to hear and understand our need then setting up the meeting.

We have been working on this project for over 5 years and are passionate and excited that a small minority business like ours can be an inclusive part of innovation that may one day become a solution that helps to positively transform the Internet and World. The call was very informative and we certainly connected more dots that were previously scattered. We are returning to our advisers with what we took away from today's meeting. Below is a bulleted summation of our notes. If anything is not correct, please let us know.

Thank you.

- The NTIA does not have oversight over ICANN.
- The DOC only has oversight of management of IANA.
- ICANN has full control over its own management policy.

- No one on the phone nor NTIA/DOC can speak about Conflict of Interest.
- Better to work within the ICANN system by using established mechanisms like ATRT (Accountability and Transparency Review Team) or addressing the Board.
- ICANN Ombudsman is another vital route.
- ICANN follows US Competition and Contract Laws, not Federal Procurement Laws and Regs.
- DOC has no control over ICANN policy.
- Make concerns known to ICANN and work within the Community.
- NTIA can be of assistance for engagement with ICANN Community but has no oversight, authority, or standing over ICANN.

August 31, 2015

The Honorable  
Penny Pritzker  
United States Secretary of Commerce  
Herbert C. Hoover Building  
1401 Constitution Ave NW  
Washington District Of Columbia 20230  
United States

VIA EMAIL: TheSec@DOC.gov (August 31, 2015)

CERTIFIED MAIL

Re: Request for Assistance with Personnel Compliance in IANA Contract # SA1301-12-CN-0035  
Applicant # 1-1710-92415

Dear Madam Secretary:

In 2011, the founders of planet.ECO LLC ("planet.ECO") set out to create a US-based business which would make a positive impact in the fight to reverse climate change. We had full faith that the United States Government and its agencies would protect our small disadvantaged business as we were met with various obstructions. We implore you as Secretary of the Department of Commerce to come to our aid and take action in the spirit of your declared promise to promote transparency and to create conditions which foster economic growth and opportunity. We trust that you will intervene where your subordinates have not.

**Background:**

On 7/1/1997 President William Clinton directed the Secretary of Commerce to privatize management of the Domain Name System ("DNS") in a manner that would allow for development of robust competition in management of Domain Names and Addresses. The Directive, in part, states:

*"I direct the Secretary of Commerce to support efforts to make the governance of the domain name system private and competitive and to create a contractually based self-regulatory regime that deals with potential conflicts between domain name usage and trademark laws on a global basis"*

All of our concerns solely relate to non-adherence to the declaration made by President Clinton, violations of Federal Laws, Rules, Regulations and non-compliance with Federal Contract SA1301-12-CN-0035 ("IANA Contract").

DNS is an asset of the United States Government, managed under the US DoC/NTIA “IANA Contract” and, due to the fact that all of our concerns pertain to the “IANA Contract”, the only method for true legal and binding resolution must come from the maker of the “IANA Contract” and owner of DNS, the United States Government. We therefore seek your assistance in obtaining corrective actions from the only person authorized "to make or approve any changes in any of the requirements of this contract", Contracting Officer, as shown in “IANA Contract” Clause G.1, CAM 1301.6 / Oct.2014, CAR 1352.201-70, Contracting Officer's Authority.

As the United States Government has always maintained exclusive authority over DNS, it is important for you to know the following facts:

1. Since 4/20/2008, planet.ECO has established "Constructive Use" of .ECO, as a trademark.
2. Since 2009 all .ECO gTLD contenders have been and still are infringing upon the .ECO trademark, in usage of “.ECO” in their gTLD applications, media, websites and elsewhere.
3. Since 1/20/2012, planet.ECO has established "Constructive Use" of .ECO, in DNS.
4. On 5/30/2012 planet.ECO responded to an announcement, allowing participation in Delegations of new gTLD Registry Operators. This process required a substantial \$185,000 application fee, approved by the United States Government and was one of the prerequisites in applying to become the registry operator of the .ECO generic Top Level Domain (gTLD).
5. On 9/24/2012 after accepting our application fee, the United States Government in draft proposal modified contract, disallowing planet.ECO LLC the same right protection afforded to all other gTLD applicants.
6. Since 1/24/2014 we have been seeking correction to errors and continue seeking remedy from the United States Government.
7. On 3/7/2014 planet.ECO successfully fulfilled all of its contract requirements necessary for the .ECO String Delegation, consistent with the “IANA Contract” and “IANA Contract” Clause C.2.9.2d, *Delegation and Redefinition of a Top Level Domain (gTLD)*.

It is worth noting planet.ECO LLC is identified by “IANA Contract” Clause C.1.3, as an Interested Party. Despite this, we have been treated differently, never being informed by any authorized person as to what the status of our gTLD application is and, moreover failing to understand why we are being delayed completion of the .ECO gTLD String Delegation. We have exhausted all administrative remedies and are seeking your intervention.

### **Sought Assistance from US Government to Correct Errors:**

On 3/25/2015 we attempted to contact the Contracting Officer Ms. Kathleen McGrath, signer of the IANA Contract SA 1301-12-CN-0035 and via phone, spoke with Ms. Tammy Journet who informed us that Ms. McGrath was no longer the Contracting Officer and was replaced by Mr. Garry Harris.

Immediately after speaking with Ms. Journet, via phone, we contacted the Contracting Officer Mr. Garry Harris, responsible for the management of the "IANA Contract". We sought assistance, verification of our status and provided our applicant and "IANA Contract" information. He immediately suggested we contact the Government Prime Contractor.

On 4/4/2015 as promised via call to Mr. Harris approximately 2 weeks earlier, we sent correspondence by email followed by U.S Mail certified letter, seeking our status. We received the same initial response Mr. Harris provided on phone call of 3/25/15, suggesting that we contact the Government Prime Contractor.

On 4/17/2015 shortly thereafter, we requested assistance from the Director of Acquisitions, Mr. Barry Berkowitz via email followed by U.S Mail certified letter. We received receipt of delivery but have yet to hear back. All the while, the US Government has not informed us of taking any action to investigate or correct any error.

On 4/30/2015 we received an alarming email from the Government stating that a breach of security occurred, involving the release of confidential information within our Application 1-1710-92415. We received this information over a year after the illegal act had occurred. Confidential business information was hacked and we have no idea how much irreparable damage has been done and leak of Trade Secrets after relying on "IANA Contract" Clause C.1.4.

Although we submitted trade secrets and banking information, all with the understanding that our application responses would be secured, as stated in "IANA Contract" Clause H.10, we now fear and believe our stolen information is being used or will be used to harm our company.

**Our Request and/or Prayer:**

As aforementioned, we are a small disadvantaged business seeking assistance from the United States Government for the correction of errors, allowing our business to be treated differently and preventing us from the rightful Delegation in becoming the registry operators for .ECO, as intended in Clause I.9, FAR 52.203-13 Government Contractor Code of Business Ethics and Conduct.

We can no longer continue to speculate as to cause of delay and request that actions be taken by the United States Government to remove the delay of Delegation to planet.ECO LLC. Delay of Delegation has resulted in irreparable harm onto planet.ECO LLC. Further delay will worsen harm. As an Interested Party, we simply deserve more transparency pertaining to contract performance, per "IANA Contract" Clause C.2.6, which may help in providing clarity as to why we have been delayed, since 3/7/2014.

Sincerely,



Jean D. William  
CEO/Chairman  
planet.ECO LLC (SDB)

October 21, 2015

The Honorable  
Penny Pritzker  
United States Secretary of Commerce  
Herbert C. Hoover Building  
1401 Constitution Ave NW  
Washington District Of Columbia 20230  
United States

VIA EMAIL: TheSec@DOC.gov, PPritzker@doc.gov (October 21, 2015) | CERTIFIED MAIL

Re: Request for Response to letter sent August 31, 2015 - Assistance with Personnel Compliance in IANA Contract # SA1301-12-CN-0035 | Applicant # 1-1710-92415

Dear Madam Secretary,

We would like to know when we may expect to receive an update to our request made to you on August 31, 2015 (please see attached). We have nearly exhausted all legal efforts in hopes of mitigating the disturbing circumstances, causing planet.ECO LLC, a Small Disadvantaged Business, to submit charges of Conflict of Interest and Trademark Infringement to the Government. Inherent in these charges are violations of Federal Laws, Rules, Regulations and non-compliance with Federal Contract SA1301-12-CN-0035 ("IANA Contract"). There are also issues of non-compliance with the July 1, 1997 directive of President William J. Clinton, 'A Framework For Global Electronic Commerce', where the President states the following directive in paragraph 5 –

*"I direct the Secretary of Commerce to support efforts to make the governance of the domain name system private and **competitive** and to create a contractually based self-regulatory regime that **deals with potential conflicts between domain name usage and trademark laws** on a global basis."*

Our initial charges of Conflict of Interest and Trademark Infringement have never deviated, since brought to the attention of your NTIA/DOC staff on January 24, 2014, yet we have never been told that our charges are wrong nor have been properly addressed by anyone in the Department of Commerce.

We further requested a status update from you and your Contracting Officers Ms. Tammy L. Journet and, Mr. Garry Harris and we have not heard back from any party.

All of this is of course, after paying \$185,000 to the Government and being compliant with all rules and regulation necessary to passing the gTLD evaluation, per the Contract. Our company should have been allowed the approval for delegation, received delegation and in business like the other contenders that have been allowed to unlawfully compete against us. Instead, we have been treated differently and continue to be treated differently and placed at a severe disadvantage against our competitors.

All the while, we continue to await receipt of status from the Government and remain subjected to an increasingly higher barrier of entry.

We seek your assistance and await a response.

Sincerely,



Jean D. William  
CEO/Chairman  
planet.ECO LLC (SDB)



**UNITED STATES DEPARTMENT OF COMMERCE**  
**The Assistant Secretary for Communications**  
**and Information**  
Washington, D.C. 20230

NOV 4 2015

Jean D. William  
Chief Executive Officer  
Planet.ECO  
45 West North Street  
Stamford, CT 06902

Dear Mr. William:

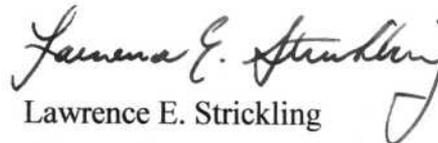
Secretary Pritzker requested that I respond on her behalf to your letter dated October 21, 2015 regarding a dispute over the .eco domain.

In your letter, you assert that the Department of Commerce has been unresponsive to Planet.ECO's conflict of interest and trademark infringement claims relating to the .eco domain. You further assert that, as a result, the National Telecommunications and Information Administration (NTIA) is not in compliance with its Internet Assigned Numbers Authority (IANA) functions contract.

None of your claims has merit. In fact, NTIA's programmatic staff experts have responded to Planet.ECO complaints on several occasions. For example, during a conference call on January 24, 2014, NTIA staff explained that the Internet Corporation for Assigned Names and Numbers (ICANN), not NITA, manages the new generic top-level domain (gTLD) program. None of the issues raised relate to NTIA's IANA functions contract, and the Department of Commerce has no jurisdiction over your claims. Given that we have no direct oversight responsibility over ICANN's new gTLD program, I suggest, as my staff has previously advised you, that Planet.ECO contact ICANN's Ombudsman, who is responsible for investigating complaints about ICANN.

If you have additional questions, please contact Fiona Alexander, NTIA's Associate Administrator and head of NTIA's Office of International Affairs, at (202) 482-1866.

Sincerely,

  
Lawrence E. Strickling

August 17, 2016

Contracting Officer  
U.S. Department of Commerce  
Commerce Acquisition Solutions Division  
Office of Acquisition Management  
1401 Constitution Avenue, NW, Room 6521  
Washington, DC 20230  
VIA EMAIL: aajayi@doc.gov

CERTIFIED MAIL

Re: An Unsolicited Proposal  
Contract # SA1301-12-CN-0035 / Applicant # 1-1710-92415

Dear Contracting Officer,

1. Serious and willful violations have taken place with regard to IANA Functions Contract SA1301-12-CN-0035 Clause G.1, which states in part, ***“The Contracting Officer is the only person authorized to make or approve any changes in any of the requirements of this contract, and, notwithstanding any provisions contained elsewhere in this contract, the said authority remains solely in the Contracting Officer. In the event the contractor makes any changes at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract terms and conditions, including price”***. On August 3, 2016 and August 10, 2016 your no cost, non-profit Contractor ICANN (“Contractor”) sent emails directly to .ECO® and furthermore, the emails contained fraudulent statements. (See Exhibit 1 - Email1 - August 3, 2016 and Exhibit 2 - Email2 - August 10, 2016)
2. The wording of the August 3, 2016 email from Contractor appears to be in violation of Contract Clause I.9 - Contractor Code of Business Ethics and Conduct (FAR 52.203-13), as this email states it is in response to an inquiry/request from planet.ECO. No inquiry was made from planet.ECO LLC (“.ECO®”) to Contractor. We are totally unaware of any actions taken by myself or any other authorized member of my board or company in attempting to make contact with any of Contractor or its members. As an Interested and affected party to the IANA Functions Contract, and in accordance with Contract Clause C.1.3, .ECO® would not make such an inquiry of Contractor.

3. For .ECO<sup>®</sup> to respond to Contractor's emails would only create confusion and thus, we will only respond to the directives issued by the Contracting Officer in the execution of a Federal Requirement, all in accordance with Contract Clauses; H.11 Compliance with Laws (CAR 1352.209-73), I.64 - Compliance with the Laws (48 CFR 1352.209-73).
4. In addition to purporting to be a response to an inquiry from .ECO<sup>®</sup>, the August 3, 2016 email from Contractor clearly indicates the Contracting Officer, per Contract Clause G.1, Contracting Officer's Authority (CAR 1352.201-70), has entered into Registry Agreement with Big Room Inc., a Canadian Corporation. This would be in violation of Contract Clause I.9 - Contractor Code of Business Ethics and Conduct (FAR 52.203-13), as Big Room Inc. has been/is operating unlawfully and in bad faith to become the .ECO Registry Operator.
5. Furthermore the August 3, 2016 email from Contractor indicates .ECO<sup>®</sup> Will Not Proceed and may request a refund for the remaining \$37,000 of the \$185,000 provided. Although .ECO<sup>®</sup> also provided a copy of its ".ECO<sup>®</sup>" USPTO trademark assignment (See Exhibit 3 - .ECO USPTO Trademark assignment) on May 30, 2012 in exchange for a fair and transparent evaluation process, such an evaluation has never occurred.
6. The August 3, 2016 email from Contractor is another source of harm to Protester ECO<sup>®</sup>, and thus .ECO<sup>®</sup> finds it necessary to once again reiterate facts it provided to you earlier which outline the seriousness of the illegal matters that have and continue bringing harm unto .ECO<sup>®</sup>, a U.S. based small disadvantaged entrepreneurial business ("SDB") that has been taken advantage of while complying with all contractual requirements and competing against former no cost, non-profit Contractor ICANN's Managerial Personnel for the root zone delegation of .ECO (C.2.9.2d).
7. Adherence to Contract Clause I.9 - Contractor Code of Business Ethics and Conduct (FAR 52.203-13) and examination of Big Room Inc's previous actions would prohibit the Contracting Officer from entering into a Registry Agreement with Big Room Inc.
8. In 2007, Big Room Inc. was co-founded by one of Contractor's Managerial Personnel. Nearing the tail end of Big Room Inc's Ploy the company's intention to willfully encroach and Infringe upon .ECO<sup>®</sup>'s trademark rights are ever visible as the company has set forth, since 2007 to win .ECO, and has not deviated seeking delegation, in the hopes of finally receiving a favorable decision from you in order to legitimize and validate its unlawful Registry Agreement and bad-faith activities.
9. In January 2007, while co-founder Jacob Malthouse worked as an executive for Contractor and 5 years prior to the public offering of the gTLD Program, Malthouse's colleague Trevor

10. Bowden decided to purchase .dot-ECO.org and .dot-ECO.Info (“dotECO” Domains) which both co-founders later only used to campaign Big Room’s so-called .ECO Community (created in or around 2009). For this reason alone, the .ECO Community applicant, Big Room Inc. appears to have an unfair and an unlawful advantage due to either inside information, front-running, gaming of the New gTLD Program and/or Cyber Squatting. Also in 2007, Bowden and Malthouse developed Big Room Inc's Business Plan while Malthouse worked for Contractor. Malthouse resigned from ICANN in September 2007 to co-found Big Room Inc. on November 14, 2007.
11. In 2008 Big Room Inc. filed 2 U.S. Trademark applications and a third in 2009 attempting to obtain trademark rights to .ECO trademarks. On December 7, 2009 the USPTO wrote to Big Room Inc. informing it of its determination and position. The USPTO in part writes, **“Registration of the applied-for mark is refused because of a likelihood of confusion with the mark in U.S. Registration No. 3716170. Trademark Act Section 2(d), 15 U.S.C. §1052(d); see TMEP §§1207.01 et seq.”** (See Exhibit 4 - USPTO’s Determination and <https://tsdr.uspto.gov/documentviewer?caseId=sn77523015&docId=OOA20091207101341#docIndex=9&page=1> Big Room Inc. continued to willfully encroach and infringe upon .ECO® and on December 2011 Big Room seeks a worldwide trademark license from .ECO® sending an email offer to .ECO® for, **“the sum of US\$15,000 in exchange for a worldwide license to use the Mark in connection with our application for the TLD and our operation of the TLD, including all uses of the Mark in the ordinary course of operating and promoting the TLD. We would propose to pay you US\$5,000 at the time of license signing, and US\$10,000 upon execution of a registry agreement with ICANN.”** The offer was not accepted and Big Room Inc. continued to willfully infringed upon our ECO® trademark and began filing numerous frivolous trademark petitions to dislodge .ECO® trademark rights so it could obtain unfair priority to use towards delegation. This conduct is in violation of Contract Clause I.9 - FAR 52.203-13 Contractor Code of Business Ethics and Conduct.
12. Big Room Inc. has failed 6 times in the USPTO in its attempts to obtain .ECO® Priority via applying for U.S. .ECO trademark rights and subjecting .ECO® to frivolous trademark cancellation petitions in the Trademark Trial and Appeals Board. Each attempt for trademark cancellation by Petitioner Big Room Inc. was met with the USPTO/TTAB Board Termination or Withdrawal by Petitioner. In the final trademark cancellation, a motion to dismiss was GRANTED and Petitioner Big Room Inc. was allowed and did take an opportunity to cure its defect and later on made a motion to WITHDRAW. (See Exhibit 5 - Big Room USPTO filings) In a long line of a series of unlawful activities, Big Room Inc. created a so-called .ECO Community, seeking to obtain its long sought after .ECO via a “Community Priority”. This is unethical as Big Room Inc. participated in the development of the Community Priority

Mechanism with Contractor; another violation of Contract Clause I.9 Contractor Code of Business Ethics and Conduct (FAR 52.203-13).

13. In response to Big Room Inc's. second attempt to obtain a U.S. .ECO trademark, on December 7, 2009 the USPTO provided applicant Big Room with a determination which in part read, ***"Application Serial No. 77452991 has now matured into a registered mark."... "The overriding concern is not only to prevent buyer confusion as to the source of the goods and/or services, but to protect the registrant from adverse commercial impact due to use of a similar mark by a newcomer. See In re Shell Oil Co., 992 F.2d 1204, 1208, 26 USPQ2d 1687, 1690 (Fed. Cir. 1993). Therefore, any doubt regarding a likelihood of confusion determination is resolved in favor of the registrant."***
14. Priority is and always has been used as a strategic ploy by others and Big Room Inc., a company co-founded by Managerial Personnel of Contractor. Specifically, Jacob Malthouse, participated in the development of the Community Priority Evaluation ("CPE") process and as a significant contributor, has participated in providing a vast majority of Community Priority Evaluation content onto the Contractor's wiki Community Priority Evaluation Page and the Contractor's wiki .ECO Page that it also managed, while infringing upon .ECO®'s rights and disregarding USPTO's determination and clearly a Conflict of Interest C.6, H.9. (See Exhibit 6 - Malthouse Contractor's wiki Contributions)
15. Regardless of the Community Priority expertise and / or involvement of Malthouse, Big Room Inc. was well aware of the potential, now actual, .ECO trademark issues, as indicated from the December 7, 2009 USPTO refusal letter. Big Room Inc. was informed of the USPTO's determination regarding the .ECO registered .ECO mark by planet.ECO LLC (co-founder Moses Boone) and their .ECO applied for mark, years ahead of the gTLD public application window. Although no one has commented on Big Room's appeared intentions to game the gTLD system via .ECO trademarks, the USPTO writes, ***"the marks are sufficiently similar to cause a likelihood of confusion under Trademark Act Section 2(d)" and "the services provided by the registrant, the applicant's services would clearly be within the registrant's normal fields of expansion" and "the contemporaneous use of highly similar marks that are phonetic equivalents, consumers are likely to conclude that the services are related and originate from a single source. As such, registration must be refused under Trademark Act Section 2(d)"***.  
(<https://tsdr.uspto.gov/documentviewer?caseId=sn77523015&docId=OOA20091207101341#docIndex=9&page=1>)
16. Nonetheless, Big Room Inc. who has no legal basis for seeking to interfere with .ECO®'s trademark rights or willfully use a counterfeit mark in the United States, has been and is still

allowed to continue to act in unfair competition, encroaching and usurping .ECO®'s trademark rights under U.S. Trademark Law. The newly created CPE mechanism, foreign to Federal Procurement, is being used to grant priority to a so-called .ECO Community applicant priority, with no consideration to .ECO®'s highly related Internet Services trademark and in conflict with U.S. Trademark Law. (See Exhibit 7 - The .ECO Ploy (Attached)) It is illegal and in violation of the IANA Functions

17. Contract SA1301-12-CN-0035 and not permitted anywhere under Federal Regulations; as such the aforementioned actions would be in willful violation of Contract Clauses:
  - C.2.9.2d - Delegation and Redelelegation of a Generic Top Level Domain (gTLD)
  - C.6 - Conflict of Interest Requirements
  - F.5 - Government Rights to Deliverables
  - G.1- Contracting Officer's Authority (CAR 1352.201-70)
  - H.9- Organizational Conflict of Interest ( CAR 1352.209-74)
  - H.11- Compliance with Laws (CAR 1352.209-73)
  - I.9 - Contractor Code of Business Ethics and Conduct (FAR 52.203-13)
18. Per Clause C.2.9.2d which in part reads: ***“Contractor must provide documentation verifying that ICANN followed its own policy framework and was supportive of the global public interest...”*** Willful Trademark and Conflict of Interest violations against a gTLD Small Disadvantaged Business or any Applicant does not support global public interest and violates Clause C.2.9.2d.
19. Since 2008 .ECO® has established constructive nationwide priority covering highly related Internet services (Exhibit 8 - .ECO® Trademark) and prior to applying for .ECO® gTLD evaluation offered and continues to offer a wide variety of services online in the United States under its mark .ECO®, including domain name registration services, web hosting services, SSL & security services, email account services, marketing tools, and website building services. A complete detailed list of the services for each of these categories can be found on the most current site, <http://www.dot-eco.com>
20. .ECO® continues to rightfully and lawfully seek expansion of its trademark services and respectfully requests your response to the email sent to you on June 7, 2016. (See Exhibit 8 - Email to Contracting Officer June 7, 2016)
21. In performing the IANA functions as called for in Section C.2.9.2d of the IANA Functions contract, ICANN's IANA Department will verify that all gTLD delegation redelegation requests are consistent with the approved and documented processes for making such

22. requests.<sup>1</sup> It is clear that applicant Big Room Inc. and other .ECO gTLD applicants (See Exhibit 9 COI Letter to SBA Ombudsman 6\_5\_2014) are in Conflict of Interest and have infringed upon our .ECO<sup>®</sup> trademark and therefore shall not qualify for such a request to be granted.
23. In light of the foregoing, .ECO<sup>®</sup>, respectfully requests that you rescind every word and every paragraph mentioned in any framework, process or procedure regarding the illegal / unconstitutional Community Priority Evaluation (CPE) process, all in accordance with Module 1 Sections: 1.2.3, 1.2.3.1 and Module 4 Sections: 4.2, 4.2.1, 4.2.2, 4.2.3.
24. .ECO<sup>®</sup> also respectfully requests that the unconstitutional Module 6; section 6 also be rescinded.
25. In conclusion, .ECO<sup>®</sup>, reiterates its request that you correct the aforementioned errors and delegate .ECO Registry Operations to the only qualified applicant standing, .ECO<sup>®</sup>, all in accordance with
  - CAM 1301.6
  - Clauses: C.2.9.2d
  - C.6 Conflict of Interest Requirements
  - G.1, Contracting Officer's Authority (CAR 1352.201-70)
  - H.9, Organizational Conflict of Interest (CAR 1352.209-74)
  - H.11, Compliance with Laws (CAR 1352.209-73)
  - I.9, Contractor Code of Business Ethics and Conduct (FAR 52.203-13)
26. In accordance with 48 CFR 33.211 Contracting Officers Decision, .ECO request the final decision from the Contracting Officer responsible for SA1301-12-CN-0035.

---

<sup>1</sup> Consultation on gTLD Delegation and Redeligation User Instructions and Source of Policy and Procedures

Statement of Certification

I certify that to the best of my knowledge and belief all of the information on this form is correct. I also understand that failure to report completely and accurately may result in criminal or civil penalties and any other applicable federal statutes.

Sincerely,



Jean D. William  
CEO/Chairman  
planet.ECO LLC (“.ECO”) (SDB)

## Exhibits

Exhibit 1 - August 3, 2016

|   |
|---|
|  <p>New Generic Top-Level<br/><b>Domains</b></p>   |
| <p>Dear Jean William:</p> <p>Thank you for contacting New gTLD Customer Service. This serves as a resolution to your recent inquiry: 00228057.<br/>This case was about:</p> <p>Account: Planet Dot Eco, LLC<br/>Subject: Reminder Regarding Withdrawal/Refund<br/>Description: Dear Jean William,</p> <p>This is a courtesy notification that the prevailing .ECO applicant has entered into a Registry Agreement with ICANN (<a href="https://www.icann.org/resources/agreement/eco-2016-07-08-en">https://www.icann.org/resources/agreement/eco-2016-07-08-en</a>). As previously communicated with the results of the CPE, the status of your application for .ECO was updated to “Will Not Proceed”. If a contention set has been resolved by CPE, the applications other than the prevailing community application in the contention set are eligible for a 35% refund, except for in cases where the application in question participated in Extended Evaluation or was the subject of an Objection. Pursuant to Section 1.5.1 of the Applicant Guidebook, your application is eligible for a refund of 20%, or \$37,000, as it has completed Extended Evaluation. To be issued a refund of \$37,000, the application must be withdrawn by the Primary Contact via the ICANN Customer Portal.</p> <p>Thank you for your timely attention to this matter. If you have any questions about this message, please contact us at <a href="mailto:globalsupport@icann.org">globalsupport@icann.org</a>.</p> <p>Thank you and best regards,</p> <p>Jared Erwin<br/>New gTLD Operations<br/>If you have any questions, please contact New gTLD Customer Service via the CSC Portal at <a href="https://myicann.secure.force.com/">https://myicann.secure.force.com/</a>.<br/>This is a system-generated email. Please do not respond to this email.</p> |
| <p>planet.eco<br/>Jean William - Chairman<br/>address: Stamford, CT 06902<br/>email: <a href="mailto:jeanwilliam@planetdoteco.com">jeanwilliam@planetdoteco.com</a><br/>website: <a href="http://www.planetdoteco.com">www.planetdoteco.com</a><br/>office: 203-517-0929<br/>cell: 203-921-8829</p>   |

**Exhibit 2 - Email2 - August 10, 2016**

----- Original Message -----

Subject: A comment has been added to case 00228057  
From: New gTLD Customer Service <[no-reply-gtld@icann.org](mailto:no-reply-gtld@icann.org)>  
Date: Wed, August 10, 2016 12:11 pm  
To: "jeanwilliam@planetdoteco.com" <[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)>



Dear Jean William:

Please note that a new case comment has been added to this case. [Click Here](#) to login to the Customer Service Portal and view the case details.

