

**IANA Stewardship Transition Coordination Group (ICG) Proposal
NTIA Criteria Assessment Chart**

Protocol Parameters

In the chart below, NTIA analyzes the protocol parameter portion of the ICG proposal against a series of questions developed by NTIA and other U.S. government agencies. The questions are meant to build on NTIA’s March 2014 stated criteria for the transition proposal with the purpose of assisting in determining whether and how the proposal addresses them.

- Key:**
-  **Criteria Component Met**
 -  **Criteria Component Partially Met**
 -  **Criteria Component Not Met**

Process Used for Proposal Development

Component	Assessment	Justification	Citations	Notes
Have all stakeholder groups been consulted, including those who may not be deeply involved in the immediate ICANN community?		<p>Yes, all stakeholder groups were consulted during the Protocol Parameters proposal development.</p> <p>By way of background, the protocol parameter registries are the product of the Internet Engineering Task Force (IETF) work and the user community is typically implementers (i.e., not the immediate ICANN community). The IETF does not have members, but includes anyone who wishes to participate. Those participants may also be members of other communities. Staff and participants from ICANN and the RIRs regularly participate in IETF meetings. As</p>	<p>ICG Proposal:</p> <p>Pg 192, paras 3017, 3021</p> <p>Pg 193, paras 3023, 3027</p> <p>Pg 201, para 3072</p>	

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		<p>noted in the Protocol Parameters Proposal, the IETF is open to all stakeholders.</p> <p>The proposal development process followed standard IETF practices and was open to any interested party.</p>		
<p>Were clear opportunities and timelines for engagement provided during the development of the proposal?</p>		<p>Yes, opportunities and timelines for engagement were regularly provided through the Protocol Parameter Proposal development process via public announcements, agendas, mailing lists, consultations, and meetings.</p>	<p>ICG Proposal: Pg 203, paras 3085-3095</p>	
<p>Is the proposal reflective of a broad community-supported, practical and workable plan for transitioning the USG unique role?</p>		<p>Yes, the Protocol Parameters Proposal is reflective of broad community support and the proposal itself is practical and workable.</p> <p>The Protocol Parameter Proposal continues existing practice with respect to operation and accountability mechanisms, utilizing the existing Memorandum of Understanding (MoU) between the IETF and ICANN as well as supplemental documents to detail practices, service levels, and service expectations.</p> <p>NTIA has no questions or concerns regarding the practicality or workability of the proposal, given that no changes are proposed and status quo is maintained. The ICG in its assessment also makes the same conclusion that the proposal is practical and workable.</p> <p>NTIA also finds that broad community support was achieved in that the protocol</p>	<p>ICG Proposal: Pg 16, para 31 Pg 198, paras 3060-3061 Pg 204, para 3097</p> <p>IETF MoU with ICANN: http://tools.ietf.org/pdf/rfc2860.pdf</p> <p>2014 ICANN-IETF MoU Supplemental Agreement: http://iaoc.ietf.org/documents/2014-ICANN-IETF-MoU-Supplemental-Agreement-Executed.pdf</p>	

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		parameter community, utilizing the longstanding IETF processes, reached “rough consensus” on their proposal. Throughout proposal development, comments were sought from the community and taken into account.		

NTIA CRITERIA

I. Support and Enhance the Multistakeholder Model

Component	Assessment	Justification	Citations	Notes
Does the proposal support and enhance the multistakeholder model?		Yes. The Protocol Parameters Proposal was developed through multistakeholder approaches and relies upon multistakeholder developed policies and practices in the performance of the protocol parameters function moving forward. Further, NTIA’s stewardship role will be filled by the IETF (a multistakeholder organization) through an MoU with ICANN. The ICG assessment echoes this conclusion.	ICG Proposal: Pg 26, para 86 Pg 201, para 3072	
Does the proposal reflect input from stakeholders? Do stakeholders support the proposal?		Yes, the proposal reflects stakeholder input and support as reflected throughout its development process. The Working Group reached rough consensus and the rationale was documented and made publicly available. Following Working Group consensus, the document was put through an IETF “last call” where additional stakeholders voiced support for the proposal and some offered substantial edits, which were taken into account for the final	ICG Proposal: Pg 204, paras 3097-3107 IETF IANAPLAN WG Document, Shepherd’s summary of WG consensus: https://datatracker.ietf.org/doc/draft-ietf-ianaplan-icg-response/shepherdwriteup/	

