

Application for Federal Assistance SF-424

Version 02

* 1. Type of Submission: <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application	* 2. Type of Application: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision	* If Revision, select appropriate letter(s): <input type="text"/> * Other (Specify) <input type="text"/>
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* 3. Date Received: <input type="text" value="03/18/2013"/>	4. Applicant Identifier: <input type="text"/>
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5a. Federal Entity Identifier: <input type="text"/>	* 5b. Federal Award Identifier: <input type="text"/>
---	--

State Use Only:

6. Date Received by State: <input type="text"/>	7. State Application Identifier: <input type="text"/>
--	--

8. APPLICANT INFORMATION:

* a. Legal Name: <input type="text" value="Puerto Rico Office for Public Safety and Security"/>	
* b. Employer/Taxpayer Identification Number (EIN/TIN): <input type="text" value="660679060"/>	* c. Organizational DUNS: <input type="text" value="601962173"/>

d. Address:

* Street1: <input type="text" value="PO Box 194140"/>
Street2: <input type="text"/>
* City: <input type="text" value="San Juan"/>
County: <input type="text"/>
* State: <input type="text" value="PR: Puerto Rico"/>
Province: <input type="text"/>
* Country: <input type="text" value="USA: UNITED STATES"/>
* Zip / Postal Code: <input type="text" value="00919-4140"/>

e. Organizational Unit:

Department Name: <input type="text"/>	Division Name: <input type="text"/>
--	--

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: <input type="text" value="Mr."/> * First Name: <input type="text" value="Oscar"/>
Middle Name: <input type="text"/>
* Last Name: <input type="text" value="Rodriguez"/>
Suffix: <input type="text"/>

Title:

Organizational Affiliation:

* Telephone Number: <input type="text" value="787-763-3424"/>	Fax Number: <input type="text" value="787-763-3447"/>
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*** Email:**

SR

Application for Federal Assistance SF-424

Version 02

9. Type of Applicant 1: Select Applicant Type:

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

National Telecommunications and Information Admini

11. Catalog of Federal Domestic Assistance Number:

11.549

CFDA Title:

State and Local Implementation Grant Program

*** 12. Funding Opportunity Number:**

2013-NTIA-SLIGP-01

* Title:

State and Local Implementation Grant Program (SLIGP)

13. Competition Identification Number:

2013-NTIA-SLIGP-01

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Island-wide

*** 15. Descriptive Title of Applicant's Project:**

Puerto Rico Broadband Safety Network

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

* a. Applicant

* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

17. Proposed Project:

* a. Start Date:

* b. End Date:

18. Estimated Funding (\$):

* a. Federal	<input type="text" value="1,432,624.00"/>
* b. Applicant	<input type="text" value="0.00"/>
* c. State	<input type="text" value="358,160.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="1,790,784.00"/>

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- a. This application was made available to the State under the Executive Order 12372 Process for review on
- b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)**

Yes No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name:

Middle Name:

* Last Name:

Suffix:

* Title:

* Telephone Number: Fax Number:

* Email:

* Signature of Authorized Representative: * Date Signed:

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* 3. Date Received: Completed by Grants.gov upon submission.	4. Applicant Identifier: <input type="text"/>
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State Use Only:

6. Date Received by State: <input type="text"/>	7. State Application Identifier: <input type="text"/>
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8. APPLICANT INFORMATION:

* a. Legal Name: Puerto Rico Office for Public Safety and Security

* b. Employer/Taxpayer Identification Number (EIN/TIN): 660679000	* c. Organizational DUNS: 601962173
---	---

d. Address:

* Street1: PO Box 194140
Street2: <input type="text"/>
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* State: PR: Puerto Rico
Province: <input type="text"/>
* Country: USA: UNITED STATES
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e. Organizational Unit:

Department Name: <input type="text"/>	Division Name: <input type="text"/>
---	---

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Mr.	* First Name: Oscar
Middle Name: <input type="text"/>	
* Last Name: Rodriguez	
Suffix: <input type="text"/>	

Title: Program Manager

Organizational Affiliation: <input type="text"/>
--

* Telephone Number: 787-763-3424	Fax Number: 787-763-3447
---	---------------------------------

* Email: orodriguez@oasp.gobierno.pr

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9. Type of Applicant 1: Select Applicant Type:

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Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

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* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

17. Proposed Project:

* a. Start Date:

* b. End Date:

18. Estimated Funding (\$):

* a. Federal	<input type="text" value="1,467,000.00"/>
* b. Applicant	<input type="text" value="0.00"/>
* c. State	<input type="text" value="366,750.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="1,833,750.00"/>

* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?