Case Information:

CASE NUMBER: 00228057  
ACCOUNT NAME: Planet Dot Eco, LLC  
APPLICATION ID: 1-1710-92415  
SUBJECT: Reminder Regarding Withdrawal/Refund

Kind regards,  
ICANN Customer Service  
Email: [newgtld@icann.org](mailto:newgtld@icann.org)

DISCLAIMER: This email is for information only and does not represent all requirements and criteria that the applicant must satisfy. ICANN is not providing legal, financial, business or any other kind of advice. This email does not represent a modification to the Applicant Guidebook, or the terms and conditions to the new gTLD program. This email also does not represent a waiver of any ICANN policy, procedure or agreement. In the event that any information provided in this email appears to be inconsistent with any information published elsewhere by ICANN, please do not rely on this email without confirmation or clarification from ICANN.

© 2014 Internet Corporation For Assigned Names and Numbers

[ICANN New gTLDs CSC Site Map](#)

### Exhibit 3 - .ECO USPTO Trademark assignment

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Assignments on the Web > [Trademark Query](#)

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**Trademark Assignment Abstract of Title**

**Total Assignments: 2**

Serial #: [77452991](#)      Filing Dt: 04/20/2008      Reg #: [3716170](#)      Reg. Dt: 11/24/2009

Registrant: Colored Planet Connexion  
Mark: .ECO

---

**Assignment: 1**

Reel/Frame: [4715/0630](#)      Received: 02/07/2012      Recorded: 01/29/2012      Pages: 2

Conveyance: ASSIGNS THE ENTIRE INTEREST

Assignor: [BOONE, MOSES](#)

Exec Dt: 01/29/2012  
Entity Type: INDIVIDUAL  
Citizenship: UNITED STATES

Assignee: [PLANET.ECO.LLC](#)

Composed of:  
COMPOSED OF JEAN WILLIAM, CEO MOSES BOONE, PRES.  
45 WEST NORTH ST  
STAMFORD, CONNECTICUT 06902

Entity Type: LIMITED LIABILITY COMPANY  
Citizenship: UNITED STATES

Correspondent: COLORED PLANET CONNEXION  
40 STIMSON RD  
NEW HAVEN, CONNECTICUT 06511

---

**Assignment: 2**

Reel/Frame: [4716/0715](#)      Received: 02/10/2012      Recorded: 01/29/2012      Pages: 2

Conveyance: ASSIGNS THE ENTIRE INTEREST

Assignor: [BOONE, MOSES](#)

Exec Dt: 01/29/2012  
Entity Type: INDIVIDUAL  
Citizenship: UNITED STATES

Assignee: [PLANET.ECO.LLC](#)

Composed of:  
COMPOSED OF JEAN WILLIAM, CEO MOSES BOONE PRES.  
45 WEST NORTH ST  
STAMFORD, CONNECTICUT 06902

Entity Type: LIMITED LIABILITY COMPANY  
Citizenship: CONNECTICUT

### Exhibit 4 - USPTO's Determination

Print: Dec 7, 2009      77452991

**DESIGN MARK**  
**Serial Number**  
77452991  
**Status**  
REGISTERED  
**Word Mark**  
.ECO  
**Standard Character Mark**  
Yes  
**Registration Number**  
3716170  
**Date Registered**  
2009/11/24  
**Type of Mark**  
SERVICE MARK  
**Register**  
PRINCIPAL  
**Mark Drawing Code**  
(4) STANDARD CHARACTER MARK  
**Owner**  
Colored Planet Connection DBA Colored Planet CORPORATION CONNECTICUT  
40 Stimson RD New Haven CONNECTICUT 06511  
**Goods/Services**  
Class Status -- ACTIVE. IC 042. US 100 101. G & S: Design, creation, hosting and maintenance of internet sites for third parties; Hosting of digital content on the Internet; Providing specific information as requested by customers via the Internet. First Use: 2008/12/02. First Use In Commerce: 2009/09/18.  
**Filing Date**  
2008/04/20  
**Examining Attorney**  
BENMAMAN, ALICE

### Exhibit 5 - Big Room USPTO filings



**United States Patent and Trademark Office**

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**TTABVue. Trademark Trial and Appeal Board Inquiry System**

## Summary

**Query:** Proceeding Status is: ALL  
**and** Party Name contains all words: BIG ROOM  
**Number of results:** 2

| Proceeding Filing Date                 | Defendant(s), Property(ies)  | Plaintiff(s), Property(ies)    |
|--|--|--------------------------------|
| <a href="#">92060403</a><br>11/20/2014 | <a href="#">planet.ECO LLC</a><br><b>Mark:</b> .ECO <b>S#:</b> <a href="#">77452991</a> <b>R#:</b> <a href="#">3716170</a> | <a href="#">Big Room, Inc.</a> |
| <a href="#">92055197</a><br>02/17/2012 | <a href="#">Planet.Eco LLC</a><br><b>Mark:</b> .ECO <b>S#:</b> <a href="#">77452991</a> <b>R#:</b> <a href="#">3716170</a> | <a href="#">Big Room, Inc.</a> |

Results as of 08/14/2016 11:41 AM



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Logout Please logout when you are done to release system resources al

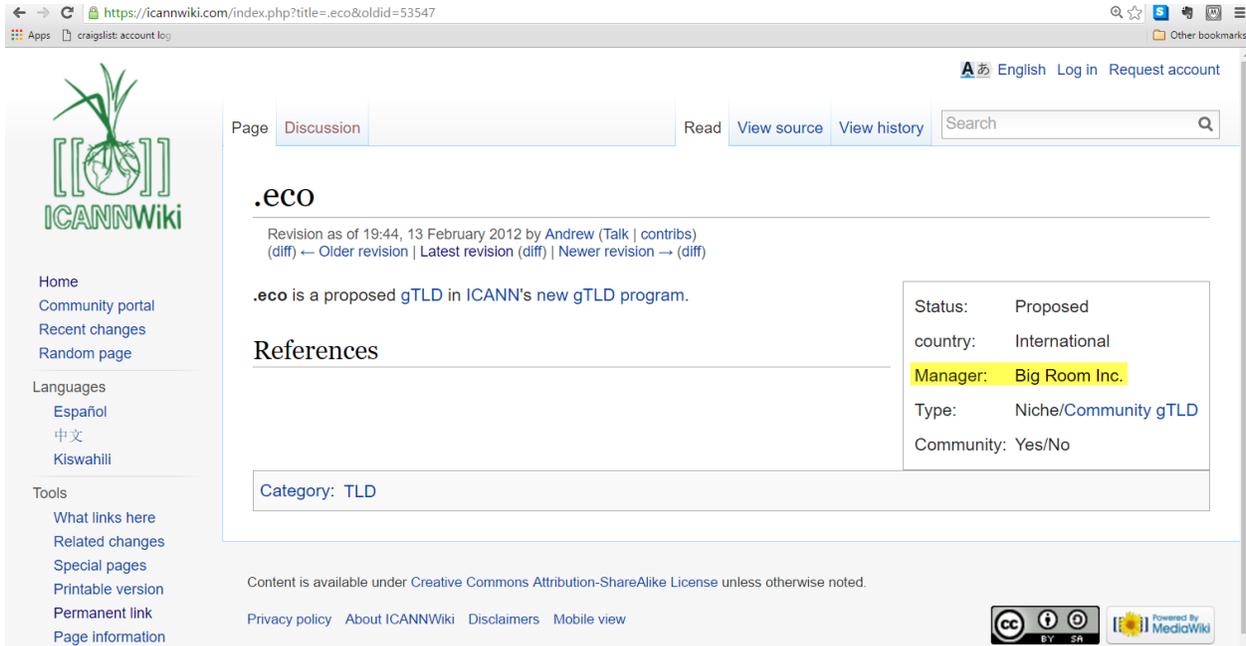
Start List At:  OR Jump to record:  **14 Records**

Refine Search  Submit

Current Search: S1: [\(big room inc\)\[OW\]](#) docs: 14 occ: 42

|    | Serial Number | Reg. Number | Word Mark          | Check Status | Live/Dead |
|----|---------------|-------------|--------------------|--------------|-----------|
| 1  | 79017737      |             | OMNI               | TSDR         | DEAD      |
| 2  | 79049189      | 3485353     | OMNIPRO            | TSDR         | DEAD      |
| 3  | 79041963      | 3480906     | OMNIGRIP           | TSDR         | DEAD      |
| 4  | 79038448      | 3454013     | ENERGIZE YOUR LIFE | TSDR         | DEAD      |
| 5  | 79042053      | 3454097     | OMNITECH           | TSDR         | DEAD      |
| 6  | 79041419      | 3454087     | OMNISELECT         | TSDR         | DEAD      |
| 7  | 79058431      | 3744837     | ITRAINER           | TSDR         | LIVE      |
| 8  | 79055479      |             | DIALTECH           | TSDR         | DEAD      |
| 9  | 78923172      |             | HUMMER             | TSDR         | DEAD      |
| 10 | 77646029      |             | .ECO               | TSDR         | DEAD      |
| 11 | 77523015      |             | .ECO               | TSDR         | DEAD      |
| 12 | 77523010      |             | DOT ECO            | TSDR         | DEAD      |
| 13 | 74695159      |             |                    | TSDR         | DEAD      |
| 14 | 74694709      |             | APPLE BAG          | TSDR         | DEAD      |

## Exhibit 6 - Malthouse Contractor's wiki Contributions



The screenshot shows the ICANN Wiki page for the '.eco' domain. The page title is '.eco' and it is categorized as a TLD. The page content includes a revision history entry from February 13, 2012, by Andrew, stating that '.eco' is a proposed gTLD in ICANN's new gTLD program. A metadata box on the right lists the following details:

|            |                      |
|------------|----------------------|
| Status:    | Proposed             |
| country:   | International        |
| Manager:   | Big Room Inc.        |
| Type:      | Niche/Community gTLD |
| Community: | Yes/No               |

The page also features a 'References' section, a 'Category: TLD' box, and a Creative Commons Attribution-ShareAlike license notice at the bottom. The left sidebar contains navigation links for Home, Community portal, Recent changes, Random page, Languages (Español, 中文, Kiswahili), and Tools (What links here, Related changes, Special pages, Printable version, Permanent link, Page information).

## Exhibit 7 - The .ECO Ploy (See Attached)

*Exhibit 8 - Email to Contracting Officer June 7, 2016*



environmentally beyond .COM

June 7, 2016

Mr. Ajayi Akinsola  
Contracting Officer  
U.S. Department of Commerce  
Commerce Acquisition Solutions Division  
Office of Acquisition Management  
1401 Constitution Avenue, NW, Room 6521  
Washington, DC 20230  
VIA EMAIL: aajayi@doc.gov | CERTIFIED MAIL

Re: Response to Contracting Officer -  
Contract # SA1301-12-CN-0035 / Applicant # 1-1710-92415

Dear Sir,

Our response to your e-mail received on May 25, 2016 is as follows:

.ECO finds it interesting that your charges and statements are not supported by the FAR, the CAM or the IANA Functions Contract. Please make available what the Contracting Officer used in the email as related to the statements and charges made.

.ECO separates your email to what it finds to be 6 statements and responds to the statements.

.ECO has always been guided by the IANA Functions Contract 0035, U.S. Laws, Rules, and Regulations and is an interested and affected party. (See IANA Functions Contract Clause C.1.3)

Below please find statements from Contracting Officer and responses from .ECO

**Statement 1:**

*I am writing to let you know that your email was received but it cannot be acted on as you are not a party to IANA Contract # SA1301-12-CN-0035.*

**Response 1:**

.ECO DISAGREES. See IANA Functions Contract Clause C.1.3.

**Statement 2:**

*You also need to cease and desist from misrepresenting yourself as a party to the aforementioned contract.*

**Response 2:**

.ECO DISAGREES. See IANA Functions Contract Clause C.1.3.

because you care

1

planet.eco  
Jean William - Chairman  
address: Stamford, CT 06902  
email: jeanwilliam@planetdoteco.com  
website: www.planetdoteco.com  
office: 203-517-0929  
cell: 203-921-8829

**Statement 3:**

*The contract is between the U.S. Department of Commerce and ICANN.*

**Response 3:**

**.ECO AGREES.**

**Statement 4:**

*You are neither a representative of ICANN nor affiliated in any way with ICANN.*

**Response 4:**

**.ECO AGREES.**

**Statement 5:**

*If you have dealings as an applicant with ICANN, you need to address those dealings directly with ICANN.*

**Response 5:**

**.ECO DISAGREES.** Please see F.5 Government Rights to Deliverables.

**Statement 6:**

*As the Contracting Officer on SA1301-12-CN-0035, there is nothing I can do for you as what you are requesting has got nothing to do with the contract as written.*

**Response 6:**

**.ECO DISAGREES.** Please see C.1.3 & F.5 Government Rights to Deliverables.

The above covers .ECO's interpretation of the contract.

In addition please see:

IANA Functions Contract 0035 Clauses C.6 and H.9  
IANA Functions Contract 0035 Clauses H.11

On several occasions .ECO has asked for information pertaining to the contracting officer.

.ECO now make the same request again for:

- The requisite Warrant and Letter of Appointment
- Resume
- Education level
- Documented procurement training
- Documented procurement experience
- Most Recent Performance Rating
- Documented Level of Authority per contract
- Current Conflict of Interest Disclosure
- Documented Waivers if applicable

- Copies of all Contract Descriptions

The request is guided by FAR 1.602

In light of the foregoing, .ECO respectfully request that the wrongful and illegal charges made by the Contracting Officer be rescinded, correct all that has been injurious and continues to cause irreparable harm to .ECO. Delegate the .ECO gTLD to .ECO immediately, allowing for its normal fields of expansion or please provide .ECO with your final decision.

Sincerely,



Jean D. William  
CEO/Chairman  
planet.ECO LLC (" .ECO") (SDB)

## Exhibits

Exhibit 1 - May 25, 2016

Good morning Mr. William,

I am writing to let you know that your email was received but it cannot be acted on as you are not a party to IANA Contract # SA1301-12-CN-0035. You also need to cease and desist from misrepresenting yourself as a party to the aforementioned contract. The contract is between the U.S. Department of Commerce and ICANN. You are neither a representative of ICANN nor affiliated in any way with ICANN. If you have dealings as an applicant with ICANN, you need to address those dealings directly with ICANN.

As the Contracting Officer on SA1301-12-CN-0035, there is nothing I can do for you as what you are requesting has got nothing to do with the contract as written.

Regards,

Akinsola "AJ" Ajayi  
Acting Director, Commerce Acquisition Solutions & Senior Bureau Procurement Official  
Office of the Secretary  
U. S. Department of Commerce  
1401 Constitution Ave., N.W., Suite 6521  
Washington, DC 20230  
Office: 202-482-2810  
Email: aajayi@doc.gov

because you care

3

planet.eco  
Jean William - Chairman  
address: Stamford, CT 06902  
email: jeanwilliam@planetdoteco.com  
website: www.planetdoteco.com  
office: 203-517-0929  
cell: 203-921-8829

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Jean William - Chairman  
address: Stamford, CT 06902  
email: jeanwilliam@planetdoteco.com  
website: www.planetdoteco.com  
office: 203-517-0929  
cell: 203-921-8829

**Exhibit 9 COI Letter to SBA Ombudsman 6\_5\_2014 (See Attached)**

----- Original Message -----

Subject: RE: An Unsolicited Proposal Complaint - Contract #  
SA1301-12-CN-0035 / Applicant # 1-1710-92415

From: <[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)>

Date: Wed, August 17, 2016 12:37 pm

To: [TheSec@DOC.gov](mailto:TheSec@DOC.gov), [PPritzker@doc.gov](mailto:PPritzker@doc.gov), [lstrickling@ntia.doc.gov](mailto:lstrickling@ntia.doc.gov),  
[BBerkowitz@doc.gov](mailto:BBerkowitz@doc.gov)

Cc: "Moses Boone" <[moses.boone@thedoteco.com](mailto:moses.boone@thedoteco.com)>, "Jean William"  
<[jean.william@thedoteco.com](mailto:jean.william@thedoteco.com)>

The Honorable  
Penny Pritzker  
United States Secretary of Commerce  
Herbert C. Hoover Building  
1401 Constitution Ave NW  
Washington District Of Columbia 20230  
United States

Dear Madam Secretary:

Attached please find our filing, all in accordance with the Disputes Clause.

On August 15, 2016 we sent the Contracting Officer managing the IANA functions Contract SA1301-12-CN-0035 a complaint and in return we received from the Contracting Officer an email directing us to Mr. Shane Kram. We are not aware that the point of contact is the Contracting Officer. Can you please assist and direct us to the proper Contracting Officer, as it relates to SA1301-12-CN-0035?

Respectfully,

Jean William

## **Contracting Officer (0035) - Error in New gTLD Program String Delegation Readiness Report**

TheSec@doc.gov,  
PPritzker@doc.gov,  
Istrickling@ntia.doc.gov,  
BBerkowitz@doc.gov,  
TJournet@doc.gov

**jeanwilliam@planetdoteco.com** Mon, Sep 12, 2016 at 4:20 PM

The Honorable

Penny Pritzker

United States Secretary of Commerce

Herbert C. Hoover Building

1401 Constitution Ave NW

Washington District Of Columbia 20230

United States

Dear Madam Secretary:

Please see the attached pertaining to the Delegation of .ECO.

Respectfully, Jean William

## ATTACHMENT

Contracting Officer c/o Mr. Barry Berkowitz U.S. Department of Commerce Commerce Acquisition Solutions Division Office of Acquisition Management 1401 Constitution Avenue, NW, Room 6521 Washington, DC 20230

cc: VIA EMAIL: TheSec@DOC.gov, PPritzker@doc.gov, lstrickling@ntia.doc.gov, BBerkowitz@doc.gov, TJournet@doc.gov

VIA CERTIFIED MAIL: Madam Penny Pritzker, Mr. Larry Strickling, Mr. Barry Berkowitz, Ms. Tammy Journet

Re: Error in New gTLD Program String Delegation Readiness Report.docx Contract # SA1301-12-CN-0035 / Applicant # 1-1710-92415

Dear Contracting Officer,

We have received a copy of the New gTLD Program String Delegation Readiness Report for Application ID: 1-912-59314, String: ECO, Report Date: 2016-08-17 PST, and have noticed an error in Objection Process 1 listed on page 2 of 3.

The answer to question 1 (Q: Were objections filed against the Application? A: No) is inaccurate as it relates to the Delegation of .ECO. .ECO® has previously objected on several occasions. Please See our Dispute Filing to Contracting Officer in a Letter dated August 17, 2016, that was previously sent to you, which illustrates our objection and other things. This is an error and you cannot go forward. We respectfully request the withdrawal of the applicant's name, as previously requested in our Filing.

Sincerely,

Jean D. William

## 2016-08-04 dot Registry\_ICANN's general counsel should lose his job over this

**Notebook:** Community Priority Evaluation COI vs. No COI  
**Created:** 07/15/2018 09:59  
**Tags:** dot africa, ICANN COI list, miscarriage of justice  
**URL:** [http://www.theregister.co.uk/2016/08/04/icanns\\_general\\_counsel\\_should\\_lose\\_his\\_job\\_over\\_this/](http://www.theregister.co.uk/2016/08/04/icanns_general_counsel_should_lose_his_job_over_this/)

# 'ICANN's general counsel should lose his job over this'

Dot Registry CEO reacts to extraordinary judgment against DNS overseer

By [Chris Williams](#), Editor in Chief 4 Aug 2016 at 16:04

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Shaul Jolles ... CEO of Dot Registry

**Interview** It has been four years since Shaul Jolles, as CEO of Dot Registry, filed applications for five new internet extensions – .corp, .inc, .llc, .llp and .ltd – and wrote a check for just under \$1m to have them considered by domain name system overseer ICANN.

Unlike the other applicants for the three US corporate entity suffixes .inc, .llc, .llp – and there are no fewer than 21 other applicants – Dot Registry took the unusual step of applying for a special "community" status, meaning that the company would have to jump over a number of additional hurdles to be given priority status.

And in order to pass that test, he spent over a year enlisting Secretaries of State right across the United States to officially support his application.

Unlike the other companies that would sell .inc domains on the open market to anyone, Dot Registry will instead require people who want a domain to have an actual incorporated business (.inc) or a limited company (.llc) or limited partnership (.llp), and to be registered with their state to get it.

Concerned that the wide-open use of legal business suffixes would lead to an explosion in scams, the states signed up. And Dot Registry sent another \$22,000 per name to have them evaluated by ICANN as "community" names.

Almost exactly two years to the day later, Jolles [received the answer](#) from the independent company that ICANN hired to carry out the evaluations, the Economist Intelligence Unit (EIU). He knew right away something was wrong.

## Up to a point

"My applications are good, really good. I would say they were the best of all those that were put in," he says, referring to the other 25 "community priority evaluation" or CPE applications. "But the moment I saw we got five points, I understood. There was no question here: I knew they were trying to fail us."

Out of a possible 16 points, of which applicants needed to score 14 to pass, Dot Registry's three applications had all hit an identical 5. It was so low a score that Jolles knew something wasn't right, and immediately started preparing for an official reconsideration of the decision by a subset of ICANN's board called the Board Governance Committee (BGC).

He started checking in with the different Secretaries of State to make sure nothing peculiar had happened and was immediately struck by some inconsistencies. "They didn't verify all the letters of support," he told us. "But then others had been sent multiple emails. One Secretary of State was actually sent 12 emails."

The emails were odd: the first one asked the secretary to confirm they had sent the letter. When they responded yes, they received another asking if they were authorized to send such a letter of support. When they answered yes, they were asked under what grounds they were authorized to do so. When they provided proof, they received another email asking them if they specifically endorsed the Dot Registry bid, and so on.

"From the very beginning I knew that, for some reason, there was going to be an issue with the evaluation," Jolles says.

When it wasn't ICANN's evaluators, it was his possible competitors'. One of them, he claims, went to a representative of the European Commission and convinced them that there were thousands of .inc companies in Europe that would be disadvantaged by Dot Registry's US-based bid. The representative drew up an objection and sent it to ICANN. When Jolles saw it, he got in contact and explained that there was no such conflict and that they had been misled.

The representative withdrew their objection and informed ICANN. But, Jolles found out two years later, ICANN never told the evaluators of the withdrawal, and even though it was published on ICANN's website, they never located it either. As a result, they worked on the assumption that European governments were opposed to the idea.

## **No cock-up**

That could be explained away as a simple cock-up, but the more Jolles dug into the evaluation of his application, the more he became convinced that something more sinister was going on.

He hired an expert to dig into all the other evaluations and compare them to his own, and discovered that the EIU had treated his applications differently from the others, even adding new requirements that didn't exist before.

Dot Registry produced an extensive rundown of mistakes and unusual circumstances in its application and sent it to ICANN's BGC, confident that it would undertake a full investigation. It didn't. In fact, the BGC did nothing at all with that work and relied solely on the advice of ICANN's own legal team to reject his request for reconsideration out of hand.

And so he [filed for a review](#) of that rejection using ICANN's last resort Independent Review Panel (IRP). Just under two years and nearly \$250,000 later, he received his answer: he had been working against ICANN's legal team the whole time.

The extent to which ICANN manipulated its own processes to reject Dot Registry's applications and then make it impossible for the company to find out why, or to have that decision reviewed, is almost Kafkaesque.

Far from being independent evaluators, documents provided to the IRP led it to conclude that the ICANN staff actually supervised the EIU and was "intimately involved" in the drafting of its reports. Incredibly, ICANN staff proposed the wording that the EIU's zero-scoring on one key section of the report stemmed from "research" that the EIU was supposed to have carried out. The IRP was unable to find any sign that such research existed.

"The whole thing is a sham," Jolles tells us. "My biggest takeaway from the judgment was that I wasn't

surprised."

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Next page: **Hall of mirrors**

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Tips and corrections

15 Comments



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#### 1.602-2 -- Responsibilities.

Contracting officers are responsible for ensuring performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract, and safeguarding the interests of the United States in its contractual relationships. In order to perform these responsibilities, contracting officers should be allowed wide latitude to exercise business judgment. Contracting officers shall --

- (a) Ensure that the requirements of [1.602-1\(b\)](#) have been met, and that sufficient funds are available for obligation;
- (b) Ensure that contractors receive impartial, fair, and equitable treatment;
- (c) Request and consider the advice of specialists in audit, law, engineering, information security, transportation, and other fields, as appropriate;
- (d) Designate and authorize, in writing and in accordance with agency procedures, a contracting officer's representative (COR) on all contracts and orders other than those that are firm-fixed price, and for firm-fixed-price contracts and orders as appropriate, unless the contracting officer retains and executes the COR duties. See [7.104\(e\)](#). A COR—
  - (1) Shall be a Government employee, unless otherwise authorized in agency regulations;
  - (2) Shall be certified and maintain certification in accordance with the current Office of Management and Budget memorandum on the Federal Acquisition Certification for Contracting Officer Representatives (FAC-COR) guidance, or for DoD, in accordance with the current applicable DoD policy guidance;
  - (3) Shall be qualified by training and experience commensurate with the responsibilities to be delegated in accordance with agency procedures;
  - (4) May not be delegated responsibility to perform functions that have been delegated under [42.202](#) to a contract administration office, but may be assigned some duties at [42.302](#) by the contracting officer;
  - (5) Has no authority to make any commitments or changes that affect price, quality, quantity, delivery, or other terms and conditions of the contract nor in any way direct the contractor or its subcontractors to operate in conflict with the contract terms and conditions;
  - (6) Shall be nominated either by the requiring activity or in accordance with agency procedures; and
  - (7) Shall be designated in writing, with copies furnished to the contractor and the contract administration office—
    - (i) Specifying the extent of the COR's authority to act on behalf of the contracting officer;
    - (ii) Identifying the limitations on the COR's authority;
    - (iii) Specifying the period covered by the designation;
    - (iv) Stating the authority is not redelegable; and
    - (v) Stating that the COR may be personally liable for unauthorized acts.



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Topics

- ▣ Spectrum Management
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- ▣ Grants
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- Data Central

## IANA Functions Contract

Critical to the DNS is the continued performance of the Internet Assigned Numbers Authority (IANA) functions. The IANA functions have historically included: (1) the coordination of the assignment of technical Internet protocol parameters; (2) the administration of certain responsibilities associated with Internet DNS root zone management; (3) the allocation of Internet numbering resources; and (4) other services related to the management of the .ARPA and .INT top-level domains. The Internet Corporation for Assigned Names and Numbers (ICANN) performed the IANA functions, on behalf of the United States Government, through a contract with NTIA.