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		version. This “last call” comment process was summarized and publicly posted.	IETF Last Call summary: http://www.ietf.org/mail-archive/web/ianaplan/current/msg01500.html	
Does the proposal replace the USG role with one that is dominated or controlled by governments or intergovernmental institutions?		No, the proposal does not replace the USG role with one dominated/controlled by governments or intergovernmental institutions. It instead relies on existing mechanisms with the IETF and Internet Architecture Board (MoU/Supplemental Agreement) replacing the NTIA stewardship role, which is not government-led or intergovernmental.	ICG Proposal: Pg 202, para 3080	
Does the proposal build in protections against unilateral changes (to the root zone file, protocol parameters, etc.) that are not pursuant to publicly-documented and stakeholder-accepted procedures?		Yes, the plan maintains current practices; therefore, protections against unilateral changes are already in place. These practices are highlighted in the IETF MoU with ICANN and the annually amended Supplemental Agreement. Specifically, ICANN cannot take action without IETF direction.	ICG Proposal: Pg 198, paras 3060-3061 IETF MoU with ICANN: http://tools.ietf.org/pdf/rfc2860.pdf 2014 ICANN-IETF MoU Supplemental Agreement: http://iaoc.ietf.org/documents/2014-ICANN-IETF-MoU-Supplemental-Agreement-Executed.pdf	
How is accountability addressed? Does the proposal provide adequate checks and balances to protect against capture?		Yes. NTIA finds that accountability is adequately addressed and that adequate checks and balances are in place. Under the plan, the existing oversight and accountability structure continues post-transition. The proposal specifically points out that “the IETF community is very satisfied with the current arrangement.”	ICG Proposal: Pg 197, paras 3049-3054 Pg 198, paras 3060-3061 IETF MOU w/ICANN: http://tools.ietf.org/pdf/rfc2860.pdf	

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		<p>The Internet Architecture Board (IAB) will provide broad oversight of the IETF and must approve the appointment of an organization to act as the IANA Functions Operator (IFO), which in this case is currently ICANN, on behalf of the IETF.¹ The IETF will continue to be responsible for day-to-day administration and contract management. The MoU between ICANN and the IETF community that has been in place since 2000 (RFC 2860), will continue to define the work to be carried out by the IFO, and each year a service level agreement is (and will be) negotiated with the IFO as a supplement to the MoU. An annual audit will be performed to ensure protocol parameter requests are being processed according to the established policies and results are made publicly available.</p> <p>NTIA finds that these measures offer adequate checks and balances and are consistent with what is currently required under the IANA functions contract with NTIA.</p>	<p>2014 ICANN-IETF MoU Supplemental Agreement: http://iaoc.ietf.org/documents/2014-ICANN-IETF-MoU-Supplemental-Agreement-Executed.pdf</p>	
<p>Does the proposal ensure transparency? Does the proposal include mechanisms that work to ensure optimal levels of</p>		<p>Yes, the proposal ensures transparency.</p> <p>The IETF operates in an open and transparent manner as articulated in RFC 6852. With respect to the transparency of</p>	<p>ICG Proposal: Pg 192, para 3021 Pg 197, para 3053</p>	

¹ The IANA functions operator (IFO) is the entity that is ultimately responsible for the performance of the IANA functions, and in this case, the protocol parameters function. The IETF proposes to use its existing MoU and Supplemental Agreement with the IFO, which is ICANN. ICANN will subcontract the performance of the protocol parameters function to the Post Transition IANA (PTI), which the IETF MoU with ICANN permits (see pgs 13-14 of the ICG proposal). However, for all intents and purposes, all references to the IFO in the protocol parameters proposal refers to ICANN as the entity responsible for protocol parameters performance.