- a. This application was made available to the State under the Executive Order 12372 Process for review on
- b. Program is subject to E.O. 12372 but has not been selected by the State for review.
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Yes No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)

** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name:
Middle Name:
* Last Name:
Suffix:

* Title:

* Telephone Number: Fax Number:

* Email:

* Signature of Authorized Representative: * Date Signed:

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1) State and Local Implementation Grant Program	(2)	(3)	(4)	
a. Personnel	\$ 201,600.00	\$ 117,600.00	\$	\$	\$ 319,200.00
b. Fringe Benefits	50,400.00	29,400.00			79,800.00
c. Travel	93,600.00				93,600.00
d. Equipment	0.00				
e. Supplies	16,624.00				16,624.00
f. Contractual	1,015,800.00	211,160.00			1,226,960.00
g. Construction	0.00				
h. Other	54,600.00				54,600.00
i. Total Direct Charges (sum of 6a-6h)	1,432,624.00	358,160.00			\$ 1,790,784.00
j. Indirect Charges					\$
k. TOTALS (sum of 6i and 6j)	\$ 1,432,624.00	\$ 358,160.00	\$	\$	\$ 1,790,784.00
7. Program Income	\$	\$	\$	\$	\$

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS	
8. PR Broadband Safety Network	\$ <input type="text"/>	\$ 358,160.00	\$ <input type="text"/>	\$ 358,160.00	
9. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
10. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
11. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
12. TOTAL (sum of lines 8-11)	\$ <input type="text"/>	\$ 358,160.00	\$ <input type="text"/>	\$ 358,160.00	
SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
14. Non-Federal	\$ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15. TOTAL (sum of lines 13 and 14)	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)				
	(b)First	(c) Second	(d) Third	(e) Fourth	
16. <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	
17. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
18. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
19. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
20. TOTAL (sum of lines 16 - 19)	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	
SECTION F - OTHER BUDGET INFORMATION					
21. Direct Charges: <input type="text" value="1,790,784.00"/>	22. Indirect Charges: <input type="text"/>				
23. Remarks: <input type="text" value="Revision from July 2013."/>					

Puerto Rico Public Safety Broadband Network Project

Background Information

To have a complete understanding of what is proposed in this supplemental narrative, it is important to provide some background to the reader regarding the particular background of the Commonwealth of Puerto Rico. Puerto Rico is an archipelago and the easternmost of the Greater Antilles (18 15 N, 66 30 W), and the fourth largest island in the Caribbean after Cuba, Hispaniola (which comprises the Dominican Republic and Haiti), and Jamaica. The Island is located at the crossroads between North and South America, at just 3.5 hours airtime from New York, 60 minutes from Caracas, and at only 4 days sailing from Atlantic ports in the U.S. and ports in the Gulf of Mexico. The Puerto Rican territory includes other three small islands, Vieques, Culebra and Mona, as well as numerous islets. Both Vieques and Culebra are populated and organized into municipalities. Based on the latest U. S. Census, the population of Puerto Rico is roughly three million seven hundred twenty six thousand (3,725,789) people. The Island, with an area of 3,435 square miles (9,000 sq. km)-110 miles long by 39 miles wide-has a mountainous interior and is surrounded by a wide coastal plain where the majority of the population lives. As a territory of the US, the government of the Commonwealth of Puerto Rico maintains a civil law legal system based on the Spanish civil code, within the framework of the federal legal system.

The current economic indicators have consistently demonstrated that the Commonwealth of Puerto Rico lags behind many US States in various key areas. The latest per capita income estimate for 2011 is \$15,203 (declined from \$18,100 in 2008) which is way below than that of the poorest state in the US, Mississippi (\$32,000 per capita - 2011) and the National Average (\$41, 560 per capita- 2011). Puerto Rico has an official unemployment rate is 15.5 percent, with a rate of labor force participation (percentage of the total populations able to work or seek employment) of only 39%. Forty-five (45%) percent of Puerto Ricans live below the poverty line, and 20 percent of personal income in the commonwealth comes from federal or state public funds. This is coupled with an economy in recession since 2006 with consistently negative growth projections.

An island with a predicament as that of Puerto Rico, making sound investments in projects related to

Puerto Rico Public Safety Broadband Network Project

preparedness, protection, response, recovery and mitigation are essential to avoid unnecessary interruptions to normal business and economic activity. Critical infrastructure and key resource assessments have identified that due to distance considerations, Puerto Rico requires a resilient protective strategy as well as robust capabilities to sustain any all-hazards incident in which Federal, State and Local in which locally based responders might have to use their own available resources until further assistance can reach the island from the Continental United States (CONUS). Nonetheless, the island is connected to the Continental US via a modern system integrated with a high-capacity submarine cable and Intelsat with high-speed data capability. This connectivity would be lost if these critical infrastructures were to be impacted by a natural or man-made hazardous event.