### 2012 Contract

- **Contract Close-out** (October 21, 2016)
- **Amendment Modification No. 0005** (February 2, 2016)
- **Amendment Modification No. 0004** (September 17, 2015)
- **Amendment Modification No. 0003** (August 4, 2015)
- **Amendment Modification No. 0002** (April 30, 2013)
- **Amendment Modification No. 0001** (October 1, 2012)
- **Commerce Department Awards Contract for Management of Key Internet Functions to ICANN** (July 2, 2012)
- **Award IANA Functions Contract** (July 2, 2012) (858 KB pdf); **ICANN proposal** (incorporated by reference)
  - RFP SA1301-12-RP-0043 was awarded on July 2, 2012 to Internet Corporation for Assigned Numbers (ICANN).
- **Amendment 001** Internet Assigned Numbers Authority (IANA) Solicitation Number: SA1301-12-RP-0043 (May 17, 2012)
  - The purpose of this amendment is to post all **questions and answers** submitted in response to this RFP and amend sections E, F, H, I, L, M and the **SF33 to the original RFP** (05/17/2012).
- **Request for Proposal – Internet Assigned Numbers Authority (IANA) Solicitation Number: SA1301-12-RP-0043**(April 16, 2012)
  - On April 16, 2012, the Department of Commerce **re-issued** the Request for Proposal (RFP) SA1301-12-RP-0043 for a new Internet Assigned Numbers Authority (IANA) functions contract. The continued performance of these functions is critical to preserving the stability and security of the Internet's Domain Name System.
- **Notice – Cancelled Internet Assigned Numbers Authority (IANA) Functions - Request for Proposal (RFP) SA1301-12-RP-IANA** (March 10, 2012)
- **Notice – Extension of the Internet Assigned Numbers Authority (IANA) Functions Contract** (March 10, 2012)
- **Amendment 003** Internet Assigned Numbers Authority (IANA) Solicitation Number: SA1301-12-RP-IANA (March 9, 2012)
  - Request for Proposal (RFP) SA1301-12-RP-IANA is hereby cancelled. The Department of Commerce intends to reissue the RFP at a future date, date to be determined (TBD).
- **Amendment 002** Internet Assigned Numbers Authority (IANA) Solicitation Number: SA1301-12-RP-IANA (December 2, 2011)
  - The purpose of this amendment is to post all questions and answers submitted in response to this RFP and change the "Note" found on page 82.
- **Amendment 001** Internet Assigned Numbers Authority (IANA) Solicitation Number: SA1301-12-RP-IANA (November 17, 2011)
  - This amendment revises Section I.
- **Internet Assigned Numbers Authority (IANA) Solicitation Number: SA1301-12-RP-IANA** (November 10, 2011)
- **Pre-solicitation Notice** Operation of the Internet Assigned Numbers Authority (IANA) Functions (October 21, 2011)
  - The U.S. Department of Commerce (DOC), Office of the Secretary (OS) intends to issue a solicitation (Request for Proposal) on behalf of DOC, National Telecommunications and Information Administration (NTIA) for services to maintain the continuity and stability of services related to certain interdependent Internet technical management functions, known collectively as the Internet Assigned Numbers Authority (IANA).
- **Internet Assigned Numbers Authority (IANA) Functions Further Notice of Inquiry** with Public Comments (June 14, 2011)
- **Request for Comments on the Internet Assigned Numbers Authority (IANA) Functions** (February 25, 2011)

### 2006 Contract

**IANA Functions Contract** (August 11, 2006)  
**ICANN proposal** (incorporated into contract)  
 Modifications to the contract with ICANN:

- Modification 1** (September 24, 2007)
- Modification 2** (May 30, 2008)
- Modification 3** (September 4, 2008)
- Modification 4** (September 1, 2009)

### Featured Initiatives

- BroadbandUSA**
- Digital Literacy**
- Internet Policy Task Force**
- Wireless Broadband: 500MHz**
- National Broadband Map**



**Modification 5** (July 13, 2010)

- **DoC Testing and Implementation Requirements**

- **DNSSEC Policy & Practice Statement for the Root Zone ZSK Operator** 

**Modification 6** (October 1, 2010)

**Modification 7** (November 30, 2010)

**Modification 8** (June 14, 2011)

**Modification 9** (December 7, 2011)

**Modification 10** (March 8, 2012)

IANA Functions Contract Solicitation

- **Presolicitation notice to award purchase order to ICANN**
- **Modification of Presolicitation notice**
- **IANA Functions Statement of Work**

#### 2003 Contract

**IANA Functions Contract** (March 13, 2003)

Modifications to contract with ICANN:

**Modification 1** (August 28, 2003)

**Modification 2** (September 16, 2003)

**Modification 3** (August 30, 2004)

**Modification 4** (September 29, 2005)

**Modification 5** (April 1, 2006)

#### 2001 Contract

**IANA Functions Contract** (March 21, 2001)

Modifications to contract with ICANN:

**Modification 1** (April, 2002)

**Modification 2** (August 17, 2002).

**Modification 3** (October 1, 2002)

#### 2000 Contract

**IANA Functions Contract** (February 9, 2000)

Modifications to contract with ICANN:

**Modification 1** (September 8, 2000)

**Modification 2** (October 1, 2000).

| AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT  |  |                                   |  | 1. Contract ID Code  |      | Page of Pages  |  |
|---|--|-----------------------------------|--|--|------|--|--|
|   |  |                                   |  |  |      | 1 2  |  |
| 2. AMENDMENT MODIFICATION NO.<br>0005   |  | 3. EFFECTIVE DATE<br>FEB 02, 2016 |  | 4. REQUISITION/PURCHASE REQ. NO.   |      | 5. PROJECT NO. (if applicable)                               |  |
| 6. ISSUED BY<br>U.S. DEPARTMENT OF COMMERCE<br>14TH & CONSTITUTION AVE. NW<br>ACQUISITION SERVICES RM 6520<br>WASHINGTON DC 20230<br>Vernita D. Harris 202-482-4686 vharris@NTIA.doc.gov  |  |                                   | 7. ADMINISTERED BY (If other than item 6)<br>See Block 6 |  | CODE |  |  |
| 8. NAME AND ADDRESS OF CONTRACTOR (NO., Street, Country, State and ZIP Code)<br>INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS<br>12025 WATERFRONT DRIVE<br>SUITE 300<br>LOS ANGELES CA 90094<br><br>310-823-9358<br><br>DUNS: 045511487<br>Cage Code: 4A4S9   |  |                                   |  | (x)  |      | 9A. AMENDMENT OF SOLICITATION NO.                            |  |
|   |  |                                   |  |  |      | 9B. DATED (SEE ITEM 11)                                      |  |
|   |  |                                   |  | X  |      | 10A. MODIFICATION OF CONTRACT/ORDER NO.<br>SA1301-12-CN-0035 |  |
|   |  |                                   |  |  |      | 10B. DATED (SEE ITEM 13)<br>OCT 01, 2012                     |  |
| CODE 00000428   |  | FACILITY CODE                     |  |  |      |  |  |
| <b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>  |  |                                   |  |  |      |  |  |
| <input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.<br>Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:<br>(a) By completing items 8 and 15, and returning _____ copies of amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted;<br>or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE<br>RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OR OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF<br>YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each<br>telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified. |  |                                   |  |  |      |  |  |
| 12. ACCOUNTING AND APPROPRIATION DATA (If required)   |  |                                   |  |  |      | Modification Amount: \$0.00                                  |  |
| See Schedule  |  |                                   |  |  |      | Modification Obligated Amount: \$0.00                        |  |
| <b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>  |  |                                   |  |  |      |  |  |
| Check One   | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.   |                                   |  |  |      |  |  |
| X   | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |                                   |  |  |      |  |  |
|   | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:   |                                   |  |  |      |  |  |
|   | D. OTHER (Specify type of modification and authority)  |                                   |  |  |      |  |  |
| E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.  |  |                                   |  |  |      |  |  |
| 14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible)<br>The purpose of the modification is to change key personnel. See the following page.   |  |                                   |  |  |      |  |  |
| Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.  |  |                                   |  |  |      |  |  |
| 15A. NAME AND TITLE OF SIGNER (Type or print)   |  |                                   |  | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)                           |      |  |  |
|   |  |                                   |  | LaVonne Jinks-Umstead, Director<br>202-482-0557 ljinks-umstead@doc.gov               |      |  |  |
| 15B. CONTRACTOR/OFFEROR   |  | 15C. DATE SIGNED                  |  | 16B. UNITED STATES OF AMERICA  |      | 16C. DATE SIGNED   |  |
|   |  |                                   |  |  |      | FEB 02, 2016   |  |
| (Signature of person authorized to sign)  |  |                                   |  | (Signature of Contracting Officer)   |      |  |  |

**Modification Description**

The purpose of the modification is to change key personnel. The task order is changed as follows:

Under page 46, H.8, KEY PERSONNEL (CAR 1352.237-75), replace "Leo Vegoda" with "Naela Sarras" for the "Liaison for Internet Number Resource Allocation" position, replace "Tomofumi Okubo" with "Geoff Bickers" for the "Security Director" position, and replace "Steve Antonoff" with "Amy Stathos" for the "Conflict of Interest Officer" position.

All other terms and conditions remain unchanged.



# Federal Agency Comment Form

OMB Control #3245-0313

## Small Business Administration – Office of the National Ombudsman

Exp. date 6/30/2016

Purpose: Small business owners may use this form to submit comments on Federal enforcement/compliance actions that they consider excessive or unfair. The National Ombudsman will use the information when it contacts the applicable Federal Agency for a review of action.

Case #: \_\_\_\_\_

### Instructions

1. Complete, sign and date this form. (Signature not required if completed at [www.sba.gov/ombudsman](http://www.sba.gov/ombudsman)).
2. Provide a brief written statement on the reverse side regarding the specific enforcement or compliance action taken against your organization by the federal agency.
3. Submit copies of substantiating documentation, such as correspondence, citation, or notice (Note: Can be submitted separately from this form by fax or mail. Make sure to reference your name or company's name with this information).
4. If your comments concern the IRS, you must also submit a completed IRS Tax Information Authorization Form 8821, available at <http://www.irs.gov/forms> (Can be sent by fax or mail).
5. Fax, e-mail or send this form and requested information to: (1) Fax: (202) 481-5719; (2) E-mail: [Ombudsman@sba.gov](mailto:Ombudsman@sba.gov); (3) Address: SBA, Office of the National Ombudsman, 409 Third Street, SW, Washington, DC 20024. Telephone : (202) 205-2417.

Please Print

Organization/Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax : \_\_\_\_\_ E-mail: \_\_\_\_\_

Contact Name: Mr. Ms. \_\_\_\_\_ Title: \_\_\_\_\_

Please indicate your organization type:

- Small Business       Not-for-Profit, Representing \_\_\_\_\_ Members  
 Small Government (population of less than 50,000)       Association, Representing \_\_\_\_\_ Members

### List the federal agency with which you are having a problem:

Federal Agency Name: \_\_\_\_\_

Agency Contact person: \_\_\_\_\_

Agency Office/Division: \_\_\_\_\_

Did the federal agency listed above inform you of your right to contact the SBA Office of the National Ombudsman?

- Yes       No      If not, how did you learn about this office?

\_\_\_\_\_

### Confidentiality / Disclosure

The Small Business Regulatory Enforcement Fairness Act (SBREFA), allows you to keep your identity and other information private, and limit its access only to the SBA (See 15 U.S.C. 657 (b) (2) (B)). However, by requesting confidentiality the federal agency may not have sufficient information to investigate your specific problem, possibly delaying or preventing any potential resolution of your situation.

I request that my information be kept confidential.  Yes  No (If yes, results may be limited.)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Your signature authorizes the SBA Ombudsman to proceed on your behalf.

**Pursue all legal options you believe are in your company's best interest.**

**This process is not a substitute for legal action.**

### SBA FORM 1993 (3-10) Previous Editions Obsolete

Please Note: The estimated burden for completing this form is 45 minutes. You are not required to respond to this information collection if a valid OMB approval number is not displayed. If you have any questions or comments concerning this estimate or other aspects of this information collection, please contact the U.S. Small Business Administration, Chief, Administrative Information Branch, Washington, D.C. 20416 and/or Office of Management and Budget, Clearance Officer, Paperwork Reduction Project (3245-0313), Washington, D.C. 20503. PLEASE DO NOT SEND FORMS TO OMB, as this will delay action on your request for assistance.

**Type or (print) your comments below:**

---

We request your assistance per 15 U.S. Code § 657 - Oversight of Regulatory Enforcement.

Our company, planet.ECO believes that its rights as a United States based Small Business have been and are being violated, as it pertains to its participation in the Internet Corporation for Assigned Names and Numbers (hereinafter "GOV'T-CONTRACTOR") New gTLD Program for the management of the .ECO Registry. The U.S. Government via the Department of Commerce, National Telecommunications and Information Administration (hereinafter "GOVERNMENT") and its GOV'T-CONTRACTOR are acting outside of the law by allowing at a minimum, the appearance of Conflict of Interest, if not an actual Conflict of Interest to occur within the .ECO gTLD contention set. Based on such conflict, it is more than reasonable to believe that we are competing with those that should not be allowed to participate due to improper, illicit and undue advantage. We simply request, as the right of every American company, a fair and level playing field where U.S. governmental rules and regulations are adhered to. We are formally requesting an investigation into these matters and seek the removal of all contenders found to be in Conflict of Interest.

Our company, is incorporated in the State of CT and is one of four .ECO generic Top Level Domain (gTLD) contenders that applied to the New gTLD (generic Top Level Domain) Program via U.S. GOV'T-CONTRACTOR on May 30, 2012. The GOV'T-CONTRACTOR has been actively contracted with the GOVERNMENT, since 1998, and has been delegated responsibility for the administration of the Internet and; granted authority for evaluating and awarding all Internet gTLD delegations. The GOVERNMENT explicitly aimed for the GOV'T-CONTRACTOR to promote competition, innovation, choice and change in the domain name marketplace while ensuring Internet security and stability.

In 2011, the New gTLD program was said to be "open to any public or private organization from any part of the world". We believed this to be true and as the only US based Small Business .ECO TLD applicant, successfully submitted the \$185,000 application fee, a 300+ page application (business plan) and passed the GOV'T-CONTRACTOR'S best practices evaluation for the management of the .ECO Top Level Domain (TLD). Furthermore, our company is also the exclusive U.S. trademark owner of .ECO® and has taken action, in Federal Court, to protect its trademark from infringement by two of the .ECO TLD contenders.

We believed that the New gTLD program would prove itself to be an honest and fair opportunity to participate in the development of an important, innovative and environmentally-focused Internet platform; while continuing to expand our company's trademark and brand. This is something that we and all of our workers, associates and collaborators have dedicated several years of our lives towards. The following summary is quoted from our .ECO TLD application,

"The .ECO domain will provide a niche Internet platform focused on environmental stewardship and sustainability. The availability of .ECO domains will create a sense of exclusivity, community, and specificity for online participants in the green/sustainability sector which is not presently available

through existing/available domain names."

We firmly believe that our efforts will accelerate the production of a multitude of viable environmental solutions and businesses; while facilitating the generation of inclusive access to "green jobs" in an emerging green economy both here in the U.S. and worldwide.

Below is a list of some of the tasks we have performed during our pursuit of the .ECO gTLD:

- **Submitted \$3.5M then an additional \$12.5M (totaling \$16M) in guaranteed committed funds to securely cover \$10.6M, requested by GOV'T-CONTRACTOR.**
- **Submitted \$185,000 application fee to GOV'T-CONTRACTOR.**
- **Devoted all resource to generate 300+ page application for .ECO gTLD.**
- **Met all GOV'T-CONTRACTOR rules and requirements.**
- **Expensed over \$400,000 in Operating Cost.**
- **Company devoted over 5 years to this project developing proof of concept and industry relationships to fast track economic and ecologic efforts.**
- **Over \$400,000 in legal and consultation fees (debt).**

Since participating in the GOV'T-CONTRACTOR'S gTLD Program, it has become evident that the contenders, [Big Room, DONUTS](#) and [TLDH](#) all have unfair and improper insider advantage that would appear to prevent an honest, just and fair administration of the final award determination. Such contenders all appear illegally involved in major Conflict of Interest in prosecuting their application, since all with former significant attachments to the award-determination body, GOV'T-CONTRACTOR. Such contenders are either former Board Members, Officers and Key Employees, thus creating Conflict of Interest. Many of these people have also become founders, members or management of the New Top Level Domain Applicant Group (NTAG), Domain Name Association (DNA) and other groups that may also maintain close relationships, communications and affiliations with the GOV'T-CONTRACTOR. Such unlevel playing fields with preferred insider advantages is something we certainly did not anticipate, as we believed the fulfillment of the Internet's intended open and honest administration depended on building trust for all users worldwide and US Small Businesses would be allowed to freely participate - not to cooperatively allow such unjust competitive framework to advance in the award determination process for such an important award and opportunity.

Below are some of the people that have been allowed to participate in the gTLD Program and create more than just the appearance of Conflicts of Interest, at the risk of great and improper, undue expense and potential financial loss and harm to our company:

### **1. Big Room- ( Applied only for 1 gTLD - ".ECO" )**

- **Jacob Malthouse** - Executive on Global Partnership Team and Fellowships Programme, (Sept. 2005 - Sept. 2007) - Employed with Former GOV'T-CONTRACTOR as Executive  
(Dec. 2007 - Present) - Resigned from GOV'T-CONTRACTOR and Joined Big Room Inc.

## **2. Minds + Machines, subsidiary of (TLDH) - (Top 4 gTLD Applicant - Applied for 92 TLDs, Including ".ECO")**

- **Michael Salazar** - New gTLD Program Director,  
(July 2009 - June 2012) - Employed with Former GOV'T-CONTRACTOR as Executive  
(Dec. 2012 - Present) - Resigned from GOV'T-CONTRACTOR and Joined TLDH
- **Peter Dengate Thrush** - Chairman of the Board,  
(Nov. 2007 - June 2011) - Employed with Former GOV'T-CONTRACTOR as Chairman  
(July 2011 - Present) - Resigned from GOV'T-CONTRACTOR and Joined TLDH

## **3. DONUTS - (Largest gTLD Applicants - Applied for 307 TLDs, including ".ECO" )**

- **Paul Stahura** - Nominating Committee for Board Members,  
(Nov. 2006 - Jan. 2012) - Performed for GOV'T CONTRACTOR as Member of Nominating Committee for Board Members  
(Jan. 2012 - Present) - CEO and Co-Founder of DONUTS
- **Jon Nevett** - Chairman of Registrars Constituency,  
(June 2006 - June 2009) - Performed for GOV'T CONTRACTOR as Chairman of Registrars Constituency Group, and President's Strategy Committee  
(Apr. 2011 - Present)- Resigned from GOV'T-CONTRACTOR and Joined DONUTS
- **Kurt Pritz** - Head of the New gTLD Program, Chief of Strategy; SVP, Stakeholder Relations; VP, Business Operations,  
(Sept. 2003 - Nov. 2012) - Employed with Former GOV'T-CONTRACTOR as Sr. Executive / Board Member  
(Apr. 2013 - Nov. 2013) -Resigned from GOV'T-CONTRACTOR and Joined DONUTS
- **Kevin Wilson** - Chief Financial Officer,  
(Jan. 2007 - Jan. 2011) - Employed with Former GOV'T-CONTRACTOR as Executive  
(June 2012 - Present) - Resigned from GOV'T-CONTRACTOR and Joined DONUTS

• **Michele Jourdan** - Manager of the New gTLD Communications Department,

(Aug. 2008 - May 2013) - Employed with Former GOV'T-CONTRACTOR as Executive

(May 2013 - Present) - Resigned from GOV'T-CONTRACTOR and Joined DONUTS

• **Alina Syunkova** - Board of Director Support Coordinator,

(May 2011 - Oct. 2012) - Employed with Former GOV'T-CONTRACTOR as Executive / Board Liaison

(July 2013 - Present) - Resigned from GOV'T-CONTRACTOR and Joined DONUTS

Our company is not comprised of any GOV'T-CONTRACTOR insiders and have worked long and hard at successfully complying with all rules for specific requirements stated in the GOV'T-CONTRACTOR'S Applicant Guidebook (AGB), which all above applicants helped formulate. After nearly 2 years of evaluation, we passed the GOV'T-CONTRACTOR's Extended Evaluation, demonstrating our operational, technical and financial capability to run the .ECO registry. Despite our efforts, it is impossible to ever be awarded the .ECO gTLD, based upon actions, or lack-thereof taken by the GOVERNMENT and its GOV'T-CONTRACTOR. It appears that the GOVERNMENT is allowing this environment of Conflict of Interest to remain, "business as usual".

We sought assistance from the U.S. Government via the Department of Commerce, National Telecommunications and Information Administration to discuss and correct the CONTRACTOR'S Conflict of Interest. To date we have not received any response nor action as it relates to the above. We now seek the assistance of the Office of Small Ombudsman.

Should you have any questions please feel free to contact me.

Sincerely,

Jean William

CEO / Co-Founder

planet.ECO LLC

203-921-8829

[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)

## 2016-08-04 dot Registry\_ICANN's general counsel should lose his job over this

**Notebook:** Community Priority Evaluation COI vs. No COI  
**Created:** 07/15/2018 09:59  
**Tags:** dot africa, ICANN COI list, miscarriage of justice  
**URL:** [http://www.theregister.co.uk/2016/08/04/icanns\\_general\\_counsel\\_should\\_lose\\_his\\_job\\_over\\_this/](http://www.theregister.co.uk/2016/08/04/icanns_general_counsel_should_lose_his_job_over_this/)

# 'ICANN's general counsel should lose his job over this'

Dot Registry CEO reacts to extraordinary judgment against DNS overseer

By [Chris Williams](#), Editor in Chief 4 Aug 2016 at 16:04

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Shaul Jolles ... CEO of Dot Registry

**Interview** It has been four years since Shaul Jolles, as CEO of Dot Registry, filed applications for five new internet extensions – .corp, .inc, .llc, .llp and .ltd – and wrote a check for just under \$1m to have them considered by domain name system overseer ICANN.

Unlike the other applicants for the three US corporate entity suffixes .inc, .llc, .llp – and there are no fewer than 21 other applicants – Dot Registry took the unusual step of applying for a special "community" status, meaning that the company would have to jump over a number of additional hurdles to be given priority status.

And in order to pass that test, he spent over a year enlisting Secretaries of State right across the United States to officially support his application.

Unlike the other companies that would sell .inc domains on the open market to anyone, Dot Registry will instead require people who want a domain to have an actual incorporated business (.inc) or a limited company (.llc) or limited partnership (.llp), and to be registered with their state to get it.

Concerned that the wide-open use of legal business suffixes would lead to an explosion in scams, the states signed up. And Dot Registry sent another \$22,000 per name to have them evaluated by ICANN as "community" names.

Almost exactly two years to the day later, Jolles [received the answer](#) from the independent company that ICANN hired to carry out the evaluations, the Economist Intelligence Unit (EIU). He knew right away something was wrong.

## Up to a point

"My applications are good, really good. I would say they were the best of all those that were put in," he says, referring to the other 25 "community priority evaluation" or CPE applications. "But the moment I saw we got five points, I understood. There was no question here: I knew they were trying to fail us."

Out of a possible 16 points, of which applicants needed to score 14 to pass, Dot Registry's three applications had all hit an identical 5. It was so low a score that Jolles knew something wasn't right, and immediately started preparing for an official reconsideration of the decision by a subset of ICANN's board called the Board Governance Committee (BGC).

He started checking in with the different Secretaries of State to make sure nothing peculiar had happened and was immediately struck by some inconsistencies. "They didn't verify all the letters of support," he told us. "But then others had been sent multiple emails. One Secretary of State was actually sent 12 emails."

The emails were odd: the first one asked the secretary to confirm they had sent the letter. When they responded yes, they received another asking if they were authorized to send such a letter of support. When they answered yes, they were asked under what grounds they were authorized to do so. When they provided proof, they received another email asking them if they specifically endorsed the Dot Registry bid, and so on.

"From the very beginning I knew that, for some reason, there was going to be an issue with the evaluation," Jolles says.

When it wasn't ICANN's evaluators, it was his possible competitors'. One of them, he claims, went to a representative of the European Commission and convinced them that there were thousands of .inc companies in Europe that would be disadvantaged by Dot Registry's US-based bid. The representative drew up an objection and sent it to ICANN. When Jolles saw it, he got in contact and explained that there was no such conflict and that they had been misled.

The representative withdrew their objection and informed ICANN. But, Jolles found out two years later, ICANN never told the evaluators of the withdrawal, and even though it was published on ICANN's website, they never located it either. As a result, they worked on the assumption that European governments were opposed to the idea.

## **No cock-up**

That could be explained away as a simple cock-up, but the more Jolles dug into the evaluation of his application, the more he became convinced that something more sinister was going on.

He hired an expert to dig into all the other evaluations and compare them to his own, and discovered that the EIU had treated his applications differently from the others, even adding new requirements that didn't exist before.

Dot Registry produced an extensive rundown of mistakes and unusual circumstances in its application and sent it to ICANN's BGC, confident that it would undertake a full investigation. It didn't. In fact, the BGC did nothing at all with that work and relied solely on the advice of ICANN's own legal team to reject his request for reconsideration out of hand.

And so he [filed for a review](#) of that rejection using ICANN's last resort Independent Review Panel (IRP). Just under two years and nearly \$250,000 later, he received his answer: he had been working against ICANN's legal team the whole time.

The extent to which ICANN manipulated its own processes to reject Dot Registry's applications and then make it impossible for the company to find out why, or to have that decision reviewed, is almost Kafkaesque.

Far from being independent evaluators, documents provided to the IRP led it to conclude that the ICANN staff actually supervised the EIU and was "intimately involved" in the drafting of its reports. Incredibly, ICANN staff proposed the wording that the EIU's zero-scoring on one key section of the report stemmed from "research" that the EIU was supposed to have carried out. The IRP was unable to find any sign that such research existed.

"The whole thing is a sham," Jolles tells us. "My biggest takeaway from the judgment was that I wasn't

surprised."

**Sponsored:** [Minds Mastering Machines - Call for papers now open](#)

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Next page: **Hall of mirrors**

Page: [1](#) [2](#) [Next](#) →

Tips and corrections

15 Comments



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August 31, 2015

The Honorable  
Penny Pritzker  
United States Secretary of Commerce  
Herbert C. Hoover Building  
1401 Constitution Ave NW  
Washington District Of Columbia 20230  
United States

VIA EMAIL: TheSec@DOC.gov (August 31, 2015)

| CERTIFIED MAIL

Re: Request for Assistance with Personnel Compliance in IANA Contract # SA1301-12-CN-0035  
Applicant # 1-1710-92415

Dear Madam Secretary:

In 2011, the founders of planet.ECO LLC ("planet.ECO") set out to create a US-based business which would make a positive impact in the fight to reverse climate change. We had full faith that the United States Government and its agencies would protect our small disadvantaged business as we were met with various obstructions. We implore you as Secretary of the Department of Commerce to come to our aid and take action in the spirit of your declared promise to promote transparency and to create conditions which foster economic growth and opportunity. We trust that you will intervene where your subordinates have not.

**Background:**

On 7/1/1997 President William Clinton directed the Secretary of Commerce to privatize management of the Domain Name System ("DNS") in a manner that would allow for development of robust competition in management of Domain Names and Addresses. The Directive, in part, states:

*"I direct the Secretary of Commerce to support efforts to make the governance of the domain name system private and competitive and to create a contractually based self-regulatory regime that deals with potential conflicts between domain name usage and trademark laws on a global basis"*

All of our concerns solely relate to non-adherence to the declaration made by President Clinton, violations of Federal Laws, Rules, Regulations and non-compliance with Federal Contract SA1301-12-CN-0035 ("IANA Contract").

DNS is an asset of the United States Government, managed under the US DoC/NTIA “IANA Contract” and, due to the fact that all of our concerns pertain to the “IANA Contract”, the only method for true legal and binding resolution must come from the maker of the “IANA Contract” and owner of DNS, the United States Government. We therefore seek your assistance in obtaining corrective actions from the only person authorized "to make or approve any changes in any of the requirements of this contract", Contracting Officer, as shown in “IANA Contract” Clause G.1, CAM 1301.6 / Oct.2014, CAR 1352.201-70, Contracting Officer's Authority.

As the United States Government has always maintained exclusive authority over DNS, it is important for you to know the following facts:

1. Since 4/20/2008, planet.ECO has established "Constructive Use" of .ECO, as a trademark.
2. Since 2009 all .ECO gTLD contenders have been and still are infringing upon the .ECO trademark, in usage of “.ECO” in their gTLD applications, media, websites and elsewhere.
3. Since 1/20/2012, planet.ECO has established "Constructive Use" of .ECO, in DNS.
4. On 5/30/2012 planet.ECO responded to an announcement, allowing participation in Delegations of new gTLD Registry Operators. This process required a substantial \$185,000 application fee, approved by the United States Government and was one of the prerequisites in applying to become the registry operator of the .ECO generic Top Level Domain (gTLD).
5. On 9/24/2012 after accepting our application fee, the United States Government in draft proposal modified contract, disallowing planet.ECO LLC the same right protection afforded to all other gTLD applicants.
6. Since 1/24/2014 we have been seeking correction to errors and continue seeking remedy from the United States Government.
7. On 3/7/2014 planet.ECO successfully fulfilled all of its contract requirements necessary for the .ECO String Delegation, consistent with the “IANA Contract” and “IANA Contract” Clause C.2.9.2d, *Delegation and Redelegation of a Top Level Domain (gTLD)*.

It is worth noting planet.ECO LLC is identified by “IANA Contract” Clause C.1.3, as an Interested Party. Despite this, we have been treated differently, never being informed by any authorized person as to what the status of our gTLD application is and, moreover failing to understand why we are being delayed completion of the .ECO gTLD String Delegation. We have exhausted all administrative remedies and are seeking your intervention.