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<p>transparency in the performance of the IANA functions? Are they outlined? How will they be enforced?</p>		<p>protocol parameters function performance, there are transparency requirements in the MoU and supplemental SLA including the IFO making available to the public (and free of charge) information about each current assignment, including contact details for the assignee. (MoU Sec 4.4). The SLA stipulates that the IFO maintain a publicly accessible Resource Registry Matrix, provision of monthly resource allocation statistics, and provision of monthly statistics showing work that has been done and work items currently queued. Conclusions of the annual audits are to also be made publicly available.</p> <p>In addition to the above, the IETF has identified that its next supplemental document (to be in place at transition) will include further articulation and clarity on transparency requirements, noting that transparency is critical to the protocol parameters function.</p> <p>Transparency requirements embedded in the MoU and SLA allow for enforcement and are subject to escalation.</p>	<p>Pg 199, para 3063</p> <p>IETF MoU w/ICANN: http://tools.ietf.org/pdf/rfc2860.pdf</p> <p>2014 ICANN-IETF MoU Supplemental Agreement: http://iaoc.ietf.org/documents/2014-ICANN-IETF-MoU-Supplemental-Agreement-Executed.pdf</p>	

II. Maintain the Security, Stability, and Resiliency of the Internet DNS

Component	Assessment	Justification	Citations	Notes
<p>Does the proposal work to preserve a model to perform the IANA functions in a manner that avoids single points of failure, manipulation, and/or capture?</p>		<p>Yes, the proposal preserves the model in that it makes no changes to the protocol parameters function, its operations, or policy development. Current practices will be maintained; therefore, protections against single points of failure, manipulation, and/or capture are already in place.</p> <p>Namely, the IAB will continue to provide broad oversight of the IETF and must approve the appointment of an organization to act as the IFO on behalf of the IETF. The IETF is responsible for day-to-day administration and contract management. An MoU between ICANN and the IETF community has been in place since 2000 (RFC 2860), which defines the work to be carried out by the IFO. Each year a service level agreement is (and will be) negotiated with the IFO as a supplement to the MoU. Per the 2014 supplement, an annual audit is performed to ensure protocol parameter requests are being processed according to the established policies and results are made publicly available.</p> <p>Specific to the issue of single points of failure, the supplemental agreements specifically require the IFO to document any discovered single points of failure and detail efforts to address and/or ameliorate them.</p>	<p>ICG Proposal: Pg 198, paras 3060-3061</p> <p>IETF MoU with ICANN: http://tools.ietf.org/pdf/rfc2860.pdf</p> <p>2014 ICANN-IETF MoU Supplemental Agreement: http://iaoc.ietf.org/documents/2014-ICANN-IETF-MoU-Supplemental-Agreement-Executed.pdf</p>	

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<p>Does the proposal provide mechanisms to preserve the integrity, transparency, and accountability in the performance of the IANA functions?</p>		<p>Yes, the proposal provides mechanisms to preserve the integrity, transparency, and accountability in the performance of the protocol parameters function. It is proposed that the existing oversight and accountability structures continue post-transition.</p> <p>The IETF operates in an open and transparent manner as is articulated in RFC 6852. With respect to the transparency of protocol parameters function performance, there are transparency requirements in the MoU and supplemental SLA. In addition, the IETF stated in the proposal that its next supplemental document (to be in place at transition) will include further articulation and clarity on transparency requirements, noting that transparency is critical to the protocol parameters function.</p> <p>The proposal points to existing structures to preserve accountability. Specifically, the IAB will provide broad oversight of the IETF and must approve the appointment of an organization to act as the IFO on behalf of the IETF. The IETF is responsible for day-to-day administration and contract management. An MoU between ICANN and the IETF community has been in place since 2000 (RFC 2860), which defines the work to be carried out by the IFO. Each year a service level agreement is (and will be) negotiated with the IFO as a supplement to the MoU. Per the 2014 supplement, an</p>	<p>ICG Proposal:</p> <p>Pg 192, para 3021</p> <p>Pg 199, para 3063</p> <p>IETF MoU with ICANN: http://tools.ietf.org/pdf/rfc2860.pdf</p> <p>2014 ICANN-IETF MoU Supplemental Agreement: http://iaoc.ietf.org/documents/2014-ICANN-IETF-MoU-Supplemental-Agreement-Executed.pdf</p>	