Justification

The State-central-level of the Government of the Commonwealth of Puerto Rico has been the entity responsible with addressing public security, safety and law enforcement matters throughout the island. It has the main statutory authority over many facets of public administration and creating public policy. The State-level has the primary responsibility for response with centralized capacity for police, fire, emergency medical services (EMS), emergency management, along with a centralized 9-1-1 emergency system. This centralized arrangement has represented a significant drain in the Commonwealth's finances and a matter of public discussion to date. As with many jurisdictions today the Commonwealth is under severe financial distress and seeks to save and achieve efficiency.

Since the 1970's and 1980's there has been a gradual but slow effort to decentralize, regionalize and localize first responder capabilities municipal governments. During this period most of the seventy-eight (78) municipal governments in the islands have instituted community policing bodies, emergency management and emergency medical services, which by the sole nature of their proximity to accidents, are the first to react to all-hazards incidents. Nevertheless, these much smaller first responders serve in a supportive capacity to State-level security and response units. A challenge throughout all this time, and as identified in the Puerto Rico's Statewide Communication Interoperability Plan (PRSCIP), local public security response lacks efficient and sophisticated communications infrastructure and equipment

Puerto Rico Public Safety Broadband Network Project

to interoperate with State and Federal level counterparts.

The Office of Public Security Affairs (OASP, for its Spanish acronym), was created by Executive Order #25 signed on May 2, 2005, ascribed to the Office of the Governor, and it is designated as the State Administrative Agency (SAA) for the administration of the State Homeland Security Grant Program, as well as other related security programs. This OASP is in charge of providing policy guidance to the Governor in all matters related to homeland security policy and works with State and Local all-hazards response and law enforcement agencies, sub granting well over \$20 million dollars and collaborating with these entities in adequate programmatic and financial administration of grant funds. Sound planning, advocacy and extensive coordination from the OASP has produced important advances in preparedness in order to produce a public safety grade (PSG) system. This hard work has paid off with major achievements. In 2007, the OASP was awarded \$4.5 million from the highly competitive **COPS Technology Program Grant** to complete a regional interoperable communications and information sharing infrastructure for the San Juan-Caguas-Guaynabo Metropolitan Statistical Area. Through a consortium of seventy (70) municipalities, the OASP, 9-1-1, Department of Natural Resources, FBI, FEMA Region 5 and the National Guard, a regional radio and data network was created to achieve basic interoperable communications standards (see Figure 1). Another achievement is the development of the Puerto Rico's Statewide Communication Interoperability Plan (PRSCIP). The PRSCIP identified the lack of an island-wide communications system as a major interoperability gap for the territory's first responders. Puerto Rico employed a holistic approach to overhaul its communications systems and provide interoperability among the island's 78 municipalities, state agencies, Federal agencies, and non-governmental organizations. The OASP leveraged PSIC, in addition to other grant and local funds, to establish an island-wide radio network and upgrade emergency dispatch capabilities. The network serves as a communications backbone that links disparate radio systems across the territory, as well as establishes microwave connections to the existing dispatch centers.