### **Sought Assistance from US Government to Correct Errors:**

On 3/25/2015 we attempted to contact the Contracting Officer Ms. Kathleen McGrath, signer of the IANA Contract SA 1301-12-CN-0035 and via phone, spoke with Ms. Tammy Journet who informed us that Ms. McGrath was no longer the Contracting Officer and was replaced by Mr. Garry Harris.

Immediately after speaking with Ms. Journet, via phone, we contacted the Contracting Officer Mr. Garry Harris, responsible for the management of the "IANA Contract". We sought assistance, verification of our status and provided our applicant and "IANA Contract" information. He immediately suggested we contact the Government Prime Contractor.

On 4/4/2015 as promised via call to Mr. Harris approximately 2 weeks earlier, we sent correspondence by email followed by U.S Mail certified letter, seeking our status. We received the same initial response Mr. Harris provided on phone call of 3/25/15, suggesting that we contact the Government Prime Contractor.

On 4/17/2015 shortly thereafter, we requested assistance from the Director of Acquisitions, Mr. Barry Berkowitz via email followed by U.S Mail certified letter. We received receipt of delivery but have yet to hear back. All the while, the US Government has not informed us of taking any action to investigate or correct any error.

On 4/30/2015 we received an alarming email from the Government stating that a breach of security occurred, involving the release of confidential information within our Application 1-1710-92415. We received this information over a year after the illegal act had occurred. Confidential business information was hacked and we have no idea how much irreparable damage has been done and leak of Trade Secrets after relying on "IANA Contract" Clause C.1.4.

Although we submitted trade secrets and banking information, all with the understanding that our application responses would be secured, as stated in "IANA Contract" Clause H.10, we now fear and believe our stolen information is being used or will be used to harm our company.

**Our Request and/or Prayer:**

As aforementioned, we are a small disadvantaged business seeking assistance from the United States Government for the correction of errors, allowing our business to be treated differently and preventing us from the rightful Delegation in becoming the registry operators for .ECO, as intended in Clause I.9, FAR 52.203-13 Government Contractor Code of Business Ethics and Conduct.

We can no longer continue to speculate as to cause of delay and request that actions be taken by the United States Government to remove the delay of Delegation to planet.ECO LLC. Delay of Delegation has resulted in irreparable harm onto planet.ECO LLC. Further delay will worsen harm. As an Interested Party, we simply deserve more transparency pertaining to contract performance, per "IANA Contract" Clause C.2.6, which may help in providing clarity as to why we have been delayed, since 3/7/2014.

Sincerely,



Jean D. William  
CEO/Chairman  
planet.ECO LLC (SDB)

October 21, 2015

The Honorable  
Penny Pritzker  
United States Secretary of Commerce  
Herbert C. Hoover Building  
1401 Constitution Ave NW  
Washington District Of Columbia 20230  
United States

VIA EMAIL: TheSec@DOC.gov, PPritzker@doc.gov (October 21, 2015) | CERTIFIED MAIL

Re: Request for Response to letter sent August 31, 2015 - Assistance with Personnel Compliance in IANA Contract # SA1301-12-CN-0035 | Applicant # 1-1710-92415

Dear Madam Secretary,

We would like to know when we may expect to receive an update to our request made to you on August 31, 2015 (please see attached). We have nearly exhausted all legal efforts in hopes of mitigating the disturbing circumstances, causing planet.ECO LLC, a Small Disadvantaged Business, to submit charges of Conflict of Interest and Trademark Infringement to the Government. Inherent in these charges are violations of Federal Laws, Rules, Regulations and non-compliance with Federal Contract SA1301-12-CN-0035 ("IANA Contract"). There are also issues of non-compliance with the July 1, 1997 directive of President William J. Clinton, 'A Framework For Global Electronic Commerce', where the President states the following directive in paragraph 5 –

*"I direct the Secretary of Commerce to support efforts to make the governance of the domain name system private and **competitive** and to create a contractually based self-regulatory regime that **deals with potential conflicts between domain name usage and trademark laws** on a global basis."*

Our initial charges of Conflict of Interest and Trademark Infringement have never deviated, since brought to the attention of your NTIA/DOC staff on January 24, 2014, yet we have never been told that our charges are wrong nor have been properly addressed by anyone in the Department of Commerce.

We further requested a status update from you and your Contracting Officers Ms. Tammy L. Journet and, Mr. Garry Harris and we have not heard back from any party.

All of this is of course, after paying \$185,000 to the Government and being compliant with all rules and regulation necessary to passing the gTLD evaluation, per the Contract. Our company should have been allowed the approval for delegation, received delegation and in business like the other contenders that have been allowed to unlawfully compete against us. Instead, we have been treated differently and continue to be treated differently and placed at a severe disadvantage against our competitors.

All the while, we continue to await receipt of status from the Government and remain subjected to an increasingly higher barrier of entry.

We seek your assistance and await a response.

Sincerely,



Jean D. William  
CEO/Chairman  
planet.ECO LLC (SDB)

----- Original Message -----

Subject: RE: An Unsolicited Proposal Complaint - Contract #  
SA1301-12-CN-0035 / Applicant # 1-1710-92415

From: <[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)>

Date: Wed, August 17, 2016 12:37 pm

To: [TheSec@DOC.gov](mailto:TheSec@DOC.gov), [PPritzker@doc.gov](mailto:PPritzker@doc.gov), [lstrickling@ntia.doc.gov](mailto:lstrickling@ntia.doc.gov),  
[BBerkowitz@doc.gov](mailto:BBerkowitz@doc.gov)

Cc: "Moses Boone" <[moses.boone@thedoteco.com](mailto:moses.boone@thedoteco.com)>, "Jean William"  
<[jean.william@thedoteco.com](mailto:jean.william@thedoteco.com)>

The Honorable  
Penny Pritzker  
United States Secretary of Commerce  
Herbert C. Hoover Building  
1401 Constitution Ave NW  
Washington District Of Columbia 20230  
United States  
Dear Madam Secretary:

Attached please find our filing, all in accordance with the Disputes Clause.

On August 15, 2016 we sent the Contracting Officer managing the IANA functions Contract SA1301-12-CN-0035 a complaint and in return we received from the Contracting Officer an email directing us to Mr. Shane Kram. We are not aware that the point of contact is the Contracting Officer. Can you please assist and direct us to the proper Contracting Officer, as it relates to SA1301-12-CN-0035?

Respectfully,

Jean William

**Contracting Officer (0035) - Error in New gTLD Program String Delegation Readiness Report**

TheSec@doc.gov,  
PPritzker@doc.gov,  
Istrickling@ntia.doc.gov,  
BBerkowitz@doc.gov,  
TJournet@doc.gov

**jeanwilliam@planetdoteco.com** Mon, Sep 12, 2016 at 4:20 PM

The Honorable

Penny Pritzker

United States Secretary of Commerce

Herbert C. Hoover Building

1401 Constitution Ave NW

Washington District Of Columbia 20230

United States

Dear Madam Secretary:

Please see the attached pertaining to the Delegation of .ECO.

Respectfully, Jean William

## ATTACHMENT

Contracting Officer c/o Mr. Barry Berkowitz U.S. Department of Commerce Commerce Acquisition Solutions Division Office of Acquisition Management 1401 Constitution Avenue, NW, Room 6521 Washington, DC 20230

cc: VIA EMAIL: TheSec@DOC.gov, PPrizker@doc.gov, lstrickling@ntia.doc.gov, BBerkowitz@doc.gov, TJournet@doc.gov

VIA CERTIFIED MAIL: Madam Penny Pritzker, Mr. Larry Strickling, Mr. Barry Berkowitz, Ms. Tammy Journet

Re: Error in New gTLD Program String Delegation Readiness Report.docx Contract # SA1301-12-CN-0035 / Applicant # 1-1710-92415

Dear Contracting Officer,

We have received a copy of the New gTLD Program String Delegation Readiness Report for Application ID: 1-912-59314, String: ECO, Report Date: 2016-08-17 PST, and have noticed an error in Objection Process 1 listed on page 2 of 3.

The answer to question 1 (Q: Were objections filed against the Application? A: No) is inaccurate as it relates to the Delegation of .ECO. .ECO® has previously objected on several occasions. Please See our Dispute Filing to Contracting Officer in a Letter dated August 17, 2016, that was previously sent to

you, which illustrates our objection and other things. This is an error and you cannot go forward. We respectfully request the withdrawal of the applicant's name, as previously requested in our Filing.

Sincerely,

Jean D. William

# 2016-05-20, at 16:44 PM Where's the CO, Madam Secretary?

Created: 2016-06-22 08:02 AM  
Source: <https://mail.google.com/mail/u/0/#search/aj/154caa3753f25369>

On May 20, 2016, at 4:44 PM, "[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)" <[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)> wrote:

The Honorable  
Penny Pritzker  
United States Secretary of Commerce  
Herbert C. Hoover Building  
1401 Constitution Ave NW  
Washington District Of Columbia 20230  
United States

Dear Madam Secretary:

Yesterday, as normally done since February 18, 2015, we sent an email to the Contracting Officer managing the IANA functions Contract SA1301-12-CN-0035 / Applicant 1-1710-92415.

Attached please find the following email, "Undeliverable email to Ms. Lavonne Jinks-Umstead.pdf", we received in response to our email sent to Contracting Officer Ms. LaVonne Jinks-Umstead.

Searching for Ms. Jinks-Umstead we immediately followed up by phone calls to the Department of Acquisitions only to receive a series of dropped calls and eventually re-directed to the voicemail of General Council.

Unable to locate Ms. Jinks-Umstead we forward the intended communications to the IANA functions 0035 Contracting Officer to your office.

Respectfully,

Jean William

# 2016-05-20, at 19:34 Rodenbaugh Law COI - IANA Contract Barry Berkowitz responds

**Created:** 2016-06-22 07:58 AM  
**Source:** <https://mail.google.com/mail/u/0/#search/aj/154caa3753f25369>

Subject: Re: [FWD: Re: Rodenbaugh Law COI - IANA Contract #

SA1301-12-CN-0035 / Applicant # 1-1710-92415 (planet.ECO LLC)]

From: "Berkowitz, Barry" <[BBerkowitz@doc.gov](mailto:BBerkowitz@doc.gov)>

Date: Fri, May 20, 2016 7:34 pm

To: "[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)" <[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)>

Cc: "Ajayi, Akinsola" <[AAjayi@doc.gov](mailto:AAjayi@doc.gov)>, "Journet, Tammy"

<[TJournet@doc.gov](mailto:TJournet@doc.gov)>

Ms. William,

Thank you for your email. I am sorry you had issues contacting Ms. Jinks-Umstead, but Ms. Jinks-Umstead has retired and left Government service. Her replacement is Mr. Ajayi Akinsola who is copied on this email will take the required actions associated with your email. Mr. Akinsola may be reached at: (202) 482-2810, or at [aajayi@doc.gov](mailto:aajayi@doc.gov).

Again I am sorry you had problems contacting the contracting officer, but hopefully this email will clear up the problem. Please do not hesitate to reach out Mr. Akinsola if you have any questions.

Cheers

Barry Berkowitz

----- Original Message -----

Subject: RE: An Unsolicited Proposal Complaint - Contract #  
SA1301-12-CN-0035 / Applicant # 1-1710-92415

From: <[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)>

Date: Wed, August 17, 2016 12:37 pm

To: [TheSec@DOC.gov](mailto:TheSec@DOC.gov), [PPritzker@doc.gov](mailto:PPritzker@doc.gov), [lstrickling@ntia.doc.gov](mailto:lstrickling@ntia.doc.gov),  
[BBerkowitz@doc.gov](mailto:BBerkowitz@doc.gov)

Cc: "Moses Boone" <[moses.boone@thedoteco.com](mailto:moses.boone@thedoteco.com)>, "Jean William"  
<[jean.william@thedoteco.com](mailto:jean.william@thedoteco.com)>

The Honorable  
Penny Pritzker  
United States Secretary of Commerce  
Herbert C. Hoover Building  
1401 Constitution Ave NW  
Washington District Of Columbia 20230  
United States  
Dear Madam Secretary:

Attached please find our filing, all in accordance with the Disputes Clause.

On August 15, 2016 we sent the Contracting Officer managing the IANA functions Contract SA1301-12-CN-0035 a complaint and in return we received from the Contracting Officer an email directing us to Mr. Shane Kram. We are not aware that the point of contact is the Contracting Officer. Can you please assist and direct us to the proper Contracting Officer, as it relates to SA1301-12-CN-0035?

Respectfully,

Jean William

August 17, 2016

Contracting Officer  
U.S. Department of Commerce  
Commerce Acquisition Solutions Division  
Office of Acquisition Management  
1401 Constitution Avenue, NW, Room 6521  
Washington, DC 20230  
VIA EMAIL: aajayi@doc.gov

CERTIFIED MAIL

Re: An Unsolicited Proposal  
Contract # SA1301-12-CN-0035 / Applicant # 1-1710-92415

Dear Contracting Officer,

1. Serious and willful violations have taken place with regard to IANA Functions Contract SA1301-12-CN-0035 Clause G.1, which states in part, ***“The Contracting Officer is the only person authorized to make or approve any changes in any of the requirements of this contract, and, notwithstanding any provisions contained elsewhere in this contract, the said authority remains solely in the Contracting Officer. In the event the contractor makes any changes at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract terms and conditions, including price”***. On August 3, 2016 and August 10, 2016 your no cost, non-profit Contractor ICANN (“Contractor”) sent emails directly to .ECO® and furthermore, the emails contained fraudulent statements. (See Exhibit 1 - Email1 - August 3, 2016 and Exhibit 2 - Email2 - August 10, 2016)
2. The wording of the August 3, 2016 email from Contractor appears to be in violation of Contract Clause I.9 - Contractor Code of Business Ethics and Conduct (FAR 52.203-13), as this email states it is in response to an inquiry/request from planet.ECO. No inquiry was made from planet.ECO LLC (“.ECO®”) to Contractor. We are totally unaware of any actions taken by myself or any other authorized member of my board or company in attempting to make contact with any of Contractor or its members. As an Interested and affected party to the IANA Functions Contract, and in accordance with Contract Clause C.1.3, .ECO® would not make such an inquiry of Contractor.

3. For .ECO<sup>®</sup> to respond to Contractor's emails would only create confusion and thus, we will only respond to the directives issued by the Contracting Officer in the execution of a Federal Requirement, all in accordance with Contract Clauses; H.11 Compliance with Laws (CAR 1352.209-73), I.64 - Compliance with the Laws (48 CFR 1352.209-73).
4. In addition to purporting to be a response to an inquiry from .ECO<sup>®</sup>, the August 3, 2016 email from Contractor clearly indicates the Contracting Officer, per Contract Clause G.1, Contracting Officer's Authority (CAR 1352.201-70), has entered into Registry Agreement with Big Room Inc., a Canadian Corporation. This would be in violation of Contract Clause I.9 - Contractor Code of Business Ethics and Conduct (FAR 52.203-13), as Big Room Inc. has been/is operating unlawfully and in bad faith to become the .ECO Registry Operator.
5. Furthermore the August 3, 2016 email from Contractor indicates .ECO<sup>®</sup> Will Not Proceed and may request a refund for the remaining \$37,000 of the \$185,000 provided. Although .ECO<sup>®</sup> also provided a copy of its ".ECO<sup>®</sup>" USPTO trademark assignment (See Exhibit 3 - .ECO USPTO Trademark assignment) on May 30, 2012 in exchange for a fair and transparent evaluation process, such an evaluation has never occurred.
6. The August 3, 2016 email from Contractor is another source of harm to Protester ECO<sup>®</sup>, and thus .ECO<sup>®</sup> finds it necessary to once again reiterate facts it provided to you earlier which outline the seriousness of the illegal matters that have and continue bringing harm unto .ECO<sup>®</sup>, a U.S. based small disadvantaged entrepreneurial business ("SDB") that has been taken advantage of while complying with all contractual requirements and competing against former no cost, non-profit Contractor ICANN's Managerial Personnel for the root zone delegation of .ECO (C.2.9.2d).
7. Adherence to Contract Clause I.9 - Contractor Code of Business Ethics and Conduct (FAR 52.203-13) and examination of Big Room Inc's previous actions would prohibit the Contracting Officer from entering into a Registry Agreement with Big Room Inc.
8. In 2007, Big Room Inc. was co-founded by one of Contractor's Managerial Personnel. Nearing the tail end of Big Room Inc's Ploy the company's intention to willfully encroach and Infringe upon .ECO<sup>®</sup>'s trademark rights are ever visible as the company has set forth, since 2007 to win .ECO, and has not deviated seeking delegation, in the hopes of finally receiving a favorable decision from you in order to legitimize and validate its unlawful Registry Agreement and bad-faith activities.
9. In January 2007, while co-founder Jacob Malthouse worked as an executive for Contractor and 5 years prior to the public offering of the gTLD Program, Malthouse's colleague Trevor

10. Bowden decided to purchase .dot-ECO.org and .dot-ECO.Info (“dotECO” Domains) which both co-founders later only used to campaign Big Room’s so-called .ECO Community (created in or around 2009). For this reason alone, the .ECO Community applicant, Big Room Inc. appears to have an unfair and an unlawful advantage due to either inside information, front-running, gaming of the New gTLD Program and/or Cyber Squatting. Also in 2007, Bowden and Malthouse developed Big Room Inc's Business Plan while Malthouse worked for Contractor. Malthouse resigned from ICANN in September 2007 to co-found Big Room Inc. on November 14, 2007.
11. In 2008 Big Room Inc. filed 2 U.S. Trademark applications and a third in 2009 attempting to obtain trademark rights to .ECO trademarks. On December 7, 2009 the USPTO wrote to Big Room Inc. informing it of its determination and position. The USPTO in part writes, **“Registration of the applied-for mark is refused because of a likelihood of confusion with the mark in U.S. Registration No. 3716170. Trademark Act Section 2(d), 15 U.S.C. §1052(d); see TMEP §§1207.01 et seq.”** (See Exhibit 4 - USPTO’s Determination and <https://tsdr.uspto.gov/documentviewer?caseId=sn77523015&docId=OOA20091207101341#docIndex=9&page=1> Big Room Inc. continued to willfully encroach and infringe upon .ECO® and on December 2011 Big Room seeks a worldwide trademark license from .ECO® sending an email offer to .ECO® for, **“the sum of US\$15,000 in exchange for a worldwide license to use the Mark in connection with our application for the TLD and our operation of the TLD, including all uses of the Mark in the ordinary course of operating and promoting the TLD. We would propose to pay you US\$5,000 at the time of license signing, and US\$10,000 upon execution of a registry agreement with ICANN.”** The offer was not accepted and Big Room Inc. continued to willfully infringed upon our ECO® trademark and began filing numerous frivolous trademark petitions to dislodge .ECO® trademark rights so it could obtain unfair priority to use towards delegation. This conduct is in violation of Contract Clause I.9 - FAR 52.203-13 Contractor Code of Business Ethics and Conduct.
12. Big Room Inc. has failed 6 times in the USPTO in its attempts to obtain .ECO® Priority via applying for U.S. .ECO trademark rights and subjecting .ECO® to frivolous trademark cancellation petitions in the Trademark Trial and Appeals Board. Each attempt for trademark cancellation by Petitioner Big Room Inc. was met with the USPTO/TTAB Board Termination or Withdrawal by Petitioner. In the final trademark cancellation, a motion to dismiss was GRANTED and Petitioner Big Room Inc. was allowed and did take an opportunity to cure its defect and later on made a motion to WITHDRAW. (See Exhibit 5 - Big Room USPTO filings) In a long line of a series of unlawful activities, Big Room Inc. created a so-called .ECO Community, seeking to obtain its long sought after .ECO via a “Community Priority”. This is unethical as Big Room Inc. participated in the development of the Community Priority

Mechanism with Contractor; another violation of Contract Clause I.9 Contractor Code of Business Ethics and Conduct (FAR 52.203-13).

13. In response to Big Room Inc's. second attempt to obtain a U.S. .ECO trademark, on December 7, 2009 the USPTO provided applicant Big Room with a determination which in part read, ***"Application Serial No. 77452991 has now matured into a registered mark."... "The overriding concern is not only to prevent buyer confusion as to the source of the goods and/or services, but to protect the registrant from adverse commercial impact due to use of a similar mark by a newcomer. See In re Shell Oil Co., 992 F.2d 1204, 1208, 26 USPQ2d 1687, 1690 (Fed. Cir. 1993). Therefore, any doubt regarding a likelihood of confusion determination is resolved in favor of the registrant."***
14. Priority is and always has been used as a strategic ploy by others and Big Room Inc., a company co-founded by Managerial Personnel of Contractor. Specifically, Jacob Malthouse, participated in the development of the Community Priority Evaluation ("CPE") process and as a significant contributor, has participated in providing a vast majority of Community Priority Evaluation content onto the Contractor's wiki Community Priority Evaluation Page and the Contractor's wiki .ECO Page that it also managed, while infringing upon .ECO®'s rights and disregarding USPTO's determination and clearly a Conflict of Interest C.6, H.9. (See Exhibit 6 - Malthouse Contractor's wiki Contributions)
15. Regardless of the Community Priority expertise and / or involvement of Malthouse, Big Room Inc. was well aware of the potential, now actual, .ECO trademark issues, as indicated from the December 7, 2009 USPTO refusal letter. Big Room Inc. was informed of the USPTO's determination regarding the .ECO registered .ECO mark by planet.ECO LLC (co-founder Moses Boone) and their .ECO applied for mark, years ahead of the gTLD public application window. Although no one has commented on Big Room's appeared intentions to game the gTLD system via .ECO trademarks, the USPTO writes, ***"the marks are sufficiently similar to cause a likelihood of confusion under Trademark Act Section 2(d)" and "the services provided by the registrant, the applicant's services would clearly be within the registrant's normal fields of expansion" and "the contemporaneous use of highly similar marks that are phonetic equivalents, consumers are likely to conclude that the services are related and originate from a single source. As such, registration must be refused under Trademark Act Section 2(d)"***.  
(<https://tsdr.uspto.gov/documentviewer?caseId=sn77523015&docId=OOA20091207101341#docIndex=9&page=1>)
16. Nonetheless, Big Room Inc. who has no legal basis for seeking to interfere with .ECO®'s trademark rights or willfully use a counterfeit mark in the United States, has been and is still

allowed to continue to act in unfair competition, encroaching and usurping .ECO®'s trademark rights under U.S. Trademark Law. The newly created CPE mechanism, foreign to Federal Procurement, is being used to grant priority to a so-called .ECO Community applicant priority, with no consideration to .ECO®'s highly related Internet Services trademark and in conflict with U.S. Trademark Law. (See Exhibit 7 - The .ECO Ploy (Attached)) It is illegal and in violation of the IANA Functions

17. Contract SA1301-12-CN-0035 and not permitted anywhere under Federal Regulations; as such the aforementioned actions would be in willful violation of Contract Clauses:
  - C.2.9.2d - Delegation and Redelelegation of a Generic Top Level Domain (gTLD)
  - C.6 - Conflict of Interest Requirements
  - F.5 - Government Rights to Deliverables
  - G.1- Contracting Officer's Authority (CAR 1352.201-70)
  - H.9- Organizational Conflict of Interest ( CAR 1352.209-74)
  - H.11- Compliance with Laws (CAR 1352.209-73)
  - I.9 - Contractor Code of Business Ethics and Conduct (FAR 52.203-13)
18. Per Clause C.2.9.2d which in part reads: ***“Contractor must provide documentation verifying that ICANN followed its own policy framework and was supportive of the global public interest...”*** Willful Trademark and Conflict of Interest violations against a gTLD Small Disadvantaged Business or any Applicant does not support global public interest and violates Clause C.2.9.2d.
19. Since 2008 .ECO® has established constructive nationwide priority covering highly related Internet services (Exhibit 8 - .ECO® Trademark) and prior to applying for .ECO® gTLD evaluation offered and continues to offer a wide variety of services online in the United States under its mark .ECO®, including domain name registration services, web hosting services, SSL & security services, email account services, marketing tools, and website building services. A complete detailed list of the services for each of these categories can be found on the most current site, <http://www.dot-eco.com>
20. .ECO® continues to rightfully and lawfully seek expansion of its trademark services and respectfully requests your response to the email sent to you on June 7, 2016. (See Exhibit 8 - Email to Contracting Officer June 7, 2016)
21. In performing the IANA functions as called for in Section C.2.9.2d of the IANA Functions contract, ICANN's IANA Department will verify that all gTLD delegation redelegation requests are consistent with the approved and documented processes for making such

22. requests.<sup>1</sup> It is clear that applicant Big Room Inc. and other .ECO gTLD applicants (See Exhibit 9 COI Letter to SBA Ombudsman 6\_5\_2014) are in Conflict of Interest and have infringed upon our .ECO® trademark and therefore shall not qualify for such a request to be granted.
23. In light of the foregoing, .ECO®, respectfully requests that you rescind every word and every paragraph mentioned in any framework, process or procedure regarding the illegal / unconstitutional Community Priority Evaluation (CPE) process, all in accordance with Module 1 Sections: 1.2.3, 1.2.3.1 and Module 4 Sections: 4.2, 4.2.1, 4.2.2, 4.2.3.
24. .ECO® also respectfully requests that the unconstitutional Module 6; section 6 also be rescinded.
25. In conclusion, .ECO®, reiterates its request that you correct the aforementioned errors and delegate .ECO Registry Operations to the only qualified applicant standing, .ECO®, all in accordance with
  - CAM 1301.6
  - Clauses: C.2.9.2d
  - C.6 Conflict of Interest Requirements
  - G.1, Contracting Officer's Authority (CAR 1352.201-70)
  - H.9, Organizational Conflict of Interest (CAR 1352.209-74)
  - H.11, Compliance with Laws (CAR 1352.209-73)
  - I.9, Contractor Code of Business Ethics and Conduct (FAR 52.203-13)
26. In accordance with 48 CFR 33.211 Contracting Officers Decision, .ECO request the final decision from the Contracting Officer responsible for SA1301-12-CN-0035.

---

<sup>1</sup> Consultation on gTLD Delegation and Redelagation User Instructions and Source of Policy and Procedures

Statement of Certification

I certify that to the best of my knowledge and belief all of the information on this form is correct. I also understand that failure to report completely and accurately may result in criminal or civil penalties and any other applicable federal statutes.

Sincerely,



Jean D. William  
CEO/Chairman  
planet.ECO LLC (“.ECO”) (SDB)

Exhibits

Exhibit 1 - August 3, 2016

|   |
|---|
|  <p>New Generic Top-Level<br/><b>Domains</b></p>   |
| <p>Dear Jean William:</p> <p>Thank you for contacting New gTLD Customer Service. This serves as a resolution to your recent inquiry: 00228057.<br/>This case was about:</p> <p>Account: Planet Dot Eco, LLC<br/>Subject: Reminder Regarding Withdrawal/Refund<br/>Description: Dear Jean William,</p> <p>This is a courtesy notification that the prevailing .ECO applicant has entered into a Registry Agreement with ICANN (<a href="https://www.icann.org/resources/agreement/eco-2016-07-08-en">https://www.icann.org/resources/agreement/eco-2016-07-08-en</a>). As previously communicated with the results of the CPE, the status of your application for .ECO was updated to “Will Not Proceed”. If a contention set has been resolved by CPE, the applications other than the prevailing community application in the contention set are eligible for a 35% refund, except for in cases where the application in question participated in Extended Evaluation or was the subject of an Objection. Pursuant to Section 1.5.1 of the Applicant Guidebook, your application is eligible for a refund of 20%, or \$37,000, as it has completed Extended Evaluation. To be issued a refund of \$37,000, the application must be withdrawn by the Primary Contact via the ICANN Customer Portal.</p> <p>Thank you for your timely attention to this matter. If you have any questions about this message, please contact us at <a href="mailto:globalsupport@icann.org">globalsupport@icann.org</a>.</p> <p>Thank you and best regards,</p> <p>Jared Erwin<br/>New gTLD Operations<br/>If you have any questions, please contact New gTLD Customer Service via the CSC Portal at <a href="https://myicann.secure.force.com/">https://myicann.secure.force.com/</a>.<br/>This is a system-generated email. Please do not respond to this email.</p> |
| <p>planet.eco<br/>Jean William - Chairman<br/>address: Stamford, CT 06902<br/>email: <a href="mailto:jeanwilliam@planetdoteco.com">jeanwilliam@planetdoteco.com</a><br/>website: <a href="http://www.planetdoteco.com">www.planetdoteco.com</a><br/>office: 203-517-0929<br/>cell: 203-921-8829</p>   |

**Exhibit 2 - Email2 - August 10, 2016**

----- Original Message -----

Subject: A comment has been added to case 00228057  
From: New gTLD Customer Service <[no-reply-gtld@icann.org](mailto:no-reply-gtld@icann.org)>  
Date: Wed, August 10, 2016 12:11 pm  
To: "jeanwilliam@planetdoteco.com" <[jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)>



Dear Jean William:

Please note that a new case comment has been added to this case. [Click Here](#) to login to the Customer Service Portal and view the case details.