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		annual audit is performed to ensure protocol parameter requests are being processed according to the established policies and results will be made publicly available.		
Do the affected parties have the opportunity to identify appropriate service levels for the performance of the IANA functions?		Yes. The IETF/IAB will continue its annual practice of developing it's a service level agreement with ICANN, which becomes a supplement to the existing MoU between the IETF and ICANN.	ICG Proposal: Pg 197, paras 3052-3053 2014 ICANN-IETF MoU Supplemental Agreement: http://iaoc.ietf.org/documents/2014-ICANN-IETF-MoU-Supplemental-Agreement-Executed.pdf	
Does the proposal recognize that the IANA services must be resistant to attacks (e.g., denial of service, data corruption), and be able to recover from degradation, and are performed in a secure legal environment? How does the proposal ensure the IANA functions operator takes into consideration technological advancements and maintains up-to-date physical and network security?		Yes. While the protocol parameter function is not particularly susceptible to attacks, the proposal does recognize the importance of avoiding single points of failure. The current SLA requires the IFO to document monthly any discovered single points of failure and detail efforts to address and/or ameliorate them. ICANN, a California-based not-for-profit, will continue to be responsible for the performance of the protocol parameters function. ICANN will subcontract operations to PTI, an affiliate of ICANN, while will maintain the secure legal environment offered by a California-based not-for-profit. With respect to taking into consideration technological advances, the proposal notes that any contemplated changes to the protocol parameter registries function	ICG Proposal: Pgs 13-14, para 23 Pg 199, para 3063	

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		should be made using the IETF process to update RFC 6220.		
Does the transition proposal propose steps for ensuring a smooth transition that maintains the stability, security, and resiliency of the DNS?		Yes. The proposal does not recommend any structural changes. No services are expected or proposed to be changed, no continuity issues are anticipated, and there are no new technical or operational methods proposed that need testing. The IETF leadership, ICANN, and RIRs maintain an ongoing informal dialogue to spot any unforeseen issues that might arise. What is necessary as part of the transition is completion of any supplemental agreements, which can only be entered into during the implementation phase.	ICG Proposal: Pgs 200-201, paras 3065-3067	

III. Meet the Needs and Expectations of the Global Customers and Partners of the IANA Services

Component	Assessment	Justification	Citations	Notes
Does the proposal maintain a commitment to the continued separation of policy development and operational activities that is subject to periodic robust auditing?		Yes. The proposal essentially maintains the status quo of protocol parameter operations, relying on the IETF-ICANN MoU and annual SLA supplements. These agreements specify that the IFO will assign and register protocol parameters “only as directed by the criteria and procedures specified in RFCs” and that in cases where there is doubt or in case of a technical dispute, the IFO will seek and follow technical guidance exclusively from the IETF. Further, it is noted that IETF policy and registry operation are completely separate. The SLA calls for annual audits, the	IETF MoU with ICANN: http://tools.ietf.org/pdf/rfc2860.pdf 2014 ICANN-IETF MoU Supplemental Agreement: http://iaoc.ietf.org/documents/2014-ICANN-IETF-MoU-Supplemental-Agreement-Executed.pdf	

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<p>Are there structures and mechanisms for the adherence to and development of customer service levels, including timeliness and reliability?</p>		<p>conclusions of which are made publicly available.</p> <p>Yes. The proposal relies in large part on an existing MoU between the IETF and ICANN that includes an annual revision of the Supplemental Agreement. The Supplemental Agreement specifies expected levels of performance as well as timely delivery of service. The IFO will be required to conduct an annual audit to ensure optimal levels of performance.</p>	<p>IETF MOU w/ICANN: http://tools.ietf.org/pdf/rfc2860.pdf</p> <p>2014 ICANN-IETF MoU Supplemental Agreement: http://iaoc.ietf.org/documents/2014-ICANN-IETF-MoU-Supplemental-Agreement-Executed.pdf</p>	
<p>Are there processes for transparency, accountability, and auditability?</p> <ol style="list-style-type: none"> 1. Are audit and accountability mechanisms considered and meaningful? 2. Are dispute resolution mechanisms considered? 3. Are other periodic reviews considered? If so, how would they function? 4. Will results of reviews be made publicly available? If not, why not? 5. Do proposed reviews, audits, 		<p>Yes, the plan proposes processes for transparency, accountability, and auditability. The proposal calls for the existing accountability structures to continue post-transition. Under the existing structures, the IAB provides broad oversight of the IETF and must approve the appointment of an organization to act as the IFO on behalf of the IETF. The IETF is responsible for day-to-day administration and contract management. An MoU between ICANN and the IETF community has been in place since 2000 (RFC 2860), which defines the work to be carried out by the IFO. Each year a service level agreement is (and will be) negotiated with the IFO as a supplement to the MoU. Per the 2014 supplement, an annual audit is performed to ensure protocol parameter requests are being processed according to the established policies and results are made publicly available.</p> <p>In addition to audits, the SLA requires the</p>	<p>ICG Proposal:</p> <p>Pg 195, para 3036</p> <p>Pg 197, paras 3049-3054</p> <p>Pg 198, paras 3060-3061</p> <p>IETF MoU with ICANN: http://tools.ietf.org/pdf/rfc2860.pdf</p> <p>2014 ICANN-IETF MoU Supplemental Agreement: http://iaoc.ietf.org/documents/2014-ICANN-IETF-MoU-Supplemental-Agreement-Executed.pdf</p>	

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<p>etc. trigger corrections or enhancements when deemed necessary? If not, why not?</p> <p>6. Are mechanisms proposed to prevent, detect, and manage conflicts of interest between ICANN’s multistakeholder policy role and its possible role as administrator of the IANA functions? Will these mechanisms be effective and enforceable?</p> <p>7. Does the proposal allow for separability from ICANN?</p>		<p>IFO to undertake a number of reporting efforts, including annual documentation of any discovered single points of failure and detailing efforts to address/ameliorate them.</p> <p>The proposal relies on existing dispute resolution mechanisms. Most disputes are handled at the lowest level through the IETF working group and rough consensus process. Should there be disagreement with any action, Section 6.5 of RFC 2026 specifies a multi-level conflict resolution and appeals process to be followed. In the cases claiming that the procedures themselves are insufficient or inadequate, one may appeal an IAB decision to the Internet Society Board of Trustees.</p> <p>The proposal allows for separability from ICANN. The existing MoU provides an option for either party to terminate the arrangement with six months’ notice. It is noted that “obviously such an action would only be undertaken after serious consideration.”</p>		
<p>Are there processes for periodic assessments of performance and procedural evolutions or improvements, as needed?</p>		<p>Yes. The proposal relies on an existing MoU between the IETF and ICANN. As a supplement to this MoU, the IETF and ICANN will update an SLA annually to address service level expectations and identify IFO requirements. This gives the protocol parameters customer community the opportunity to make annual improvements to the performance of the</p>	<p>IETF MoU with ICANN: http://tools.ietf.org/pdf/rfc2860.pdf</p> <p>2014 ICANN-IETF MoU Supplemental Agreement: http://iaoc.ietf.org/documents/2014-ICANN-IETF-MoU-Supplemental-Agreement-Executed.pdf</p>	