Case Information:

CASE NUMBER: 00228057  
ACCOUNT NAME: Planet Dot Eco, LLC  
APPLICATION ID: 1-1710-92415  
SUBJECT: Reminder Regarding Withdrawal/Refund

Kind regards,  
ICANN Customer Service  
Email: [newgtld@icann.org](mailto:newgtld@icann.org)

DISCLAIMER: This email is for information only and does not represent all requirements and criteria that the applicant must satisfy. ICANN is not providing legal, financial, business or any other kind of advice. This email does not represent a modification to the Applicant Guidebook, or the terms and conditions to the new gTLD program. This email also does not represent a waiver of any ICANN policy, procedure or agreement. In the event that any information provided in this email appears to be inconsistent with any information published elsewhere by ICANN, please do not rely on this email without confirmation or clarification from ICANN.

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### Exhibit 3 - .ECO USPTO Trademark assignment

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#### Trademark Assignment Abstract of Title

**Total Assignments: 2**  
**Serial #:** [77452991](#)      **Filing Dt:** 04/20/2008      **Reg #:** [3716170](#)      **Reg. Dt:** 11/24/2009  
**Registrant:** Colored Planet Connexion  
**Mark:** .ECO

**Assignment: 1**  
**Reel/Frame:** [4715/0630](#)      **Received:** 02/07/2012      **Recorded:** 01/29/2012      **Pages:** 2  
**Conveyance:** ASSIGNS THE ENTIRE INTEREST  
**Assignor:** [BOONE, MOSES](#)      **Exec Dt:** 01/29/2012  
**Entity Type:** INDIVIDUAL  
**Citizenship:** UNITED STATES  
**Entity Type:** LIMITED LIABILITY COMPANY  
**Citizenship:** UNITED STATES  
**Assignee:** [PLANET.ECO.LLC](#)  
**Composed of:**  
 COMPOSED OF JEAN WILLIAM, CEO MOSES BOONE, PRES.  
 45 WEST NORTH ST  
 STAMFORD, CONNECTICUT 06902  
**Correspondent:** COLORED PLANET CONNEXION  
 40 STIMSON RD  
 NEW HAVEN, CONNECTICUT 06511

**Assignment: 2**  
**Reel/Frame:** [4716/0715](#)      **Received:** 02/10/2012      **Recorded:** 01/29/2012      **Pages:** 2  
**Conveyance:** ASSIGNS THE ENTIRE INTEREST  
**Assignor:** [BOONE, MOSES](#)      **Exec Dt:** 01/29/2012  
**Entity Type:** INDIVIDUAL  
**Citizenship:** UNITED STATES  
**Entity Type:** LIMITED LIABILITY COMPANY  
**Citizenship:** CONNECTICUT  
**Assignee:** [PLANET.ECO.LLC](#)  
**Composed of:**  
 COMPOSED OF JEAN WILLIAM, CEO MOSES BOONE PRES.  
 45 WEST NORTH ST  
 STAMFORD, CONNECTICUT 06902

### Exhibit 4 - USPTO's Determination

Print: Dec 7, 2009      77452991

**DESIGN MARK**  
**Serial Number**  
77452991  
**Status**  
REGISTERED  
**Word Mark**  
.ECO  
**Standard Character Mark**  
Yes  
**Registration Number**  
3716170  
**Date Registered**  
2009/11/24  
**Type of Mark**  
SERVICE MARK  
**Register**  
PRINCIPAL  
**Mark Drawing Code**  
(4) STANDARD CHARACTER MARK  
**Owner**  
Colored Planet Connection DBA Colored Planet CORPORATION CONNECTICUT  
40 Stimson RD New Haven CONNECTICUT 06511  
**Goods/Services**  
Class Status -- ACTIVE. IC 042. US 100 101. G & S: Design, creation, hosting and maintenance of internet sites for third parties; Hosting of digital content on the Internet; Providing specific information as requested by customers via the Internet. First Use: 2008/12/02. First Use In Commerce: 2009/09/18.  
**Filing Date**  
2008/04/20  
**Examining Attorney**  
BENMAMAN, ALICE

### Exhibit 5 - Big Room USPTO filings



**United States Patent and Trademark Office**

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**TTABVue. Trademark Trial and Appeal Board Inquiry System**

## Summary

**Query:** Proceeding Status is: ALL  
**and** Party Name contains all words: BIG ROOM  
**Number of results:** 2

| Proceeding Filing Date                 | Defendant(s), Property(ies)  | Plaintiff(s), Property(ies)    |
|--|--|--------------------------------|
| <a href="#">92060403</a><br>11/20/2014 | <a href="#">planet.ECO LLC</a><br><b>Mark:</b> .ECO <b>S#:</b> <a href="#">77452991</a> <b>R#:</b> <a href="#">3716170</a> | <a href="#">Big Room, Inc.</a> |
| <a href="#">92055197</a><br>02/17/2012 | <a href="#">Planet.Eco LLC</a><br><b>Mark:</b> .ECO <b>S#:</b> <a href="#">77452991</a> <b>R#:</b> <a href="#">3716170</a> | <a href="#">Big Room, Inc.</a> |

Results as of 08/14/2016 11:41 AM



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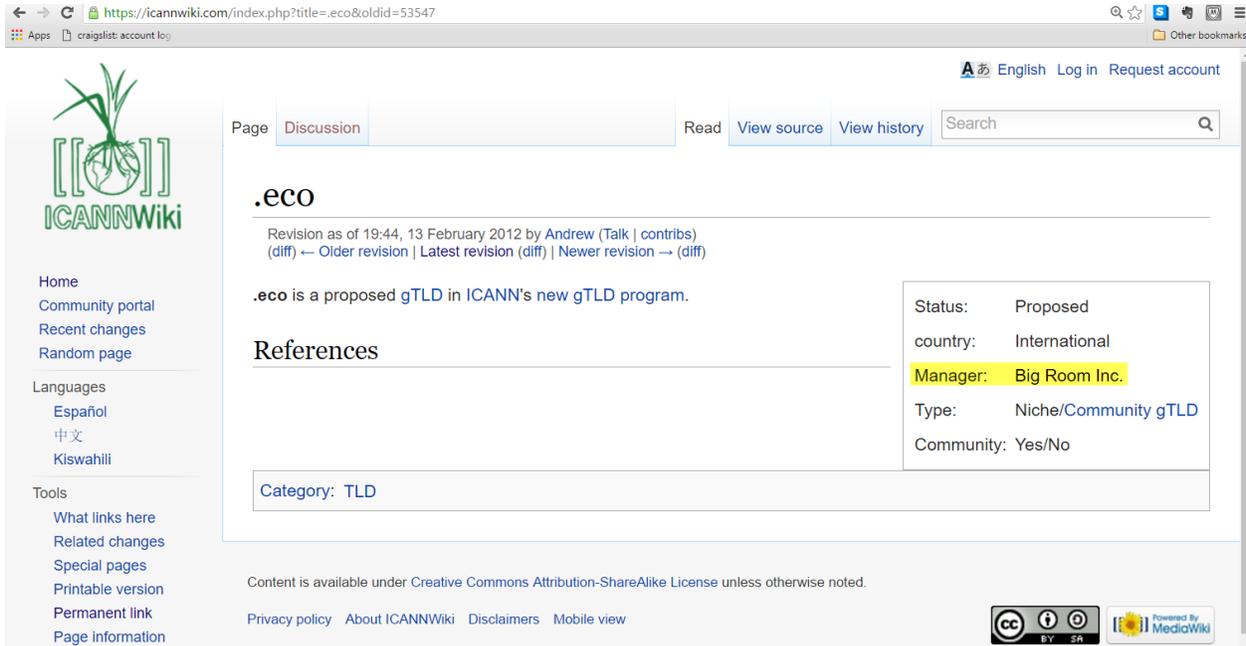
List At:  OR  to record:  **14 Records**

**Refine Search**

**Current Search:** S1:  docs: 14 occ: 42

|    | Serial Number | Reg. Number | Word Mark          | Check Status | Live/Dead |
|----|---------------|-------------|--------------------|--------------|-----------|
| 1  | 79017737      |             | OMNI               | TSDR         | DEAD      |
| 2  | 79049189      | 3485353     | OMNIPRO            | TSDR         | DEAD      |
| 3  | 79041963      | 3480906     | OMNIGRIP           | TSDR         | DEAD      |
| 4  | 79038448      | 3454013     | ENERGIZE YOUR LIFE | TSDR         | DEAD      |
| 5  | 79042053      | 3454097     | OMNITECH           | TSDR         | DEAD      |
| 6  | 79041419      | 3454087     | OMNISELECT         | TSDR         | DEAD      |
| 7  | 79058431      | 3744837     | ITRAINER           | TSDR         | LIVE      |
| 8  | 79055479      |             | DIALTECH           | TSDR         | DEAD      |
| 9  | 78923172      |             | HUMMER             | TSDR         | DEAD      |
| 10 | 77646029      |             | .ECO               | TSDR         | DEAD      |
| 11 | 77523015      |             | .ECO               | TSDR         | DEAD      |
| 12 | 77523010      |             | DOT ECO            | TSDR         | DEAD      |
| 13 | 74695159      |             |                    | TSDR         | DEAD      |
| 14 | 74694709      |             | APPLE BAG          | TSDR         | DEAD      |

## Exhibit 6 - Malthouse Contractor's wiki Contributions



The screenshot shows the ICANN Wiki page for the '.eco' domain. The page title is '.eco' and it is categorized as a TLD. The page content includes a revision history entry from February 13, 2012, by Andrew, stating that '.eco' is a proposed gTLD in ICANN's new gTLD program. A metadata box on the right lists the following details: Status: Proposed; country: International; Manager: Big Room Inc. (highlighted in yellow); Type: Niche/Community gTLD; and Community: Yes/No. The page also features a sidebar with navigation links, a search bar, and various tool icons at the bottom.

## Exhibit 7 - The .ECO Ploy (See Attached)

*Exhibit 8 - Email to Contracting Officer June 7, 2016*



environmentally beyond .COM

June 7, 2016

Mr. Ajayi Akinsola  
Contracting Officer  
U.S. Department of Commerce  
Commerce Acquisition Solutions Division  
Office of Acquisition Management  
1401 Constitution Avenue, NW, Room 6521  
Washington, DC 20230  
VIA EMAIL: [aaajayi@doc.gov](mailto:aaajayi@doc.gov) | CERTIFIED MAIL

Re: Response to Contracting Officer -  
Contract # SA1301-12-CN-0035 / Applicant # 1-1710-92415

Dear Sir,

Our response to your e-mail received on May 25, 2016 is as follows:

.ECO finds it interesting that your charges and statements are not supported by the FAR, the CAM or the IANA Functions Contract. Please make available what the Contracting Officer used in the email as related to the statements and charges made.

.ECO separates your email to what it finds to be 6 statements and responds to the statements.

.ECO has always been guided by the IANA Functions Contract 0035, U.S. Laws, Rules, and Regulations and is an interested and affected party. (See IANA Functions Contract Clause C.1.3)

Below please find statements from Contracting Officer and responses from .ECO

**Statement 1:**

*I am writing to let you know that your email was received but it cannot be acted on as you are not a party to IANA Contract # SA1301-12-CN-0035.*

**Response 1:**

.ECO DISAGREES. See IANA Functions Contract Clause C.1.3.

**Statement 2:**

*You also need to cease and desist from misrepresenting yourself as a party to the aforementioned contract.*

**Response 2:**

.ECO DISAGREES. See IANA Functions Contract Clause C.1.3.

because you care

1

planet.eco  
Jean William - Chairman  
address: Stamford, CT 06902  
email: [jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)  
website: [www.planetdoteco.com](http://www.planetdoteco.com)  
office: 203-517-0929  
cell: 203-921-8829

Jean William - Chairman

address: Stamford, CT 06902  
email: [jeanwilliam@planetdoteco.com](mailto:jeanwilliam@planetdoteco.com)  
website: [www.planetdoteco.com](http://www.planetdoteco.com)  
office: 203-517-0929  
cell: 203-921-8829

**Statement 3:**

*The contract is between the U.S. Department of Commerce and ICANN.*

**Response 3:**

**.ECO AGREES.**

**Statement 4:**

*You are neither a representative of ICANN nor affiliated in any way with ICANN.*

**Response 4:**

**.ECO AGREES.**

**Statement 5:**

*If you have dealings as an applicant with ICANN, you need to address those dealings directly with ICANN.*

**Response 5:**

**.ECO DISAGREES.** Please see F.5 Government Rights to Deliverables.

**Statement 6:**

*As the Contracting Officer on SA1301-12-CN-0035, there is nothing I can do for you as what you are requesting has got nothing to do with the contract as written.*

**Response 6:**

**.ECO DISAGREES.** Please see C.1.3 & F.5 Government Rights to Deliverables.

The above covers .ECO's interpretation of the contract.

In addition please see:

IANA Functions Contract 0035 Clauses C.6 and H.9  
IANA Functions Contract 0035 Clauses H.11

On several occasions .ECO has asked for information pertaining to the contracting officer.

.ECO now make the same request again for:

- The requisite Warrant and Letter of Appointment
- Resume
- Education level
- Documented procurement training
- Documented procurement experience
- Most Recent Performance Rating
- Documented Level of Authority per contract
- Current Conflict of Interest Disclosure
- Documented Waivers if applicable

- Copies of all Contract Descriptions

The request is guided by FAR 1.602

In light of the foregoing, .ECO respectfully request that the wrongful and illegal charges made by the Contracting Officer be rescinded, correct all that has been injurious and continues to cause irreparable harm to .ECO. Delegate the .ECO gTLD to .ECO immediately, allowing for its normal fields of expansion or please provide .ECO with your final decision.

Sincerely,



Jean D. William  
CEO/Chairman  
planet.ECO LLC (" .ECO") (SDB)

## Exhibits

Exhibit 1 - May 25, 2016

Good morning Mr. William,

I am writing to let you know that your email was received but it cannot be acted on as you are not a party to IANA Contract # SA1301-12-CN-0035. You also need to cease and desist from misrepresenting yourself as a party to the aforementioned contract. The contract is between the U.S. Department of Commerce and ICANN. You are neither a representative of ICANN nor affiliated in any way with ICANN. If you have dealings as an applicant with ICANN, you need to address those dealings directly with ICANN.

As the Contracting Officer on SA1301-12-CN-0035, there is nothing I can do for you as what you are requesting has got nothing to do with the contract as written.

Regards,

Akinsola "AJ" Ajayi  
Acting Director, Commerce Acquisition Solutions & Senior Bureau Procurement Official  
Office of the Secretary  
U. S. Department of Commerce  
1401 Constitution Ave., N.W., Suite 6521  
Washington, DC 20230  
Office: 202-482-2810  
Email: aajayi@doc.gov

because you care

3

planet.eco  
Jean William - Chairman  
address: Stamford, CT 06902  
email: jeanwilliam@planetdoteco.com  
website: www.planetdoteco.com  
office: 203-517-0929  
cell: 203-921-8829

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cell: 203-921-8829

**Exhibit 9 COI Letter to SBA Ombudsman 6\_5\_2014 (See Attached)**



**UNITED STATES DEPARTMENT OF COMMERCE**  
**The Assistant Secretary for Communications**  
**and Information**  
Washington, D.C. 20230

NOV 4 2015

Jean D. William  
Chief Executive Officer  
Planet.ECO  
45 West North Street  
Stamford, CT 06902

Dear Mr. William:

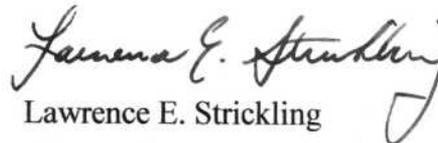
Secretary Pritzker requested that I respond on her behalf to your letter dated October 21, 2015 regarding a dispute over the .eco domain.

In your letter, you assert that the Department of Commerce has been unresponsive to Planet.ECO's conflict of interest and trademark infringement claims relating to the .eco domain. You further assert that, as a result, the National Telecommunications and Information Administration (NTIA) is not in compliance with its Internet Assigned Numbers Authority (IANA) functions contract.

None of your claims has merit. In fact, NTIA's programmatic staff experts have responded to Planet.ECO complaints on several occasions. For example, during a conference call on January 24, 2014, NTIA staff explained that the Internet Corporation for Assigned Names and Numbers (ICANN), not NITA, manages the new generic top-level domain (gTLD) program. None of the issues raised relate to NTIA's IANA functions contract, and the Department of Commerce has no jurisdiction over your claims. Given that we have no direct oversight responsibility over ICANN's new gTLD program, I suggest, as my staff has previously advised you, that Planet.ECO contact ICANN's Ombudsman, who is responsible for investigating complaints about ICANN.

If you have additional questions, please contact Fiona Alexander, NTIA's Associate Administrator and head of NTIA's Office of International Affairs, at (202) 482-1866.

Sincerely,

  
Lawrence E. Strickling



INTERNET ARCHIVE  
Wayback Machine  
1 captures  
7 May 08 - 7 May 08  
http://www.bigroom.ca/team/index.htm  
Go  
APR MAY  
7  
2007 2008

Anastasia, Jacob and Trevor began work on Big Room in March 2007 and wrote the business plan over the summer. Prior to this they collaborated on a number of projects, including the United Nations [Principles for Responsible Investment](#) and a joint UNEP [Finance Initiative](#) and [INSEAD](#) cleantech venture capital research initiative.

Big Room Inc.  
November 2007 – Present (6 years 5 months) | Vancouver, Canada Area

Big Room has been working with a coalition of environmental community leaders on a .ECO gTLD application since 2007.

Our goal is to establish a permanent role for the community that then ensures responsible use and encourages sustainable development.

In May 2012 we, along with a coalition of over 50 environmental groups and multiple UN agencies, submitted a community-designated application for .ECO.

Big Room is a... [English](#) [French](#) [German](#) [Italian](#) [Japanese](#) [Korean](#) [Portuguese](#) [Russian](#) [Spanish](#) [Swedish](#) [Thai](#) [Vietnamese](#) [Zulu](#)

Source:  
<https://web.archive.org/web/20080507132641/http://www.bigroom.ca/team/index.htm>

Source -  
Linked In

# **Community Priority Evaluation (CPE) Guidelines**

**Prepared by The Economist Intelligence Unit**

Version 2.0

## **Interconnection between Community Priority Evaluation (CPE) Guidelines and the Applicant Guidebook (AGB)**

The CPE Guidelines are an accompanying document to the AGB, and are meant to provide additional clarity around the process and scoring principles outlined in the AGB. This document does not modify the AGB framework, nor does it change the intent or standards laid out in the AGB. The Economist Intelligence Unit (EIU) is committed to evaluating each applicant under the criteria outlined in the AGB. The CPE Guidelines are intended to increase transparency, fairness and predictability around the assessment process.

## Criterion #1: Community Establishment

This section relates to the community as explicitly identified and defined according to statements in the application. (The implicit reach of the applied-for string is not considered here, but taken into account when scoring Criterion #2, “Nexus between Proposed String and Community.”)

Measured by

1-A Delineation

1-B Extension

A maximum of 4 points is possible on the Community Establishment criterion, and each sub-criterion has a maximum of 2 possible points.

### 1-A Delineation

| AGB Criteria  | Evaluation Guidelines  |
|---|--|
| <b>Scoring</b>  |  |
| <p>2= Clearly delineated, organized, and pre-existing community.</p> <p>1= Clearly delineated and pre-existing community, but not fulfilling the requirements for a score of 2.</p> <p>0= Insufficient delineation and pre-existence for a score of 1.</p>  | <p>The following questions must be scored when evaluating the application:</p> <p><i>Is the community clearly delineated?</i></p> <p><i>Is there at least one entity mainly dedicated to the community?</i></p> <p><i>Does the entity (referred to above) have documented evidence of community activities?</i></p> <p><i>Has the community been active since at least September 2007?</i></p> |
| <b>Definitions</b>  |  |
| <p>“Community” - Usage of the expression “community” has evolved considerably from its Latin origin – “communitas” meaning “fellowship” – while still implying more of cohesion than a mere commonality of interest. Notably, as “community” is used throughout the application, there should be: (a) an awareness and recognition of a community among its members; (b) some</p> | <p>The “community,” as it relates to Criterion #1, refers to the stated community in the application.</p> <p>Consider the following:</p> <ul style="list-style-type: none"> <li>• <i>Was the entity established to administer the community?</i></li> <li>• <i>Does the entity’s mission statement clearly identify the community?</i></li> </ul>  |

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| <p>understanding of the community’s existence prior to September 2007 (when the new gTLD policy recommendations were completed); and (c) extended tenure or longevity—non-transience—into the future.</p>  | <p>Additional research may need to be performed to establish that there is documented evidence of community activities. Research may include reviewing the entity’s web site, including mission statements, charters, reviewing websites of community members (pertaining to groups), if applicable, etc.</p>  |
| <p>"Delineation" relates to the membership of a community, where a clear and straight-forward membership definition scores high, while an unclear, dispersed or unbound definition scores low.</p>   | <p>“Delineation” also refers to the extent to which a community has the requisite awareness and recognition from its members.</p> <p>The following non-exhaustive list denotes elements of straight-forward member definitions: fees, skill and/or accreditation requirements, privileges or benefits entitled to members, certifications aligned with community goals, etc.</p>   |
| <p>"Pre-existing" means that a community has been active as such since before the new gTLD policy recommendations were completed in September 2007.</p>  |  |
| <p>"Organized" implies that there is at least one entity mainly dedicated to the community, with documented evidence of community activities.</p>  | <p>“Mainly” could imply that the entity administering the community may have additional roles/functions beyond administering the community, but one of the key or primary purposes/functions of the entity is to administer a community or a community organization.</p> <p>Consider the following:</p> <ul style="list-style-type: none"> <li>• <i>Was the entity established to administer the community?</i></li> <li>• <i>Does the entity’s mission statement clearly identify the community?</i></li> </ul> |
| <p><b>Criterion 1-A guidelines</b></p>   |  |
| <p>With respect to “Delineation” and “Extension,” it should be noted that a community can consist of legal entities (for example, an association of suppliers of a particular service), of individuals (for example, a language community) or of a logical alliance of communities (for example, an international federation of national communities of a similar nature). All are viable as such, provided the requisite awareness and recognition of the</p> | <p>With respect to the Community, consider the following:</p> <ul style="list-style-type: none"> <li>• <i>Are community members aware of the existence of the community as defined by the applicant?</i></li> <li>• <i>Do community members recognize the community as defined by the applicant?</i></li> </ul>  |

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| <p>community is at hand among the members. Otherwise the application would be seen as not relating to a real community and score 0 on both “Delineation” and “Extension.”</p> <p>With respect to “Delineation,” if an application satisfactorily demonstrates all three relevant parameters (delineation, pre-existing and organized), then it scores a 2.</p> | <ul style="list-style-type: none"> <li>• <i>Is there clear evidence of such awareness and recognition?</i></li> </ul> |
|--|---|

**1-B Extension**

| <b>AGB Criteria</b>  | <b>Evaluation Guidelines</b>  |
|--|---|
| <b>Scoring</b>   |   |
| <p>Extension:</p> <p>2=Community of considerable size and longevity</p> <p>1=Community of either considerable size or longevity, but not fulfilling the requirements for a score of 2.</p> <p>0=Community of neither considerable size nor longevity</p>   | <p>The following questions must be scored when evaluating the application:</p> <p><i>Is the community of considerable size?</i></p> <p><i>Does the community demonstrate longevity?</i></p> |
| <b>Definitions</b>   |   |
| <p>“Extension” relates to the dimensions of the community, regarding its number of members, geographical reach, and foreseeable activity lifetime, as further explained in the following.</p>  |   |
| <p>"Size" relates both to the number of members and the geographical reach of the community, and will be scored depending on the context rather than on absolute numbers - a geographic location community may count millions of members in a limited location, a language community may have a million members with some spread over the globe, a community of service providers may have "only" some hundred members although well spread over the globe, just to mention some examples - all these can be regarded as of "considerable size."</p> | <p>Consider the following:</p> <ul style="list-style-type: none"> <li>• <i>Is the designated community large in terms of membership and/or geographic dispersion?</i></li> </ul>            |

|   |   |
|---|---|
| <p>"Longevity" means that the pursuits of a community are of a lasting, non-transient nature.</p>   | <p>Consider the following:</p> <ul style="list-style-type: none"> <li>• <i>Is the community a relatively short-lived congregation (e.g. a group that forms to represent a one-off event)?</i></li> <li>• <i>Is the community forward-looking (i.e. will it continue to exist in the future)?</i></li> </ul> |
| <p><b>Criterion 1-B Guidelines</b></p>  |   |
| <p>With respect to "Delineation" and "Extension," it should be noted that a community can consist of legal entities (for example, an association of suppliers of a particular service), of individuals (for example, a language community) or of a logical alliance of communities (for example, an international federation of national communities of a similar nature). All are viable as such, provided the requisite awareness and recognition of the community is at hand among the members. Otherwise the application would be seen as not relating to a real community and score 0 on both "Delineation" and "Extension."</p> <p>With respect to "Extension," if an application satisfactorily demonstrates both community size and longevity, it scores a 2.</p> |   |

## Criterion #2: Nexus between Proposed String and Community

This section evaluates the relevance of the string to the specific community that it claims to represent.

Measured by

2-A Nexus

2-B Uniqueness

A maximum of 4 points is possible on the Nexus criterion, and with the Nexus sub-criterion having a maximum of 3 possible points, and the Uniqueness sub-criterion having a maximum of 1 possible point.