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		function. The SLA also requires an annual audit on performance.		
<p>Are fees proposed? If so, are the fees based on cost recovery? Are there structures and mechanisms proposed for the agreement and development of a verifiable cost recovery based system?</p> <ol style="list-style-type: none"> 1. If so, are the fees above cost recovery? In this case, is there a detailed explanation as to why? 2. Will assessment and collection of fee be transparent (published) and subject to stakeholder review, input, and approval? 		<p>No fees are proposed. In fact, the existing IETF-ICANN MoU states that the protocol parameter service is to be provided free of charge.</p>	<p>IETF MoU with ICANN: http://tools.ietf.org/pdf/rfc2860.pdf</p>	
<p>Does the proposal maintain the existing limited technical scope of the IANA functions?</p>		<p>Yes, the proposal maintains the existing limited scope of the protocol parameters function, as no changes are proposed to the service.</p>	<p>ICG Proposal: Pg 200, para 3066</p>	
<p>Does the proposal maintain the separation of policy development and operations?</p>		<p>Yes, the proposal maintains the separation of policy and operations as evident in the existing IETF-ICANN MoU and SLA, which is proposed to be maintained post-transition.</p>	<p>ICG Proposal: Pg 198, para 3061</p>	

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			<p>IETF MoU with ICANN: http://tools.ietf.org/pdf/rfc2860.pdf</p> <p>2014 ICANN-IETF MoU Supplemental Agreement: http://iaoc.ietf.org/documents/2014-ICANN-IETF-MoU-Supplemental-Agreement-Executed.pdf</p>	

IV. Maintain the Openness of the Internet

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Does the proposal maintain the impartial and apolitical administration of the IANA functions?		Yes, the impartial and apolitical administration of the protocol parameters function is maintained. The proposal makes no changes to the organization, structure, or operations of the protocol parameters service. The operations will be carried out per requirements articulated in the MoU and Supplemental Agreement. Policies will continue to be developed by the IETF and implemented by ICANN. Therefore, the impartial and apolitical administration of the function is maintained.	<p>ICG Proposal:</p> <p>Pg 198, paras 3060-3061</p>	
Does the proposal maintain the inability to use the technical architecture to interfere with the exercise of human rights or the free flow of information?		Yes, the proposal maintains the inability to use the protocol parameters function to interfere with the exercise of human rights or the free flow of information. This is largely due to the fact that the protocol parameter function is simply the maintenance of protocol parameters databases. Further, the proposal maintains the existing open framework that allows	<p>ICG Proposal:</p> <p>Pg 202, para 3078</p>	

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		anyone to participate in the development of IETF standards, including the IANA protocol parameters registries policies. Those who require assignments in the IANA protocol registries will continue to have their requests satisfied, as specified by the existing policies for those registries.		
Does the proposal address contingency situations?		Yes, the proposal addresses contingency situations. Like the other functions, the protocol parameter community based its proposal largely on the ability to “separate” from the IFO if deemed necessary. The proposal requests that ICANN (as the IFO) commit to transition the service as requested to a successor and provide continuity of service. The proposal also would require ICANN to commit to work with the IETF and subsequent operator to minimize disruption in use of the protocol parameter registries.	ICG Proposal: Pg 198, para 3062	
Does the proposal remove subjective decision making to the greatest extent possible (e.g., reliance upon community developed policies and processes; authoritative lists)?		Yes, the proposal removes subjective decision making to the greatest extent possible by specifying in the MoU between the IETF and ICANN that the IFO will assign and register protocol parameters “only as directed by the criteria and procedures specified in RFCs” and that in cases where there is “doubt or in case of a technical dispute, IANA will seek and follow technical guidance exclusively from the IESG.”	IETF MoU with ICANN: http://tools.ietf.org/pdf/rfc2860.pdf	