### 2-A Nexus

| AGB Criteria   | Evaluation Guidelines   |
|--|---|
| <b>Scoring</b>   |   |
| <p>Nexus:</p> <p>3= The string matches the name of the community or is a well-known short-form or abbreviation of the community</p> <p>2= String identifies the community, but does not qualify for a score of 3</p> <p>0= String nexus does not fulfill the requirements for a score of 2</p> | <p>The following question must be scored when evaluating the application:</p> <p style="text-align: center;"><i>Does the string match the name of the community or is it a well-known short-form or abbreviation of the community name? The name may be, but does not need to be, the name of an organization dedicated to the community.</i></p> |
| <b>Definitions</b>   |   |
| <p>“Name” of the community means the established name by which the community is commonly known by others. It may be, but does not need to be, the name of an organization dedicated to the community.</p>  | <p>“Others” refers to individuals outside of the community itself, as well as the most knowledgeable individuals in the wider geographic and language environment of direct relevance. It also refers to recognition from other organization(s), such as quasi-official, publicly recognized institutions, or other peer groups.</p>              |
| <p>“Identify” means that the applied for string closely describes the community or the community members, without over-reaching substantially beyond the community.</p>  | <p>“Match” is of a higher standard than “identify” and means ‘corresponds to’ or ‘is equal to’.</p> <p>“Identify” does not simply mean ‘describe’, but means ‘closely describes the community’.</p> <p>“Over-reaching substantially” means that the string indicates a wider geographical or thematic remit than the community has.</p>           |

|  |  |
|--|--|
|  | <p>Consider the following:</p> <ul style="list-style-type: none"> <li>• <i>Does the string identify a wider or related community of which the applicant is a part, but is not specific to the applicant’s community?</i></li> <li>• <i>Does the string capture a wider geographical/thematic remit than the community has? The “community” refers to the community as defined by the applicant.</i></li> <li>• <i>An Internet search should be utilized to help understand whether the string identifies the community and is known by others.</i></li> <li>• <i>Consider whether the application mission statement, community responses, and websites align.</i></li> </ul> |
| <p><b>Criterion 2-A Guidelines</b></p>   |  |
| <p>With respect to “Nexus,” for a score of 3, the essential aspect is that the applied-for string is commonly known by others as the identification / name of the community.</p> <p>With respect to “Nexus,” for a score of 2, the applied-for string should closely describe the community or the community members, without over-reaching substantially beyond the community. As an example, a string could qualify for a score of 2 if it is a noun that the typical community member would naturally be called in the context. If the string appears excessively broad (such as, for example, a globally well-known but local tennis club applying for “.TENNIS”) then it would not qualify for a 2.</p> |  |

**2-B Uniqueness**

| <p><b>AGB Criteria</b></p>  | <p><b>Evaluation Guidelines</b></p>   |
|---|---|
| <p><b>Scoring</b></p>   |   |
| <p>Uniqueness:<br/>1=String has no other significant meaning beyond</p> | <p>The following question must be scored when evaluating the application:</p> |

|   |  |
|---|--|
| <p>identifying the community described in the application.<br/>0=String does not fulfill the requirement for a score of 1.</p>  | <p><i>Does the string have any other significant meaning (to the public in general) beyond identifying the community described in the application?</i></p>   |
| <p><b>Definitions</b></p>   |  |
| <p>“Identify” means that the applied for string closely describes the community or the community members, without over-reaching substantially beyond the community.</p>   | <p>“Over-reaching substantially” means that the string indicates a wider geographical or thematic remit than the community has.</p>  |
| <p>“Significant meaning” relates to the public in general, with consideration of the community language context added</p>   | <p>Consider the following:</p> <ul style="list-style-type: none"> <li>• <i>Will the public in general immediately think of the applying community when thinking of the applied-for string?</i></li> <li>• <i>If the string is unfamiliar to the public in general, it may be an indicator of uniqueness.</i></li> <li>• <i>Is the geography or activity implied by the string?</i></li> <li>• <i>Is the size and delineation of the community inconsistent with the string?</i></li> <li>• <i>An internet search should be utilized to find out whether there are repeated and frequent references to legal entities or communities other than the community referenced in the application.</i></li> </ul> |
| <p><b>Criterion 2-B Guidelines</b></p>  |  |
| <p>"Uniqueness" will be scored both with regard to the community context and from a general point of view. For example, a string for a particular geographic location community may seem unique from a general perspective, but would not score a 1 for uniqueness if it carries another significant meaning in the common language used in the relevant community location. The phrasing "...beyond identifying the community" in the score of 1 for "uniqueness" implies a requirement that the string does identify the community, i.e. scores</p> |  |

2 or 3 for "Nexus," in order to be eligible for a score of 1 for "Uniqueness."

It should be noted that "Uniqueness" is only about the meaning of the string - since the evaluation takes place to resolve contention there will obviously be other applications, community-based and/or standard, with identical or confusingly similar strings in the contention set to resolve, so the string will clearly not be "unique" in the sense of "alone."

## Criterion #3: Registration Policies

This section evaluates the applicant’s registration policies as indicated in the application. Registration policies are the conditions that the future registry will set for prospective registrants, i.e. those desiring to register second-level domain names under the registry.

Measured by

3-A Eligibility

3-B Name Selection

3-C Content and Use

3-D Enforcement

A maximum of 4 points is possible on the Registration Policies criterion and each sub-criterion has a maximum of 1 possible point.

### 3-A Eligibility

| AGB Criteria  | Evaluation Guidelines   |
|---|---|
| <b>Scoring</b>  |   |
| Eligibility:<br>1= Eligibility restricted to community members<br>0= Largely unrestricted approach to eligibility   | The following question must be scored when evaluating the application:<br><br><i>Is eligibility for being allowed as a registrant restricted?</i> |
| <b>Definitions</b>  |   |
| “Eligibility” means the qualifications that organizations or individuals must have in order to be allowed as registrants by the registry.   |   |
| <b>Criterion 3-A Guidelines</b>   |   |
| With respect to “eligibility” the limitation to community “members” can invoke a formal membership but can also be satisfied in other ways, depending on the structure and orientation of the community at hand. For example, for a geographic location community TLD, a limitation to members of the community can be achieved by requiring that the registrant’s physical address be within the boundaries of the location. |   |

### 3-B Name Selection

| AGB Criteria   | Evaluation Guidelines  |
|--|--|
| <b>Scoring</b>   |  |
| <p>Name selection:<br/>           1= Policies include name selection rules consistent with the articulated community-based purpose of the applied-for TLD<br/>           0= Policies do not fulfill the requirements for a score of 1</p>  | <p>The following questions must be scored when evaluating the application:</p> <p style="text-align: center;"><i>Do the applicant’s policies include name selection rules?</i></p> <p style="text-align: center;"><i>Are name selection rules consistent with the articulated community-based purpose of the applied-for gTLD?</i></p> |
| <b>Definitions</b>   |  |
| <p>“Name selection” means the conditions that must be fulfilled for any second-level domain name to be deemed acceptable by the registry.</p>  | <p>Consider the following:</p> <ul style="list-style-type: none"> <li><i>Are the name selection rules consistent with the entity’s mission statement?</i></li> </ul>   |
| <b>Criterion 3-B Guidelines</b>  |  |
| <p>With respect to “Name selection,” scoring of applications against these subcriteria will be done from a holistic perspective, with due regard for the particularities of the community explicitly addressed. For example, an application proposing a TLD for a language community may feature strict rules imposing this language for name selection as well as for content and use, scoring 1 on both B and C above. It could nevertheless include forbearance in the enforcement measures for tutorial sites assisting those wishing to learn the language and still score 1 on D. More restrictions do not automatically result in a higher score. The restrictions and corresponding enforcement mechanisms proposed by the applicant should show an alignment with the community-based purpose of the TLD and demonstrate continuing accountability to the community named in the application.</p> |  |

### 3-C Content and Use

| AGB Criteria | Evaluation Guidelines |
|--------------|-----------------------|
|--------------|-----------------------|

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|---|--|
| <b>Scoring</b>  |  |
| <p>Content and use:<br/> 1= Policies include rules for content and use consistent with the articulated community-based purpose of the applied-for TLD<br/> 0= Policies do not fulfill the requirements for a score of 1</p>   | <p>The following questions must be scored when evaluating the application:</p> <p><i>Do the applicant’s policies include content and use rules?</i></p> <p><i>If yes, are content and use rules consistent with the articulated community-based purpose of the applied-for gTLD?</i></p> |
| <b>Definitions</b>  |  |
| <p>“Content and use” means the restrictions stipulated by the registry as to the content provided in and the use of any second-level domain name in the registry.</p>   | <p>Consider the following:</p> <ul style="list-style-type: none"> <li><i>Are the content and use rules consistent with the applicant’s mission statement?</i></li> </ul>   |
| <b>Criterion 3-C Guidelines</b>   |  |
| <p>With respect to “Content and Use,” scoring of applications against these subcriteria will be done from a holistic perspective, with due regard for the particularities of the community explicitly addressed. For example, an application proposing a TLD for a language community may feature strict rules imposing this language for name selection as well as for content and use, scoring 1 on both B and C above. It could nevertheless include forbearance in the enforcement measures for tutorial sites assisting those wishing to learn the language and still score 1 on D. More restrictions do not automatically result in a higher score. The restrictions and corresponding enforcement mechanisms proposed by the applicant should show an alignment with the community-based purpose of the TLD and demonstrate continuing accountability to the community named in the application.</p> |  |

### 3-D Enforcement

|   |   |
|---|---|
| <b>AGB Criteria</b>   | <b>Evaluation Guidelines</b>  |
| <b>Scoring</b>  |   |
| <p>Enforcement<br/> 1= Policies include specific enforcement measures</p> | <p>The following question must be scored when evaluating the application:</p> |

|   |   |
|---|---|
| <p>(e.g. investigation practices, penalties, takedown procedures) constituting a coherent set with appropriate appeal mechanisms<br/>0= Policies do not fulfill the requirements for a score of 1</p> | <p><i>Do the policies include specific enforcement measures constituting a coherent set with appropriate appeal mechanisms?</i></p> |
|---|---|

**Definitions**

|  |   |
|--|---|
| <p>“Enforcement” means the tools and provisions set out by the registry to prevent and remedy any breaches of the conditions by registrants.</p> | <p>“Coherent set” refers to enforcement measures that ensure continued accountability to the named community, and can include investigation practices, penalties, and takedown procedures with appropriate appeal mechanisms. This includes screening procedures for registrants, and provisions to prevent and remedy any breaches of its terms by registrants.</p> <p>Consider the following:<br/>Do the enforcement measures include:</p> <ul style="list-style-type: none"> <li>• <i>Investigation practices</i></li> <li>• <i>Penalties</i></li> <li>• <i>Takedown procedures (e.g., removing the string)</i></li> <li>• <i>Whether such measures are aligned with the community-based purpose of the TLD</i></li> <li>• <i>Whether such measures demonstrate continuing accountability to the community named in the application</i></li> </ul> |
|--|---|

**Criterion 3-D Guidelines**

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| <p>With respect to “Enforcement,” scoring of applications against these subcriteria will be done from a holistic perspective, with due regard for the particularities of the community explicitly addressed. For example, an application proposing a TLD for a language community may feature strict rules imposing this language for name selection as well as for content and use, scoring 1 on both B and C above. It could nevertheless include forbearance in the enforcement measures for tutorial sites assisting those wishing to learn the language and still score 1 on D. More restrictions do not automatically result in a higher score. The restrictions and corresponding enforcement</p> |  |
|--|--|

|  |  |
|--|--|
| mechanisms proposed by the applicant should show an alignment with the community-based purpose of the TLD and demonstrate continuing accountability to the community named in the application. |  |
|--|--|

## Criterion #4: Community Endorsement

This section evaluates community support and/or opposition to the application. Support and opposition will be scored in relation to the communities explicitly addressed in the application, with due regard for communities implicitly addressed by the string.

Measured by

4-A Support

4-B Opposition

A maximum of 4 points is possible on the Community Endorsement criterion and each sub-criterion (Support and Opposition) has a maximum of 2 possible points.

### 4-A Support

| AGB Criteria   | Evaluation Guidelines  |
|--|--|
| <b>Scoring</b>   |  |
| <p>Support:</p> <p>2= Applicant is, or has documented support from, the recognized community institution(s)/member organization(s), or has otherwise documented authority to represent the community</p> <p>1= Documented support from at least one group with relevance, but insufficient support for a score of 2</p> <p>0= Insufficient proof of support for a score of 1</p> | <p>The following questions must be scored when evaluating the application:</p> <p><i>Is the applicant the recognized community institution or member organization?</i></p> <p>To assess this question please consider the following:</p> <p><i>a. Consider whether the community institution or member organization is the clearly recognized representative of the community.</i></p> <p>If the applicant meets this provision, proceed to Letter(s) of support and their verification. If it does not, or if there is more than one recognized community institution or member organization (and the applicant is one of them), consider the following:</p> <p><i>Does the applicant have documented</i></p> |

|  |  |
|--|--|
|  | <p><i>support from the recognized community institution(s)/member organization(s) to represent the community?</i></p> <p>If the applicant meets this provision, proceed to Letter(s) of support and their verification. If not, consider the following:</p> <p><i>Does the applicant have documented authority to represent the community?</i></p> <p>If the applicant meets this provision, proceed to Letter(s) of support and their verification. If not, consider the following:</p> <p><i>Does the applicant have support from at least one group with relevance?</i></p> <p>If the applicant meets this provision, proceed to Letter(s) of support and their verification.</p> <p>➤ Instructions on letter(s) of support requirements are located below, in <b>Letter(s) of support and their verification</b></p> |
| <b>Definitions</b>   |  |
| <p>“Recognized” means the institution(s)/organization(s) that, through membership or otherwise, are clearly recognized by the community members as representative of that community.</p>   |  |
| <p>“Relevance” and “relevant” refer to the communities explicitly and implicitly addressed. This means that opposition from communities not identified in the application but with an association to the applied for string would be considered relevant.</p>  | <p>The institution(s)/organization(s) could be deemed relevant when not identified in the application but has an association to the applied-for string.</p>  |
| <b>Criterion 4-A Guidelines</b>  |  |
| <p>With respect to “Support,” it follows that documented support from, for example, the only national association relevant to a particular community on a national level would score a 2 if the string is clearly oriented to that national level, but only a 1 if the string implicitly addresses similar communities in other nations.</p> | <p><b>Letter(s) of support and their verification:</b> Letter(s) of support must be evaluated to determine both the relevance of the organization and the validity of the documentation and must meet the criteria spelled out below. The letter(s) of support is an input used to determine the relevance of the organization and the validity of</p>   |

|  |  |
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| <p>Also with respect to “Support,” the plurals in brackets for a score of 2, relate to cases of multiple institutions/organizations. In such cases there must be documented support from institutions/organizations representing a majority of the overall community addressed in order to score 2.</p> <p>The applicant will score a 1 for “Support” if it does not have support from the majority of the recognized community institutions/member organizations, or does not provide full documentation that it has authority to represent the community with its application. A 0 will be scored on “Support” if the applicant fails to provide documentation showing support from recognized community institutions/community member organizations, or does not provide documentation showing that it has the authority to represent the community. It should be noted, however, that documented support from groups or communities that may be seen as implicitly addressed but have completely different orientations compared to the applicant community will not be required for a score of 2 regarding support.</p> <p>To be taken into account as relevant support, such documentation must contain a description of the process and rationale used in arriving at the expression of support. Consideration of support is not based merely on the number of comments or expressions of support received.</p> | <p>the documentation.</p> <p>Consider the following:</p> <p>Are there multiple institutions/organizations supporting the application, with documented support from institutions/organizations representing a majority of the overall community addressed?</p> <p>Does the applicant have support from the majority of the recognized community institution/member organizations?</p> <p>Has the applicant provided full documentation that it has authority to represent the community with its application?</p> <p>A majority of the overall community may be determined by, but not restricted to, considerations such as headcount, the geographic reach of the organizations, or other features such as the degree of power of the organizations.</p> <p><u>Determining relevance and recognition</u></p> <p><i>Is the organization relevant and/or recognized as per the definitions above?</i></p> <p><u>Letter requirements &amp; validity</u></p> <p><i>Does the letter clearly express the organization’s support for the community-based application?</i></p> <p><i>Does the letter demonstrate the organization’s understanding of the string being requested?</i></p> <p><i>Is the documentation submitted by the applicant valid (i.e. the organization exists and the letter is authentic)?</i></p> <p>To be taken into account as relevant support, such documentation must contain a description of the process and rationale used in arriving at the expression of support. Consideration of support is not based merely on the number of comments or</p> |
|--|--|

|  |                                  |
|--|----------------------------------|
|  | expressions of support received. |
|--|----------------------------------|

#### 4-B Opposition

| AGB Criteria  | Evaluation Guidelines  |
|---|--|
| <b>Scoring</b>  |  |
| <p>Opposition:</p> <p>2= No opposition of relevance</p> <p>1= Relevant opposition from one group of non-negligible size</p> <p>0= Relevant opposition from two or more groups of non-negligible size</p>  | <p>The following question must be scored when evaluating the application:</p> <p style="text-align: center;"><i>Does the application have any opposition that is deemed relevant?</i></p>  |
| <b>Definitions</b>  |  |
| <p>“Relevance” and “relevant” refer to the communities explicitly and implicitly addressed. This means that opposition from communities not identified in the application but with an association to the applied for string would be considered relevant.</p>   | <p>Consider the following:</p> <p>For “non-negligible” size, “relevant” and “relevance” consider:</p> <ul style="list-style-type: none"> <li>• <i>If the application has opposition from communities that are deemed to be relevant.</i></li> <li>• <i>If a web search may help determine relevance and size of the objecting organization(s).</i></li> <li>• <i>If there is opposition by some other reputable organization(s), such as a quasi-official, publicly recognized organization(s) or a peer organization(s)?</i></li> <li>• <i>If there is opposition from a part of the community explicitly or implicitly addressed?</i></li> </ul> |
| <b>Criterion 4-B Guidelines</b>   |  |
| <p>When scoring “Opposition,” previous objections to the application as well as public comments during the same application round will be taken into account and assessed in this context. There will be no presumption that such objections or comments would prevent a score of 2 or lead to any particular score for “Opposition.” To be taken into account as relevant opposition, such objections or</p> | <p><b>Letter(s) of opposition and their verification:</b><br/>Letter(s) of opposition should be evaluated to determine both the relevance of the organization and the validity of the documentation and should meet the criteria spelled out below.</p> <p><u>Determining relevance and recognition</u><br/><i>Is the organization relevant and/or</i></p>   |

|   |   |
|---|---|
| <p>comments must be of a reasoned nature. Sources of opposition that are clearly spurious, unsubstantiated, made for a purpose incompatible with competition objectives, or filed for the purpose of obstruction will not be considered relevant.</p> | <p><i>recognized as per the definitions above?</i></p> <p><u>Letter requirements &amp; validity</u></p> <p><i>Does the letter clearly express the organization's opposition to the applicant's application?</i></p> <p><i>Does the letter demonstrate the organization's understanding of the string being requested?</i></p> <p><i>Is the documentation submitted by the organization valid (i.e. the organization exists and the letter is authentic)?</i></p> <p>To be considered relevant opposition, such documentation should contain a description of the process and rationale used in arriving at the expression of opposition. Consideration of opposition is not based merely on the number of comments or expressions of opposition received.</p> |
|---|---|

## Verification of letter(s) of support and opposition

Additional information on the verification of letter(s) of support and opposition:

- Changes in governments may result in new leadership at government agencies. As such, the signatory need only have held the position as of the date the letter was signed or sealed.
- A contact name should be provided in the letter(s) of support or opposition.
- The contact must send an email acknowledging that the letter is authentic, as a verbal acknowledgement is not sufficient.
- In cases where the letter was signed or sealed by an individual who is not currently holding that office or a position of authority, the letter is valid only if the individual was the appropriate authority at the time that the letter was signed or sealed.

## About the Community Priority Evaluation Panel and its Processes

The Economist Intelligence Unit (EIU) is the business information arm of The Economist Group, publisher of The Economist. Through a global network of more than 900 analysts and contributors, the EIU continuously assesses political, economic, and business conditions in more than 200 countries. As the world's leading provider of country intelligence, the EIU helps executives, governments, and institutions by providing timely, reliable, and impartial analysis.

The EIU was selected as a Panel Firm for the gTLD evaluation process based on a number of criteria, including:

- The panel will be an internationally recognized firm or organization with significant demonstrated expertise in the evaluation and assessment of proposals in which the relationship of the proposal to a defined public or private community plays an important role.
- The provider must be able to convene a linguistically and culturally diverse panel capable, in the aggregate, of evaluating Applications from a wide variety of different communities.
- The panel must be able to exercise consistent and somewhat subjective judgment in making its evaluations in order to reach conclusions that are compelling and defensible, and
- The panel must be able to document the way in which it has done so in each case.

The evaluation process will respect the principles of fairness, transparency, avoiding potential conflicts of interest, and non-discrimination. Consistency of approach in scoring Applications will be of particular importance.

The following principles characterize the EIU evaluation process for gTLD applications:

- All EIU evaluators must ensure that no conflicts of interest exist.
- All EIU evaluators must undergo training and be fully cognizant of all CPE requirements as listed in the Applicant Guidebook. This process will include a pilot testing process.
- EIU evaluators are selected based on their knowledge of specific countries, regions and/or industries, as they pertain to Applications.
- Language skills will also be considered in the selection of evaluators and the assignment of specific Applications.
- All applications will be evaluated and scored, in the first instance by two evaluators, working independently.
- All Applications will subsequently be reviewed by members of the core project team to verify accuracy and compliance with the AGB, and to ensure consistency of approach across all applications.

- The EIU will work closely with ICANN when questions arise and when additional information may be required to evaluate an application.
- The EIU will fully cooperate with ICANN's quality control process.

## 2016-12-07 Remarks of Assistant Secretary Strickling at the Internet Governance Forum Opening Session 12/06/2016

**Notebook:** IANA  
**Created:** 07/15/2018 10:31  
**Tags:** larry strickling, NOI, Transition  
**URL:** <https://www.ntia.doc.gov/print/speechtestimony/2016/remarks-assistant-secretary-strickling-internet-governanc...>

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# Remarks of Assistant Secretary Strickling at the Internet Governance Forum Opening Session 12/06/2016

## Topics:

- [Domain Name System](#) [1]
- [IANA functions](#) [2]
- [ICANN](#) [3]
- [Internet Policy](#) [4]

December 07, 2016

**Remarks of Lawrence E. Strickling**  
**Assistant Secretary of Commerce for Communications and Information**  
**Internet Governance Forum**  
**Opening Session**  
**Guadalajara, Mexico**  
**December 6, 2016**  
**--As Prepared for Delivery--**

Nearly 20 years ago, the United States promised to privatize the Internet's domain name system. Two years ago, the United States announced its intent to complete the privatization once the multistakeholder community developed a consensus plan for that transition. The transition was discussed in great deal at the IGF in Istanbul in 2014 and again last year in João Pessoa. Today I am pleased to appear here at IGF 2016 to report that the transition is now complete and was completed as of October 1, 2016. The United States Government now stands on an equal footing with all other governments with respect to ICANN and the domain name system.

For the past two years, the world has witnessed the power of the multistakeholder model of Internet governance. In developing the IANA transition plan, stakeholders around the world, including many of you, have provided perhaps the most compelling demonstration of the power of this model that we have ever witnessed.

The challenge now before us is how we can expand and evolve the multistakeholder approach. Can we build on the success of the IANA transition and the outcome of the 10-year review of the World Summit on the Information Society to tackle other Internet policy challenges? To do this, we must understand and adhere to the attributes of a successful multistakeholder model.

It is clear that the most effective multistakeholder processes are ones that:

- Include and integrate the viewpoints of a diverse range of stakeholders, ensuring that historically underrepresented groups have a meaningful say in the policies that impact them;
- Produce outcomes that are consensus-based, reflect compromise, and are broadly supported by the stakeholder communities;

- Build agendas through bottom-up contributions rather than delivering top-down mandates;
- And earn legitimacy by practicing openness and transparency and developing an environment of trust.

Let me elaborate on this legitimacy point, because it is perhaps the most critical component. Participants must have some trust in those convening the process and a sense that the world at large will accept and recognize the outcome of the process as authoritative.

So where does legitimacy come from? Often that legitimacy may come from a government or some other “official” entity that convenes the process. But government does not always need to be the legitimizing force.

For example, the Internet Engineering Task Force (IETF) is an example of a successful multistakeholder body that has gained legitimacy organically over the years and did not require the blessing of a government agency like NTIA. Instead, the IETF gained its legitimacy by producing voluntary standards of the highest quality. So, while legitimacy is a crucial factor in the success of a multistakeholder process, there may be different ways to obtain it.

One thing is clear. To be accepted as legitimate, a process needs to be open to any participant and consciously include a diversity of stakeholders. The Internet thrives only through the cooperation of many different parties. Solving or even meaningfully discussing policy issues in this space requires engaging participants from industry, civil society, governments, technical experts and the academic communities. Absent this openness and diversity, it can be difficult to achieve the degree of legitimacy needed for a multistakeholder process to be successful. At the same time, participants must know that they will be the ones to make the decision – not someone else – and that it must be a consensus decision.

Expanding and evolving the multistakeholder process also requires a dedicated and concerted effort to educate people about the multistakeholder model. It is up to those of us who support the model to build greater awareness and understanding of it among key policymakers, business leaders, and others around the world.

When we engage in those educational efforts, we must be direct and upfront and explain that multistakeholder processes are not easy. They can be chaotic and they do require a serious commitment of time and energy from participants. But we can point to a record of success. We can explain that they offer a nimble, flexible approach and are better suited to rapidly changing technology and markets than traditional regulatory or legislative models.

So I urge you to seize this moment. Use the momentum generated by the recent success in completing the IANA transition to build on that experience and find opportunities to apply the multistakeholder model to those issues where it has the best chance to succeed.

Throughout this week in Guadalajara, as you engage in discussions with different stakeholders from around the world, consider how you can organize multistakeholder approaches back home in your own community. Consider how you can join with other stakeholders regionally or globally to demonstrate the value of the multistakeholder approach to solve Internet policy challenges. And, continue to engage in the IGF going forward – its annual forum, intersessional work, the National and Regional Initiatives, and the important dialogues and intersessional work it fosters. This is the first IGF in the renewed 10-year mandate we achieved in the WSIS review last December, and we have nine more years in which to continue to expand participation, enrich the dialogue, and, indeed, demonstrate the power of the system for all.

The world is waiting. Let's get on with the task. Thank you for listening.



**To:** planet .ECO LLC ([JEAN.WILLIAM@THEDOTECO.COM](mailto:JEAN.WILLIAM@THEDOTECO.COM))  
**Subject:** U.S. TRADEMARK APPLICATION NO. 87423036 - .ECO - N/A  
**Sent:** 2/7/2018 4:56:45 PM  
**Sent As:** ECOM113@USPTO.GOV  
**Attachments:**

**UNITED STATES PATENT AND TRADEMARK OFFICE (USPTO)  
OFFICE ACTION (OFFICIAL LETTER) ABOUT APPLICANT'S TRADEMARK APPLICATION**

**U.S. APPLICATION SERIAL NO.**  
87423036

**MARK:** .ECO

**\*87423036\***

**CORRESPONDENT ADDRESS:**  
PLANET .ECO LLC  
45 WEST NORTH STREET  
STAMFORD, CT 06902

**GENERAL TRADEMARK  
INFORMATION:**  
<http://www.uspto.gov/trademarks/index.jsp>

[VIEW YOUR APPLICATION FILE](#)

**APPLICANT:** planet .ECO LLC

**CORRESPONDENT'S  
REFERENCE/DOCKET NO:**  
N/A

**CORRESPONDENT E-MAIL  
ADDRESS:**

JEAN.WILLIAM@THEDOTECO.COM

**SUSPENSION NOTICE: NO RESPONSE NEEDED**

**ISSUE/MAILING DATE:** 2/7/2018

**Introduction**

This Office action is in response to applicant's communication filed on February 5, 2018. In the initial Office action, the Examining Attorney issued an information requirement.

The applicant's petition filed on February 5, 2018, references an evidence file entitled "Requested Information Answer." However, no attachment appears in the electronic record. Applicant is responsible for ensuring that attachments are in fact submitted and for providing attachments in a format acceptable to the Office. See for example TMEP §§301 and 807.05 regarding requirements for attachments for electronic filing.

To make the attachments a part of the application record, applicant must resubmit them by resubmission via TEAS.

The applicant subsequently emailed the file to the Examining Attorney, and was advised that its response cannot be submitted by email. See TMEP §§304.02, 709.05, and note to file entered today.

Therefore, the information requirement is **maintained and continued**.

The initial Office action also included an advisory regarding an earlier filed application that has not yet abandoned or registered. Accordingly, the trademark examining attorney is suspending action on the application for the reason stated below. See 37 C.F.R. §2.67; TMEP §§716 *et seq.*

**Potential Section 2(d) Refusal – Likelihood of Confusion**

The effective filing date of the pending application identified below precedes the filing date of applicant's application. If the mark in the referenced application registers, applicant's mark may be refused registration under Section 2(d) because of a likelihood of confusion with that registered mark. *See* 15 U.S.C. §1052(d); 37 C.F.R. §2.83; TMEP §§1208 *et seq.* Therefore, action on this application is suspended until the earlier-filed referenced application is either registered or abandoned. 37 C.F.R. §2.83(c). A copy of information relevant to this referenced application was sent previously.

- Application Serial No. 87327563

The applicant is reminded that the Examining Attorney may not discuss the merits of any particular application with a third party. *See* TMEP §1806. This includes discussing the merits of Application Serial No. 87327563 with the owner of this application.

The USPTO will periodically conduct a status check of the application to determine whether suspension remains appropriate, and the trademark examining attorney will issue as needed an inquiry letter to applicant regarding the status of the matter on which suspension is based. TMEP §§716.04, 716.05. Applicant will be notified when suspension is no longer appropriate. *See* TMEP §716.04.

No response to this notice is necessary; however, if applicant wants to respond, applicant should use the "Response to Suspension Inquiry or Letter of Suspension" form online at <http://teasroa.uspto.gov/rsi/rsi>.

If applicant has questions regarding this suspension notice, please telephone or e-mail the assigned trademark examining attorney. All relevant e-mail communications will be placed in the official application record. *See* 37 C.F.R. §§2.62(c), 2.191; TMEP §§304.01-.02, 709.04-.05. Further, the trademark examining attorney may not provide legal advice or statements about applicant's rights. *See* TMEP §§705.02, 709.06.

/Kim Teresa Moninghoff/  
Examining Attorney  
Law Office 113  
Phone: 571-272-4738  
Fax: 571-273-9113  
Email: kim.moninghoff@uspto.gov

**PERIODICALLY CHECK THE STATUS OF THE APPLICATION:** To ensure that applicant does not miss crucial deadlines or official notices, check the status of the application every three to four months using the Trademark Status and Document Retrieval (TSDR) system at <http://tsdr.uspto.gov/>. Please keep a copy of the TSDR status screen. If the status shows no change for more than six months, contact the Trademark Assistance Center by e-mail at [TrademarkAssistanceCenter@uspto.gov](mailto:TrademarkAssistanceCenter@uspto.gov) or call 1-800-786-9199. For more information on checking status, see <http://www.uspto.gov/trademarks/process/status/>.

**TO UPDATE CORRESPONDENCE/E-MAIL ADDRESS:** Use the Trademark Electronic Application System (TEAS) form at <http://www.uspto.gov/trademarks/teas/correspondence.jsp>.

**To:** planet .ECO LLC ([JEAN.WILLIAM@THEDOTECO.COM](mailto:JEAN.WILLIAM@THEDOTECO.COM))  
**Subject:** U.S. TRADEMARK APPLICATION NO. 87423036 - .ECO - N/A  
**Sent:** 2/7/2018 4:56:47 PM  
**Sent As:** ECOM113@USPTO.GOV  
**Attachments:**

**UNITED STATES PATENT AND TRADEMARK OFFICE (USPTO)**

**IMPORTANT NOTICE REGARDING YOUR  
U.S. TRADEMARK APPLICATION**

USPTO OFFICE ACTION (OFFICIAL LETTER) HAS ISSUED  
ON **2/7/2018** FOR U.S. APPLICATION SERIAL NO.87423036

Please follow the instructions below:

**(1) TO READ THE LETTER:** Click on this [link](#) or go to <http://tsdr.uspto.gov/>, enter the U.S. application serial number, and click on "Documents."

The Office action may not be immediately viewable, to allow for necessary system updates of the application, but will be available within 24 hours of this e-mail notification.

**(2) QUESTIONS:** For questions about the contents of the Office action itself, please contact the assigned trademark examining attorney. For *technical* assistance in accessing or viewing the Office action in the Trademark Status and Document Retrieval (TSDR) system, please e-mail [TSDR@uspto.gov](mailto:TSDR@uspto.gov).

**WARNING**

**PRIVATE COMPANY SOLICITATIONS REGARDING YOUR APPLICATION:** Private companies **not** associated with the USPTO are using information provided in trademark applications to mail or e-mail trademark-related solicitations. These companies often use names that closely resemble the USPTO and their solicitations may look like an official government document. Many solicitations require that you pay "fees."

Please carefully review all correspondence you receive regarding this application to make sure that you are responding to an official document from the USPTO rather than a private company solicitation. All official USPTO correspondence will be mailed only from the "United States Patent and Trademark Office" in Alexandria, VA; or sent by e-mail from the domain "@uspto.gov." For more information on how to handle private company solicitations, see [http://www.uspto.gov/trademarks/solicitation\\_warnings.jsp](http://www.uspto.gov/trademarks/solicitation_warnings.jsp).

Generated on: This page was generated by TSDR on 2018-07-17 12:26:18 EDT

Mark: DOT ECO

DOT ECO

US Serial Number: 77523010

Application Filing Date: Jul. 15, 2008

Register: Principal

Mark Type: Service Mark

Status: Abandoned because the applicant failed to respond or filed a late response to an Office action. To view all documents in this file, click on the Trademark Document Retrieval link at the top of this page.

Status Date: Jul. 30, 2013

Date Abandoned: Jul. 02, 2013

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## Mark Information

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Mark Literal Elements: DOT ECO

Standard Character Claim: Yes. The mark consists of standard characters without claim to any particular font style, size, or color.

Mark Drawing Type: 4 - STANDARD CHARACTER MARK

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## Foreign Information

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Priority Claimed: Yes

Foreign Application Number: 1400134

Foreign Application Filing Date: Jun. 18, 2008

Foreign Application/Registration Country: CANADA

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## Goods and Services

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Note: The following symbols indicate that the registrant/owner has amended the goods/services:

- Brackets [...] indicate deleted goods/services;
- Double parenthesis ((.)) identify any goods/services not claimed in a Section 15 affidavit of incontestability; and
- Asterisks \*.\* identify additional (new) wording in the goods/services.

**For:** Domain name services, namely, creation and maintenance of a register of domain names; registration of domain names; policy development related to domain name registration and maintenance; administration, registration, assignment and management of computer network information, network addresses, demographic information of network addresses and domain names, all being in the nature of legal services; provision of information and data related to domain name registrations; advisory, information and consulting services related to the aforementioned services

International Class(es): 045 - Primary Class

U.S Class(es): 100, 101

Class Status: ACTIVE

Basis: 1(b) 44(d)

**For:** Internet services, namely, the operation of a trust-mark system comprising management, verification and/or disclosure of environmental, social and governance characteristics and/or performance; domain name systems development, namely, development of computer hardware and computer software; technical IT services comprising the administration, registration, assignment and management of computer network information, network addresses, demographic information of network addresses and domain names; advisory, information and consulting services relating to the aforementioned services

International Class(es): 042 - Primary Class

U.S Class(es): 100, 101

Class Status: ACTIVE

Basis: 1(b) 44(d)

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**For:** Database subscription services, namely, the provision of access to information regarding environmental, social and governance characteristics and/or performance; database services comprising the provision of access to information regarding domain names and to obtain data relating to network addresses and holders of domain names and to obtain disclosure of environmental, social and governance characteristics and/or performance; advisory information and consultancy services relating to the aforementioned services

**International Class(es):** 038 - Primary Class

**U.S Class(es):** 100, 101, 104

**Class Status:** ACTIVE

**Basis:** 1(b) 44(d)

## Basis Information (Case Level)

**Filed Use:** No

**Currently Use:** No

**Amended Use:** No

**Filed ITU:** Yes

**Currently ITU:** Yes

**Amended ITU:** No

**Filed 44D:** Yes

**Currently 44D:** Yes

**Amended 44D:** No

**Filed 44E:** No

**Currently 44E:** No

**Amended 44E:** No

**Filed 66A:** No

**Currently 66A:** No

**Filed No Basis:** No

**Currently No Basis:** No

## Current Owner(s) Information

**Owner Name:** Big Room, Inc.

**Owner Address:** 332-237 Keefer Street  
Vancouver V6A1X6  
CANADA

**Legal Entity Type:** CORPORATION

**State or Country Where Organized:** CANADA

## Attorney/Correspondence Information

### Attorney of Record

**Attorney Name:** R. Scott Keller

**Docket Number:** 136622136632

**Attorney Primary Email Address:** [trademarks@wnj.com](mailto:trademarks@wnj.com)

**Attorney Email Authorized:** Yes

### Correspondent

**Correspondent Name/Address:** R. Scott Keller  
Warner Norcross & Judd LLP  
111 Lyon St NE  
900 Fifth Third Center  
Grand Rapids, MICHIGAN 49503  
UNITED STATES

**Phone:** 616-752-2479

**Fax:** 616-222-2479

**Correspondent e-mail:** [trademarks@wnj.com](mailto:trademarks@wnj.com)

**Correspondent e-mail Authorized:** Yes

### Domestic Representative

**Domestic Representative Name:** R. Scott Keller

**Phone:** 616-752-2479

**Fax:** 616-222-2479

**Domestic Representative e-mail:** [trademarks@wnj.com](mailto:trademarks@wnj.com)

**Domestic Representative e-mail Authorized:** Yes

## Prosecution History

| Date          | Description                                       | Proceeding Number |
|---------------|---|-------------------|
| Jul. 30, 2013 | ABANDONMENT NOTICE MAILED - FAILURE TO RESPOND    |                   |
| Jul. 30, 2013 | ABANDONMENT - FAILURE TO RESPOND OR LATE RESPONSE |                   |
| Jan. 01, 2013 | NOTIFICATION OF INQUIRY AS TO SUSPENSION E-MAILED |                   |
| Jan. 01, 2013 | INQUIRY TO SUSPENSION E-MAILED                    |                   |
| Jan. 01, 2013 | SUSPENSION INQUIRY WRITTEN                        | 82438             |

|               |  |       |
|---------------|--|-------|
| Dec. 26, 2012 | LIE CHECKED SUSP - TO ATTY FOR ACTION                  | 77312 |
| Jun. 18, 2012 | NOTIFICATION OF LETTER OF SUSPENSION E-MAILED          | 6332  |
| Jun. 18, 2012 | LETTER OF SUSPENSION E-MAILED                          | 6332  |
| Jun. 18, 2012 | SUSPENSION LETTER WRITTEN                              | 82438 |
| Jun. 18, 2012 | TEAS/EMAIL CORRESPONDENCE ENTERED                      | 77312 |
| Jun. 18, 2012 | CORRESPONDENCE RECEIVED IN LAW OFFICE                  | 77312 |
| Jun. 08, 2012 | TEAS RESPONSE TO SUSPENSION INQUIRY RECEIVED           |       |
| Jun. 08, 2012 | NOTIFICATION OF INQUIRY AS TO SUSPENSION E-MAILED      |       |
| Jun. 08, 2012 | INQUIRY TO SUSPENSION E-MAILED                         |       |
| Jun. 08, 2012 | SUSPENSION INQUIRY WRITTEN                             | 82438 |
| Dec. 08, 2011 | REPORT COMPLETED SUSPENSION CHECK CASE STILL SUSPENDED |       |
| Jun. 08, 2011 | REPORT COMPLETED SUSPENSION CHECK CASE STILL SUSPENDED |       |
| Dec. 08, 2010 | REPORT COMPLETED SUSPENSION CHECK CASE STILL SUSPENDED |       |
| Jun. 08, 2010 | NOTIFICATION OF LETTER OF SUSPENSION E-MAILED          | 6332  |
| Jun. 08, 2010 | LETTER OF SUSPENSION E-MAILED                          | 6332  |
| Jun. 08, 2010 | SUSPENSION LETTER WRITTEN                              | 82438 |
| Jun. 07, 2010 | TEAS/EMAIL CORRESPONDENCE ENTERED                      | 88889 |
| Jun. 07, 2010 | CORRESPONDENCE RECEIVED IN LAW OFFICE                  | 88889 |
| Jun. 07, 2010 | TEAS RESPONSE TO OFFICE ACTION RECEIVED                |       |
| Dec. 07, 2009 | NOTIFICATION OF NON-FINAL ACTION E-MAILED              | 6325  |
| Dec. 07, 2009 | NON-FINAL ACTION E-MAILED                              | 6325  |
| Dec. 07, 2009 | NON-FINAL ACTION WRITTEN                               | 82438 |
| Dec. 02, 2009 | ASSIGNED TO EXAMINER                                   | 82438 |
| Nov. 27, 2009 | LIE CHECKED SUSP - TO ATTY FOR ACTION                  | 77312 |
| Nov. 27, 2009 | ASSIGNED TO LIE  | 77312 |
| Nov. 25, 2009 | ATTORNEY/DOM.REP.REVOKED AND/OR APPOINTED              |       |
| Nov. 25, 2009 | TEAS REVOKE/APP/CHANGE ADDR OF ATTY/DOM REP RECEIVED   |       |
| Oct. 09, 2009 | TEAS CHANGE OF CORRESPONDENCE RECEIVED                 |       |
| May 27, 2009  | NOTIFICATION OF LETTER OF SUSPENSION E-MAILED          | 6332  |
| May 27, 2009  | LETTER OF SUSPENSION E-MAILED                          | 6332  |
| May 27, 2009  | SUSPENSION LETTER WRITTEN                              | 82104 |
| Apr. 27, 2009 | NOTIFICATION OF NON-FINAL ACTION E-MAILED              | 6325  |
| Apr. 27, 2009 | NON-FINAL ACTION E-MAILED                              | 6325  |
| Apr. 27, 2009 | NON-FINAL ACTION WRITTEN                               | 82104 |
| Apr. 03, 2009 | TEAS/EMAIL CORRESPONDENCE ENTERED                      | 78413 |
| Apr. 03, 2009 | CORRESPONDENCE RECEIVED IN LAW OFFICE                  | 78413 |
| Apr. 02, 2009 | ASSIGNED TO LIE  | 78413 |
| Apr. 02, 2009 | TEAS RESPONSE TO OFFICE ACTION RECEIVED                |       |
| Oct. 28, 2008 | NOTIFICATION OF NON-FINAL ACTION E-MAILED              | 6325  |
| Oct. 28, 2008 | NON-FINAL ACTION E-MAILED                              | 6325  |
| Oct. 28, 2008 | NON-FINAL ACTION WRITTEN                               | 82104 |
| Oct. 22, 2008 | ASSIGNED TO EXAMINER                                   | 82104 |
| Jul. 18, 2008 | NEW APPLICATION ENTERED IN TRAM                        |       |

---

## TM Staff and Location Information

---

### TM Staff Information

**TM Attorney:** RAPPAPORT, SETH A

**Law Office:** LAW OFFICE 112  
**Assigned:**

### File Location

**Current Location:** TMO LAW OFFICE 112 - SENIOR ATTORNEY

**Date in Location:** Jul. 30, 2013

Generated on: This page was generated by TSDR on 2018-07-17 12:26:48 EDT

Mark: .ECO

.ECO

US Serial Number: 77523015

Application Filing Date: Jul. 15, 2008

Register: Principal

Mark Type: Service Mark

Status: Abandoned because the applicant failed to respond or filed a late response to an Office action. To view all documents in this file, click on the Trademark Document Retrieval link at the top of this page.

Status Date: Jul. 30, 2013

Date Abandoned: Jul. 02, 2013

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## Mark Information

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Mark Literal Elements: .ECO

Standard Character Claim: Yes. The mark consists of standard characters without claim to any particular font style, size, or color.

Mark Drawing Type: 4 - STANDARD CHARACTER MARK

---

## Foreign Information

---

Priority Claimed: Yes

Foreign Application Number: 1398122

Foreign Application Filing Date: Jun. 04, 2008

Foreign Application/Registration Country: CANADA

Priority Claimed: Yes

Foreign Application Number: 1398122

Foreign Application Filing Date: Jun. 04, 2008

Foreign Application/Registration Country: CANADA

Priority Claimed: Yes

Foreign Application Number: 1398122

Foreign Application Filing Date: Jun. 04, 2008

Foreign Application/Registration Country: CANADA

---

## Goods and Services

---

**Note:** The following symbols indicate that the registrant/owner has amended the goods/services:

- Brackets [...] indicate deleted goods/services;
- Double parenthesis ((...)) identify any goods/services not claimed in a Section 15 affidavit of incontestability; and
- Asterisks \*...\* identify additional (new) wording in the goods/services.

**For:** Domain name services, namely creation and maintenance of a register of domain names; registration of domain names; policy development related to domain name registration and maintenance; administration, registration, assignment and management of computer network information, network addresses, demographic information of network addresses and domain names, all being in the nature of legal services; provision of information and data related to domain name registrations; advisory, information and consulting services relating to the aforementioned services

**International Class(es):** 045 - Primary Class

**U.S Class(es):** 100, 101

**Class Status:** ACTIVE

**Basis:** 1(b) 44(d) 44(e)

**For:** Internet services, namely the operation of a trust-mark system comprising management, verification and/or disclosure of environmental, social and governance characteristics and/or performance; domain name systems development, namely development of computer hardware and software; technical IT services comprising the administration, registration, assignment and management of computer network information, network addresses, demographic information of network addresses and domain names; advisory, information and consulting services relating to the aforementioned services

**International Class(es):** 042 - Primary Class

**U.S Class(es):** 100, 101

**Class Status:** ACTIVE

**Basis:** 1(b) 44(d) 44(e)

**For:** Database subscription services, namely the provision of access to information regarding environmental, social and governance characteristics and/or performance; database services, namely the provision of access to information regarding domain names and to obtain data relating to network addresses and holders of domain names and to obtain disclosure of environmental, social and governance characteristics and/or performance; advisory, information and consultancy services relating to the aforementioned services

**International Class(es):** 038 - Primary Class

**U.S Class(es):** 100, 101, 104

**Class Status:** ACTIVE

**Basis:** 1(b) 44(d) 44(e)

## Basis Information (Case Level)

**Filed Use:** No

**Currently Use:** No

**Amended Use:** No

**Filed ITU:** Yes

**Currently ITU:** Yes

**Amended ITU:** No

**Filed 44D:** Yes

**Currently 44D:** Yes

**Amended 44D:** No

**Filed 44E:** No

**Currently 44E:** Yes

**Amended 44E:** Yes

**Filed 66A:** No

**Currently 66A:** No

**Filed No Basis:** No

**Currently No Basis:** No

## Current Owner(s) Information

**Owner Name:** Big Room, Inc.

**Owner Address:** 332-237 Keefer Street  
Vancouver V6A1X6  
CANADA

**Legal Entity Type:** CORPORATION

**State or Country Where Organized:** CANADA

## Attorney/Correspondence Information

### Attorney of Record

**Attorney Name:** R. Scott Keller

**Docket Number:** 136622136631

**Attorney Primary Email Address:** [trademarks@wnj.com](mailto:trademarks@wnj.com)

**Attorney Email Authorized:** Yes

### Correspondent

**Correspondent Name/Address:** R. Scott Keller  
Warner Norcross & Judd LLP  
111 Lyon St NE  
900 Fifth Third Center  
Grand Rapids, MICHIGAN 49503  
UNITED STATES

**Phone:** 616-752-2479

**Fax:** 616-222-2479

**Correspondent e-mail:** [trademarks@wnj.com](mailto:trademarks@wnj.com)

**Correspondent e-mail Authorized:** Yes

### Domestic Representative

**Domestic Representative:** R. Scott Keller

**Phone:** 616-752-2479

Name:

Fax: 616-222-2479

Domestic [trademarks@wnj.com](mailto:trademarks@wnj.com)  
Representative e-mail:

Domestic Yes  
Representative e-mail Authorized:

## Prosecution History

| Date          | Description  | Proceeding Number |
|---------------|--|-------------------|
| Jul. 30, 2013 | ABANDONMENT NOTICE MAILED - FAILURE TO RESPOND         |                   |
| Jul. 30, 2013 | ABANDONMENT - FAILURE TO RESPOND OR LATE RESPONSE      |                   |
| Jan. 01, 2013 | NOTIFICATION OF INQUIRY AS TO SUSPENSION E-MAILED      |                   |
| Jan. 01, 2013 | INQUIRY TO SUSPENSION E-MAILED                         |                   |
| Jan. 01, 2013 | SUSPENSION INQUIRY WRITTEN                             | 82438             |
| Dec. 26, 2012 | LIE CHECKED SUSP - TO ATTY FOR ACTION                  | 77312             |
| Jun. 18, 2012 | NOTIFICATION OF LETTER OF SUSPENSION E-MAILED          | 6332              |
| Jun. 18, 2012 | LETTER OF SUSPENSION E-MAILED                          | 6332              |
| Jun. 18, 2012 | SUSPENSION LETTER WRITTEN                              | 82438             |
| Jun. 15, 2012 | TEAS/EMAIL CORRESPONDENCE ENTERED                      | 77312             |
| Jun. 15, 2012 | CORRESPONDENCE RECEIVED IN LAW OFFICE                  | 77312             |
| Jun. 08, 2012 | TEAS RESPONSE TO SUSPENSION INQUIRY RECEIVED           |                   |
| Jun. 08, 2012 | NOTIFICATION OF INQUIRY AS TO SUSPENSION E-MAILED      |                   |
| Jun. 08, 2012 | INQUIRY TO SUSPENSION E-MAILED                         |                   |
| Jun. 08, 2012 | SUSPENSION INQUIRY WRITTEN                             | 82438             |
| Dec. 08, 2011 | REPORT COMPLETED SUSPENSION CHECK CASE STILL SUSPENDED |                   |
| Jun. 08, 2011 | REPORT COMPLETED SUSPENSION CHECK CASE STILL SUSPENDED |                   |
| Dec. 08, 2010 | REPORT COMPLETED SUSPENSION CHECK CASE STILL SUSPENDED |                   |
| Jun. 08, 2010 | NOTIFICATION OF LETTER OF SUSPENSION E-MAILED          | 6332              |
| Jun. 08, 2010 | LETTER OF SUSPENSION E-MAILED                          | 6332              |
| Jun. 08, 2010 | SUSPENSION LETTER WRITTEN                              | 82438             |
| Jun. 07, 2010 | TEAS/EMAIL CORRESPONDENCE ENTERED                      | 88889             |
| Jun. 07, 2010 | CORRESPONDENCE RECEIVED IN LAW OFFICE                  | 88889             |
| Jun. 07, 2010 | TEAS RESPONSE TO OFFICE ACTION RECEIVED                |                   |
| Dec. 07, 2009 | NOTIFICATION OF NON-FINAL ACTION E-MAILED              | 6325              |
| Dec. 07, 2009 | NON-FINAL ACTION E-MAILED                              | 6325              |
| Dec. 07, 2009 | NON-FINAL ACTION WRITTEN                               | 82438             |
| Dec. 02, 2009 | ASSIGNED TO EXAMINER                                   | 82438             |
| Nov. 27, 2009 | LIE CHECKED SUSP - TO ATTY FOR ACTION                  | 77312             |
| Nov. 27, 2009 | ASSIGNED TO LIE  | 77312             |
| Nov. 25, 2009 | ATTORNEY/DOM.REP.REVOKED AND/OR APPOINTED              |                   |
| Nov. 25, 2009 | TEAS REVOKE/APP/CHANGE ADDR OF ATTY/DOM REP RECEIVED   |                   |
| Oct. 09, 2009 | TEAS CHANGE OF CORRESPONDENCE RECEIVED                 |                   |
| May 27, 2009  | NOTIFICATION OF LETTER OF SUSPENSION E-MAILED          | 6332              |
| May 27, 2009  | LETTER OF SUSPENSION E-MAILED                          | 6332              |
| May 27, 2009  | SUSPENSION LETTER WRITTEN                              | 82104             |
| Apr. 27, 2009 | NOTIFICATION OF NON-FINAL ACTION E-MAILED              | 6325              |
| Apr. 27, 2009 | NON-FINAL ACTION E-MAILED                              | 6325              |
| Apr. 27, 2009 | NON-FINAL ACTION WRITTEN                               | 82104             |
| Apr. 03, 2009 | TEAS/EMAIL CORRESPONDENCE ENTERED                      | 78413             |
| Apr. 03, 2009 | CORRESPONDENCE RECEIVED IN LAW OFFICE                  | 78413             |
| Apr. 02, 2009 | ASSIGNED TO LIE  | 78413             |
| Apr. 02, 2009 | TEAS RESPONSE TO OFFICE ACTION RECEIVED                |                   |
| Oct. 28, 2008 | NOTIFICATION OF NON-FINAL ACTION E-MAILED              | 6325              |
| Oct. 28, 2008 | NON-FINAL ACTION E-MAILED                              | 6325              |
| Oct. 28, 2008 | NON-FINAL ACTION WRITTEN                               | 82104             |

Oct. 22, 2008 ASSIGNED TO EXAMINER  
Jul. 18, 2008 NEW APPLICATION ENTERED IN TRAM

82104

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## TM Staff and Location Information

---

### TM Staff Information

**TM Attorney:** RAPPAPORT, SETH A

**Law Office Assigned:** LAW OFFICE 112

### File Location

**Current Location:** TMO LAW OFFICE 112 - SENIOR ATTORNEY

**Date in Location:** Jul. 30, 2013

Generated on: This page was generated by TSDR on 2018-07-17 12:27:23 EDT

Mark: .ECO



US Serial Number: 77646029

Application Filing Date: Jan. 08, 2009

Register: Principal

Mark Type: Service Mark

Status: Abandoned because the applicant failed to respond or filed a late response to an Office action. To view all documents in this file, click on the Trademark Document Retrieval link at the top of this page.

Status Date: Jul. 17, 2012

Date Abandoned: Jun. 21, 2012

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## Mark Information

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Mark Literal Elements: .ECO

Standard Character Claim: No

Mark Drawing Type: 3 - AN ILLUSTRATION DRAWING WHICH INCLUDES WORD(S)/ LETTER(S)/NUMBER(S)

Description of Mark: The mark consists of stylized markings in the shape of a square meant to represent a die.

Color(s) Claimed: Color is not claimed as a feature of the mark.

Design Search Code(s): 26.01.21 - Circles that are totally or partially shaded.

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## Goods and Services

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Note: The following symbols indicate that the registrant/owner has amended the goods/services:

- Brackets [...] indicate deleted goods/services;
- Double parenthesis ((.)) identify any goods/services not claimed in a Section 15 affidavit of incontestability; and
- Asterisks \*.\* identify additional (new) wording in the goods/services.

For: Database subscription services, namely, providing an electronic database of environmental and sustainability profiles of companies and organizations; database services, namely, providing an on-line directory information service featuring information regarding the domain names, network addresses, and holders of domain names; and advisory information and consultancy services relating to the aforementioned services

International Class(es): 035 - Primary Class

U.S Class(es): 100, 101, 102

Class Status: ACTIVE

Basis: 1(b)

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## Basis Information (Case Level)

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Filed Use: No  
Filed ITU: Yes  
Filed 44D: No  
Filed 44E: No  
Filed 66A: No  
Filed No Basis: No

Currently Use: No  
Currently ITU: Yes  
Currently 44D: No  
Currently 44E: No  
Currently 66A: No  
Currently No Basis: No

Amended Use: No  
Amended ITU: No  
Amended 44D: No  
Amended 44E: No

---

## Current Owner(s) Information

---

**Owner Name:** Big Room Inc.

**Owner Address:** 332-237 Keefer Street  
Vancouver V6A1X6  
CANADA

**Legal Entity Type:** CORPORATION

**State or Country Where Organized:** CANADA

---

## Attorney/Correspondence Information

---

### Attorney of Record

**Attorney Name:** R. Scott Keller

**Docket Number:** 136622136630

**Attorney Primary Email Address:** [trademarks@wnj.com](mailto:trademarks@wnj.com)

**Attorney Email Authorized:** Yes

### Correspondent

**Correspondent Name/Address:** R. Scott Keller  
Warner Norcross & Judd LLP  
111 Lyon St NE  
900 Fifth Third Center  
Grand Rapids, MICHIGAN 49503  
UNITED STATES

**Phone:** 616-752-2479

**Fax:** 616-222-2479

**Correspondent e-mail:** [trademarks@wnj.com](mailto:trademarks@wnj.com)

**Correspondent e-mail Authorized:** Yes

### Domestic Representative

**Domestic Representative Name:** R. Scott Keller

**Phone:** 616-752-2479

**Fax:** 616-222-2479

**Domestic Representative e-mail:** [trademarks@wnj.com](mailto:trademarks@wnj.com)

**Domestic Representative e-mail Authorized:** Yes

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## Prosecution History

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| Date          | Description  | Proceeding Number |
|---------------|--|-------------------|
| Jul. 17, 2012 | ABANDONMENT NOTICE MAILED - FAILURE TO RESPOND         |                   |
| Jul. 17, 2012 | ABANDONMENT - FAILURE TO RESPOND OR LATE RESPONSE      |                   |
| Dec. 20, 2011 | NOTIFICATION OF NON-FINAL ACTION E-MAILED              | 6325              |
| Dec. 20, 2011 | NON-FINAL ACTION E-MAILED                              | 6325              |
| Dec. 20, 2011 | NON-FINAL ACTION WRITTEN                               | 82438             |
| Dec. 20, 2011 | ASSIGNED TO EXAMINER                                   | 82438             |
| Dec. 16, 2011 | PREVIOUS ALLOWANCE COUNT WITHDRAWN                     |                   |
| Dec. 05, 2011 | WITHDRAWN FROM PUB OTQR REQUEST                        | 71359             |
| Nov. 22, 2011 | LAW OFFICE PUBLICATION REVIEW COMPLETED                | 74221             |
| Nov. 21, 2011 | APPROVED FOR PUB - PRINCIPAL REGISTER                  |                   |
| Nov. 07, 2011 | LIE CHECKED SUSP - TO ATTY FOR ACTION                  | 74221             |
| Nov. 07, 2011 | ASSIGNED TO LIE  | 74221             |
| May 06, 2011  | REPORT COMPLETED SUSPENSION CHECK CASE STILL SUSPENDED | 68658             |
| Nov. 02, 2010 | REPORT COMPLETED SUSPENSION CHECK CASE STILL SUSPENDED | 68658             |
| Apr. 30, 2010 | REPORT COMPLETED SUSPENSION CHECK CASE STILL SUSPENDED | 68658             |
| Nov. 25, 2009 | ATTORNEY/DOM.REP.REVOKED AND/OR APPOINTED              |                   |
| Nov. 25, 2009 | TEAS REVOKE/APP/CHANGE ADDR OF ATTY/DOM REP RECEIVED   |                   |
| Oct. 26, 2009 | NOTIFICATION OF LETTER OF SUSPENSION E-MAILED          | 6332              |
| Oct. 26, 2009 | LETTER OF SUSPENSION E-MAILED                          | 6332              |
| Oct. 26, 2009 | SUSPENSION LETTER WRITTEN                              | 83694             |
| Oct. 09, 2009 | TEAS CHANGE OF CORRESPONDENCE RECEIVED                 |                   |

|               |   |       |
|---------------|---|-------|
| Oct. 05, 2009 | TEAS/EMAIL CORRESPONDENCE ENTERED         | 68658 |
| Sep. 30, 2009 | CORRESPONDENCE RECEIVED IN LAW OFFICE     | 68658 |
| Oct. 05, 2009 | ASSIGNED TO LIE                           | 68658 |
| Sep. 30, 2009 | TEAS RESPONSE TO OFFICE ACTION RECEIVED   |       |
| Mar. 30, 2009 | NOTIFICATION OF NON-FINAL ACTION E-MAILED | 6325  |
| Mar. 30, 2009 | NON-FINAL ACTION E-MAILED                 | 6325  |
| Mar. 30, 2009 | NON-FINAL ACTION WRITTEN                  | 83694 |
| Mar. 23, 2009 | ASSIGNED TO EXAMINER                      | 83694 |
| Jan. 14, 2009 | NOTICE OF DESIGN SEARCH CODE MAILED       |       |
| Jan. 13, 2009 | NEW APPLICATION ENTERED IN TRAM           |       |

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## TM Staff and Location Information

---

### TM Staff Information

**TM Attorney:** RAPPAPORT, SETH A

**Law Office Assigned:** LAW OFFICE 103

### File Location

**Current Location:** TMEG LAW OFFICE 103 - EXAMINING ATTORNEY ASSIGNED

**Date in Location:** Jul. 17, 2012

ESTTA Tracking number: **ESTTA546341**

Filing date: **07/02/2013**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

|                           |   |
|---------------------------|---|
| Proceeding                | 92055197  |
| Party                     | Plaintiff<br>Big Room, Inc.   |
| Correspondence<br>Address | R SCOTT KELLER<br>WARNER NORCROSS & JUDD LLP<br>111 LYON STREET NW, 900 FIFTH THIRD CENTER<br>GRAND RAPIDS, MI 49503<br>UNITED STATES<br>trademarks@wnj.com, skeller@wnj.com, wendy.riel@fmc-law.com, |
| Submission                | Withdrawal of Cancellation  |
| Filer's Name              | R. Scott Keller   |
| Filer's e-mail            | trademarks@wnj.com,skeller@wnj.com  |
| Signature                 | /rsk/   |
| Date                      | 07/02/2013  |
| Attachments               | Withdrawal of Cancellation.pdf(30402 bytes )  |

UNITED STATES PATENT AND TRADEMARK OFFICE  
TRADEMARK TRIAL AND APPEAL BOARD

BIG ROOM, INC. )  
 )  
 Petitioner, )  
 ) CANCELLATION NO. 92055197  
 v. )  
 )  
 PLANET.ECO LLC )  
 )  
 Respondent. )  
\_\_\_\_\_ )

**WITHDRAWAL OF PETITION TO CANCEL WITHOUT PREJUDICE**

No answer having yet been filed, pursuant to TBMP §601.02 and 37 CFR §2.114(c), Petitioner hereby withdraws the Petition to Cancel without prejudice.

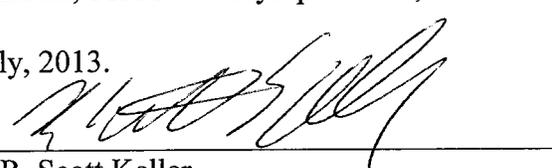
BIG ROOM, INC.



R. Scott Keller  
Warner Norcross & Judd LLP  
900 Fifth Third Center  
111 Lyon Street, NW  
Grand Rapids, Michigan 49503-2487  
(616) 752-2479  
Attorneys for Applicant

**CERTIFICATE OF SERVICE**

I hereby certify that a true copy of the foregoing Withdrawal of Petition to Cancel Without Prejudice was sent by first class mail, postage prepaid, to Raphael A. Gutierrez, Law Office of Raphael A. Gutierrez, Attorneys for Respondent, 11355 W. Olympic Blvd., Suite 106, Los Angeles, California 90064 on this 2<sup>nd</sup> day of July, 2013.



R. Scott Keller

ESTTA Tracking number: **ESTTA503286**

Filing date: **11/01/2012**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

|                        |  |
|------------------------|--|
| Proceeding             | 92055469   |
| Party                  | Plaintiff<br>Top Level Domains Holding Limited   |
| Correspondence Address | JANET F SATTERTHWAITE<br>VENABLE LLP<br>PO BOX 34385<br>WASHINGTON, DC 20043<br>UNITED STATES<br>mehall@venable.com, jfsatterthwaite@venable.com, pjwyles@venable.com, trademarkdocket@venable.com |
| Submission             | Withdrawal of Cancellation   |
| Filer's Name           | Michael E. Hall  |
| Filer's e-mail         | jfsatterthwaite@venable.com, mehall@venable.com, trademarkdocket@venable.com   |
| Signature              | /Michael E. Hall/  |
| Date                   | 11/01/2012   |
| Attachments            | Withdrawal of Cancellation No. 92055469.pdf ( 2 pages )(148506 bytes )   |

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
TRADEMARK TRIAL AND APPEAL BOARD

|  |  |
|--|--|
| <p><i>In re Registration No. 3,716,170 for the mark .ECO</i></p> <p>TOP LEVEL DOMAIN HOLDINGS LTD.,</p> <p>Petitioner,</p> <p>v.</p> <p>PLANET.ECO, LLC,</p> <p>Registrant</p> | <p>Cancellation No. 92-055,469</p> <p><b><u>Withdrawal of Cancellation</u></b></p> |
|--|--|

Pursuant to TBMP § 601.02 and 37 C.F.R. § 2.114(c), Petitioner withdraws its Petition for Cancellation in the above-captioned action without prejudice. Registrant has consented to this withdrawal, as evidenced by the signatures of its counsel below.

Respectfully submitted,

DATED: November 1, 2012

VENABLE LLP

By: \_\_\_\_\_

JANET SATTERTHWAITE  
Attorneys for Petitioner

DATED: November 1, 2012

THE MACELLARO LAW FIRM

By: \_\_\_\_\_

Theresa J. Macellaro  
THERESA J. MACELLARO  
Attorney for Registrant

DATED: November 1, 2012

LAW OFFICE OF RAPHAEL A.  
GUTIÉRREZ

By:



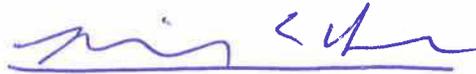
RAPHAEL A. GUTIÉRREZ  
Attorney for Registrant

Certificate of Service

The undersigned hereby certifies that a copy of this paper has been served upon Registrant at its address of record on this 1st day of November 2012.

Raphael A. Gutiérrez  
Law Office of Raphael A. Gutiérrez  
11355 W. Olympic Blvd., Suite 106  
Los Angeles, CA 90064  
Email: rafa@rgattorney.com

Theresa Macellaro  
The Macellaro Firm  
124 Brooks Ave.  
Venice, CA 90291  
Email: tjmesq@hotmail.com

  
Michael E. Hall

ESTTA Tracking number: **ESTTA683108**

Filing date: **07/13/2015**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

|                           |   |
|---------------------------|---|
| Proceeding                | 92060403  |
| Party                     | Plaintiff<br>Big Room, Inc.   |
| Correspondence<br>Address | R SCOTT KELLER<br>WARNER NORCROSS & JUDD LLP<br>900 FIFTH THIRD CENTER, 111 LYON ST NW<br>GRAND RAPIDS, MI 49503-2487<br>UNITED STATES<br>trademarks@wnj.com, skeller@wnj.com |
| Submission                | Withdrawal of Cancellation  |
| Filer's Name              | R. Scott Keller   |
| Filer's e-mail            | trademarks@wnj.com,skeller@wnj.com  |
| Signature                 | /rsk/   |
| Date                      | 07/13/2015  |
| Attachments               | Withdrawal of planet.ECO cancellation.pdf(310074 bytes )  |

UNITED STATES PATENT AND TRADEMARK OFFICE  
TRADEMARK TRIAL AND APPEAL BOARD

BIG ROOM, INC. )

Petitioner, )

v. )

PLANET.ECO LLC )

Respondent. )

CANCELLATION NO. 92060403

**WITHDRAWAL OF PETITION TO CANCEL WITHOUT PREJUDICE**

No answer having yet been filed, pursuant to TBMP §601.02 and 37 CFR §2.114(c), Petitioner hereby withdraws the Petition to Cancel without prejudice.

BIG ROOM, INC.



R. Scott Keller  
Warner Norcross & Judd LLP  
900 Fifth Third Center  
111 Lyon Street, NW  
Grand Rapids, Michigan 49503-2487  
(616) 752-2479  
Attorneys for Applicant

**CERTIFICATE OF SERVICE**

I hereby certify that a true copy of the foregoing Withdrawal of Petition to Cancel Without Prejudice was sent by first class mail, postage prepaid, to Wesley W. Whitmyer, Jr., Whitmyer IP Group LLC, attorneys for Registrant, 600 Summer Street, Stamford, CT 06901 on this 13th day of July, 2015.



R. Scott Keller

ESTTA Tracking number: **ESTTA683108**

Filing date: **07/13/2015**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

|                           |   |
|---------------------------|---|
| Proceeding                | 92060403  |
| Party                     | Plaintiff<br>Big Room, Inc.   |
| Correspondence<br>Address | R SCOTT KELLER<br>WARNER NORCROSS & JUDD LLP<br>900 FIFTH THIRD CENTER, 111 LYON ST NW<br>GRAND RAPIDS, MI 49503-2487<br>UNITED STATES<br>trademarks@wnj.com, skeller@wnj.com |
| Submission                | Withdrawal of Cancellation  |
| Filer's Name              | R. Scott Keller   |
| Filer's e-mail            | trademarks@wnj.com,skeller@wnj.com  |
| Signature                 | /rsk/   |
| Date                      | 07/13/2015  |
| Attachments               | Withdrawal of planet.ECO cancellation.pdf(310074 bytes )  |

UNITED STATES PATENT AND TRADEMARK OFFICE  
TRADEMARK TRIAL AND APPEAL BOARD

BIG ROOM, INC. )

Petitioner, )

v. )

PLANET.ECO LLC )

Respondent. )

CANCELLATION NO. 92060403

**WITHDRAWAL OF PETITION TO CANCEL WITHOUT PREJUDICE**

No answer having yet been filed, pursuant to TBMP §601.02 and 37 CFR §2.114(c), Petitioner hereby withdraws the Petition to Cancel without prejudice.

BIG ROOM, INC.



R. Scott Keller  
Warner Norcross & Judd LLP  
900 Fifth Third Center  
111 Lyon Street, NW  
Grand Rapids, Michigan 49503-2487  
(616) 752-2479  
Attorneys for Applicant

**CERTIFICATE OF SERVICE**

I hereby certify that a true copy of the foregoing Withdrawal of Petition to Cancel Without Prejudice was sent by first class mail, postage prepaid, to Wesley W. Whitmyer, Jr., Whitmyer IP Group LLC, attorneys for Registrant, 600 Summer Street, Stamford, CT 06901 on this 13th day of July, 2015.



R. Scott Keller

ESTTA Tracking number: **ESTTA683108**

Filing date: **07/13/2015**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

|                        |   |
|------------------------|---|
| Proceeding             | 92060403  |
| Party                  | Plaintiff<br>Big Room, Inc.   |
| Correspondence Address | R SCOTT KELLER<br>WARNER NORCROSS & JUDD LLP<br>900 FIFTH THIRD CENTER, 111 LYON ST NW<br>GRAND RAPIDS, MI 49503-2487<br>UNITED STATES<br>trademarks@wnj.com, skeller@wnj.com |
| Submission             | Withdrawal of Cancellation  |
| Filer's Name           | R. Scott Keller   |
| Filer's e-mail         | trademarks@wnj.com,skeller@wnj.com  |
| Signature              | /rsk/   |
| Date                   | 07/13/2015  |
| Attachments            | Withdrawal of planet.ECO cancellation.pdf(310074 bytes )  |

UNITED STATES PATENT AND TRADEMARK OFFICE  
TRADEMARK TRIAL AND APPEAL BOARD

BIG ROOM, INC. )

Petitioner, )

v. )

PLANET.ECO LLC )

Respondent. )

CANCELLATION NO. 92060403

**WITHDRAWAL OF PETITION TO CANCEL WITHOUT PREJUDICE**

No answer having yet been filed, pursuant to TBMP §601.02 and 37 CFR §2.114(c), Petitioner hereby withdraws the Petition to Cancel without prejudice.

BIG ROOM, INC.



R. Scott Keller

Warner Norcross & Judd LLP

900 Fifth Third Center

111 Lyon Street, NW

Grand Rapids, Michigan 49503-2487

(616) 752-2479

Attorneys for Applicant

**CERTIFICATE OF SERVICE**

I hereby certify that a true copy of the foregoing Withdrawal of Petition to Cancel Without Prejudice was sent by first class mail, postage prepaid, to Wesley W. Whitmyer, Jr., Whitmyer IP Group LLC, attorneys for Registrant, 600 Summer Street, Stamford, CT 06901 on this 13th day of July, 2015.



R. Scott Keller

UNITED STATES PATENT AND TRADEMARK OFFICE  
Trademark Trial and Appeal Board  
P.O. Box 1451  
Alexandria, VA 22313-1451

WINTER/vb

Mailed: January 9, 2012

Cancellation No. 92051924

Doteco LLC

v.

Colored Planet Connexion DBA  
Colored Planet

Respondent's motion<sup>1</sup> for involuntary dismissal<sup>2</sup> (filed November 22, 2011) is hereby granted as conceded. See Trademark Rules 2.127(a) and 2.132(a), 37 C.F.R. §§ 2.127(a) and 2.132(a).

Accordingly, the petition to cancel is dismissed with prejudice.

*By the Trademark Trial  
and Appeal Board*

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<sup>1</sup> Respondent's motion was submitted in single-spaced format. Should counsel or respondent submit any other documents to the Board, any such filings must be submitted in double-spaced format and otherwise comply with Trademark Rule 2.126(a), 37 C.F.R. § 2.126(a).

<sup>2</sup> The appearance of Mike Rodenbaugh, an attorney, on behalf of respondent is noted. See Trademark Rule 2.17(b)(1)(ii), 37 C.F.R. § 2.17(b)(1)(ii); and TBMP § 114.03 (3d ed. 2011). However, inasmuch as counsel did not set forth his correspondence address in the subject filing, respondent's correspondence address, as presently set forth in the USPTO TARR database and in the records of the Board, remains unchanged.



ESTTA Tracking number: **ESTTA884321**

Filing date: **03/20/2018**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

|                           |  |
|---------------------------|--|
| Proceeding                | 91231750   |
| Party                     | Defendant<br>planet.ECO LLC  |
| Correspondence<br>Address | Mark Graves<br>The Trinity Law Group LLC<br>4155 Manor Hills Lane SW<br>Atlanta, GA 30331<br>UNITED STATES<br>Email: Mark@TheTrinityLawGroup.org, Jean.William@TheDotECO.com,<br>Moses.Boone@TheDotECO.com |
| Submission                | Motion to Dismiss - Rule 12(b)   |
| Filer's Name              | Mark Stephen Graves, Esq.  |
| Filer's email             | Mark@TheTrinityLawGroup.org  |
| Signature                 | /MSGesq/   |
| Date                      | 03/20/2018   |
| Attachments               | Motion to Dismiss.pdf(113396 bytes )   |

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE  
TRADEMARK TRIAL AND APPEAL BOARD

|  |                             |
|--|-----------------------------|
| Proceeding   | 91231750                    |
| Applicant  | Applicant<br>planet.ECO LLC |
| Other Party  | Opposer<br>Big Room Inc.    |
| Have the parties held their discovery conference as required under Trademark Rules 2.120(a)(1) and (a)(2)? | No                          |

**Motion to Dismiss with prejudice for Failure to State a Claim**

This Motion to Dismiss with prejudice<sup>1</sup> is asserted by the Applicant, planet.ECO LLC, through counsel, Mark Stephen Graves, Esquire, and hereby respectfully requests that the Trademark Trial and Appeal Board (the “Board”) grant a Motion to Dismiss for the Applicant against the Opposer pursuant to Rule 12(b)(6) of the Federal Rules of Civil Procedure and Trademark Rules of Practice §2.101(a) and §2.127, with prejudice.

Applicant is the owner of Application No. 86,846,214 at issue in this proceeding (for the word mark ‘.eco’). Since Opposer failed to state nor explain relevant grounds for opposition as required, the opposition has not been properly instituted and should be dismissed<sup>2</sup> with prejudice due to Opposer’s failure to amend his pleading.<sup>3</sup>

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<sup>1</sup> *Be Sport, Inc. v. Al-Jazeera Satellite Channel*, 115 USPQ2d 1765, 1769 (TTAB 2015) (citing *Cf. Pactiv Corp. v. Dow Chemical Co.*, 449 F.3d 1227, 78 USPQ2d 1939 (Fed. Cir. 2006) (“The Board liberally grants leave to amend pleading at any stage of a proceeding, but will deny addition of a claim or defense that is legally ‘futile.’”)).

<sup>2</sup> See Trademark Trial and Appeal Board Manual of Procedure (TBMP) §503 (making applicable to this proceeding the defense of failure to state a claim upon which relief can be granted under FRCP 12(b)(6)); *Advanced Cardiovascular Systems Inc. v. SciMed Life Systems, Inc.*, 988 F.2d 1157, 26 USPQ2d 1038, 1041 (Fed. Cir. 1993) (“authoriz[ing] the defendant to move, before filing a responsive pleading, for dismissal of the complaint”); TBMP §503.02 (June 2017) (“the claimant must allege well-pleaded factual matter and more than ‘threadbare recitals of the elements of a cause of action, supported by mere conclusory statements.’”).

<sup>3</sup> TBMP §503.03 n.4.

Furthermore, Opposer should not be granted leave to amend in response to this Motion to Dismiss in the interest of justice.<sup>4</sup>

Under TBMP §503.01, and because this is a dispositive motion, this opposition proceeding should be otherwise suspended pending the determination of this motion.<sup>5</sup>

### STATEMENT OF FACTS

On January 22, 2018, the Board made a judgment on Applicant's Motion for Relief, in which the tribunal struck four out of five claims asserted by the Opposer in its Notice of Opposition. Opposer was granted thirty days to amend its Notice of Opposition, which if Opposer failed to do, "said claims [would] be dismissed with prejudice."<sup>6</sup> Opposer failed to file and serve an amended Notice of Opposition by February 21, 2018 as required. Accordingly, prejudice attaches to those four claims.

For the non-stricken claim, the tribunal found that "Opposer has sufficiently pleaded a claim that Applicant's involved mark is generic or merely descriptive without acquired distinctiveness **insofar as Applicant has pleaded** that [1] '.eco' is a generic TLD with no source identifying function or, alternatively, that [2] '.eco' is descriptive of a TLD used in reference to ecology and the environment." *Id.* pg. 7, ¶2 (emphasis added). Applicant has not pleaded the foregoing, and such arguments are ineffective against the pleaded registration of the '.eco' mark because it is the natural expansion

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<sup>4</sup> *Id.* ("where justice does not require that leave to amend be given, the Board, in its discretion, may refuse to allow an opportunity, or a further opportunity, for amendment.") (citing *Institut National des Appellations d'Origine v. Brown-Forman Corp.*, 47 USPQ2d 1875, 1896 (TTAB 1998) (amendment would be futile because opposers cannot prevail on claim as a matter of law)).

<sup>5</sup> 37 CFR §2.127(d); TBMP §510.

<sup>6</sup> Judgment on Applicant's Motion for Relief pg. 12, ¶2.

of Applicant's registration for "Domain Name Related Services"<sup>7</sup> (.eco®; Registration No. 3,716,170) that "is both more than five years old and incontestable and cannot be challenged on the grounds of nondistinctiveness."<sup>8</sup>

## STATEMENT OF LAW

A court must dismiss a notice of opposition for failure to state a claim if "plaintiff can prove no set of facts in support of his claim that would entitle him to relief."<sup>9</sup> When ruling on a motion to dismiss, while the Board must accept the pleaded factual allegations as true,<sup>10</sup> "[c]onclusory allegations of law and unwarranted inferences of fact do not suffice to support a claim."<sup>11</sup> When tested against these well-established standards, Opposer's allegations fail as a matter of law because Opposer has failed to state a claim that Applicant's "mark is generic or merely descriptive without acquired distinctiveness"<sup>12</sup> as specified within Applicant's application at issue (Application No. 86,846,214)—a natural expansion of its incontestable mark (.eco®; Registration No.

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<sup>7</sup> See U.S. Trademark Application Serial No. 77,523,015 doc.10 (filed July 15, 2008) (stating that Registrant's '.eco' mark encompasses "domain name related services"). Registrant's '.eco' mark also comprises "any goods or services in the registrant's normal fields of expansion." See *id.*; see Trademark Manual of Examining Procedure (TMEP) §1207.01(a)(v).

<sup>8</sup> *Harry Winston, Inc. v. Bruce Winston Gem Corp.*, 111 USPQ2d 1419 (TTAB 2014) (citing Trademark Act §14, 15 U.S.C. §1064; *Park 'N Fly v. Dollar Park and Fly, Inc.*, 469 U.S. 189, 224 USPQ 327, 330 (1985) ("The language of the Lanham Act... refutes any conclusion that an incontestable mark may be challenged as merely descriptive.")).

<sup>9</sup> *Supra* note 2, *Advanced Cardiovascular Sys.* at 1160 (internal quotation marks omitted).

<sup>10</sup> See *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (a complaint "must contain sufficient factual matter, accepted as true, to 'state a claim to relief that is plausible on its face.'" (quoting *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 570 (2007))).

<sup>11</sup> *Bradley v. Chiron Corp.*, 136 F.3d 1317, 1322 (Fed. Cir. 1998).

<sup>12</sup> Judgment on the Applicant's Motion for Relief, n.3 ("To the extent Opposer does file and serve amended pleadings, Opposer should reassert its allegations regarding its standing, as well as its allegations in support of its claims that Applicant's involved mark is generic or merely descriptive without acquired distinctiveness.").

3,716,170)—and should be dismissed with prejudice for Opposer’s failure to meet the Board’s stated requirements. *Id.*

**A. The Notice of Opposition Should be Dismissed Because Opposer Cannot Challenge Applicant’s Mark for Distinctiveness**

Section 2(f) of the Lanham Act states that “prima facie evidence that the mark has become distinctive” exists where there is “proof of substantially exclusive and continuous use thereof as a mark by the applicant in commerce for the five years before the date on which the claim of distinctiveness is made.”<sup>13</sup> Incontestability is “conclusive evidence”, 15 U.S.C. §1115(b), that said mark has been exclusively used in commerce, as a mark can only become incontestable upon a showing that “such registered mark has been in continuous use for five consecutive years... and is still in use in commerce.”<sup>14</sup> “Such conclusive evidence shall relate to the exclusive right to use the mark on **or in connection with** the goods or services specified.” 15 U.S.C. §1115(b) (emphasis added). Plead Application No. 86,846,214 for internet advertising and marketing services cites Applicant’s incontestable Registration No. 3,716,170 for “Domain Name Related Services”, and Applicant asserts that said services are “within its natural expansion of trade, [by which] the first user of a mark in connection with particular goods or services possesses superior rights in the mark as against subsequent users of the same or similar mark for any goods or services which purchasers might reasonably expect to emanate from it in the normal expansion of its

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<sup>13</sup> 15 U.S.C. §1052(f); *supra* note 8.

<sup>14</sup> 15 U.S.C. §1065; *supra* note 8.

business under the mark.”<sup>15</sup> Inclusive within Applicant’s incontestable Registration No. 3,716,170 is the service of “[p]roviding specific information as requested by customers via the Internet,” the natural expansion of which is doing so via advertising and marketing services as specified within Applicant’s Application No. 86,846,214 for the same word mark.

Though the natural expansion doctrine typically applies to “parties’ dueling claims of priority,” which is not at issue here, it is also applicable where registrant’s goods or services encompass those falling within the scope of its’ registration. *Id.* (citing *Time Warner Entertainment Co. v. Jones*, 65 USPQ2d 1650 (TTAB 2002) (evidence of licensing ROADRUNNER mark on wide variety of goods and use of another mark BUGS BUNNY on maps supported finding that road maps were within the natural area of expansion of products for plaintiff); *May Department Stores Co. v. Prince*, 200 USPQ 803 (TTAB 1978) (shampoo is natural expansion from plaintiff’s health and beauty aids inasmuch as shampoo falls within the category of health and beauty aids)); see also *Pinocchio’s Pizza Inc. v. Sandra Inc.*, 11 USPQ2d 1227, 1228 (TTAB 1989) (“As a general rule, a prior user of a mark is entitled to a registration covering the entire United States limited only to the extent that the subsequent user can establish that no likelihood of confusion exists and that it has concurrent rights in its actual area of use, plus its area of natural expansion.”).

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<sup>15</sup> *General Mills, Inc. v. Fage Dairy Processing Indus. S.A.*, 100 U.S.P.Q.2d 1584 (citing *Mason Engineering and Design Corporation v. Mateson Chemical Corp.*, 225 USPQ 956 (TTAB 1985)).

Accordingly, the Board should dismiss Opposer's Notice of Opposition with prejudice because Opposer has failed to state that the applied-for mark is not distinctive; Opposer has failed to reassert its allegations as specified by the Board;<sup>16</sup> and Opposer is unable to succeed on the merits of its pleading.<sup>17</sup>

### CONCLUSION

For the foregoing reasons, Applicant respectfully requests that the Board dismiss this opposition proceeding with prejudice.

Dated: March 20, 2018

Respectfully Submitted,

By:   
Mark Stephen Graves  
Attorney for Applicant  
planet.ECO LLC

The Trinity Law Group, LLC.  
4155 Manor Hills Lane SW  
Atlanta, GA 30331  
Telephone: (404)981-7241

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<sup>16</sup> *Supra* note 12.

<sup>17</sup> *Supra* note 1; *supra* note 4.

## Certificate of Service

The undersigned hereby certifies that a copy of this paper has been served upon all parties, at their address of record by email on this date.

Respectfully Submitted,

/MSGesq/

Mark Stephen Graves, Esq.

[Mark@TheTrinityLawGroup.org](mailto:Mark@TheTrinityLawGroup.org)

03/20/2018

Service delivered to the email addresses below on the date listed:

[trademarks@wnj.com](mailto:trademarks@wnj.com), [skeller@wnj.com](mailto:skeller@wnj.com)