Puerto Rico Public Safety Broadband Network Project

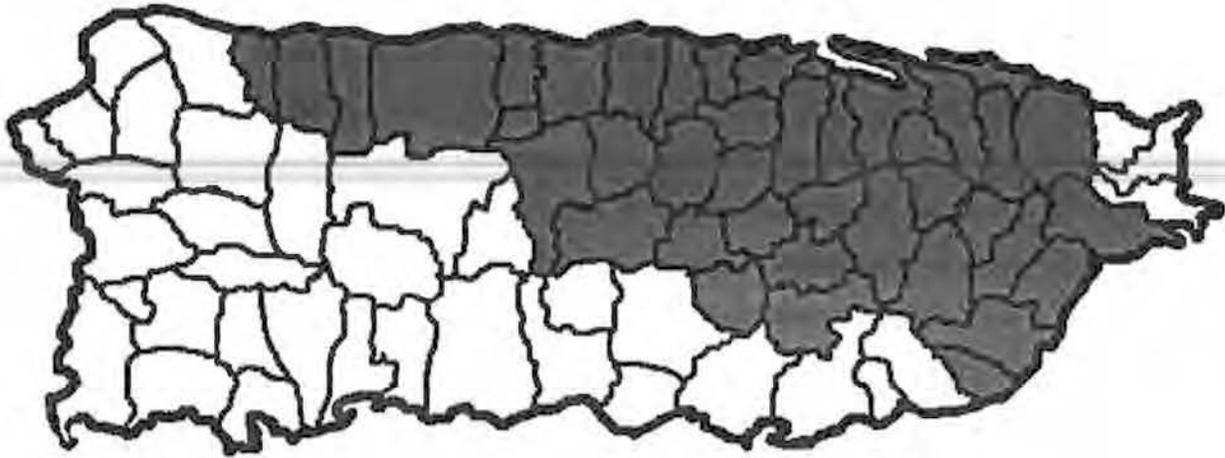


Figure 1 - Map of the San Juan-Caguas-Guaynabo Metropolitan Statistical Area

Puerto Rico used PSIC funds to acquire and install ten 700 megahertz (MHz) Project 25-compliant and nine very high frequency repeaters at nine existing communications sites across the island. This equipment supplemented the existing ultra-high frequency and 800 MHz capabilities. Each site is also equipped with microwave backhaul for voice and data integration with the island's dispatch network. The OASP established memoranda of understanding with local municipalities that allow the Puerto Rico Emergency Management Agency (PREMA) to maintain ownership and responsibility of site equipment.

Puerto Rico also implemented a new computer aided dispatch (CAD) system. PSIC funds were used to acquire and deploy the main server, seven regional servers, and the individual CAD consoles. The consoles allow dispatchers to locally dispatch emergency response personnel and automatically transmit all incident information to one central territory database. The CAD system provides real-time communications and data sharing among the 911 emergency system, 78 municipality governments, Emergency Medical System, State Fire Department, and PREMA. It also includes geographic information systems mapping software and is compatible with Puerto Rico's existing automatic vehicle location system; these capabilities provide responders vital situational awareness. To add communications redundancy, the OASP also installed gateways in each of the territory's seven Public Safety Regions and ten mobile communications vehicles. The gateways facilitate communications

Puerto Rico Public Safety Broadband Network Project

among the Puerto Rico State Police, State Fire Department, and other public safety and law enforcement agencies both at the state and municipal levels.

Although the Commonwealth of Puerto Rico has made significant advances in creating a robust and public safety grade (PSG) interoperable communications infrastructure, many challenges remain and the absence of adequate financial resources to make this endeavor sustainable. Despite substantial assets in possession of the Commonwealth, to pursue a completely independent State led infrastructure project is unlikely to be viable. Specifically, a model whereby the State relies on funding expected to be available from Federal sources, and funding expected to be available from State, local, regional, and tribal sources within the state, is not possible in the near or distant future. **Nonetheless, there is a keen interest from the Commonwealth of Puerto Rico to petition FirstNet approval to perform the planning and implementation according to the SLIGP and pursue an agreement with FirstNet in which through a public-private partnership a local contractor would perform the construction of the network and the final acceptance test run, following exactly the standards and conditions set forth by FirstNet RFP. After the completion of the test run, FirstNet would assume operation and management of the network as statutorily agreed.** We believe that this would be a **win-win situation for both parties**, as the goals and objectives of the NPSBN would be completed and local engineers would provide the know-how of the local landscape and environment.

Such an important project could boost an already weak economy and serve as a mechanism to lure and leverage investment in other productive sectors. The physical distance of Puerto Rico from the Continental US requires a distinct solution that can be adapted to the reality of an island with mountainous topography and add the local know-how in the adoption of radio/data networks.

Within this document OASP will provide answers to the questions posed by FirstNet which should adequately inform on the local capabilities to fulfill the SLIGP guidance. To facilitate the process below a summary of proposed project activities:

1. Enhancement of the existing governance body, the Puerto Rico Interoperable Communications Committee (PRCIC) through the incorporation of a) an internal governing regulation to achieve

Puerto Rico Public Safety Broadband Network Project

standard operating procedures and reach sound, informed, binding decisions, and b) create a subcommittee, the Puerto Rico Public Safety Broadband Network Committee (PRPSBNC) which will lead and supervise the plan and execution of the NPSBN.

2. Development of a work group within the PRPSBNC to supervise the drafting of a Public Safety Broadband Plan.
3. Updating of the PRSCIP to bring the proposed strategic projects to par and include requirements of the NPSBN.
4. Cross train, educate and exercise with all stakeholders in public safety interoperability and broadband network topics
5. Hire administrative personnel for the project
6. Professional services contracting of specialized expert services firm and other.
7. Organizing of regular/kick-off meetings, workshops, training, and conferences to reach out to State, local and private sector stakeholders.
8. Execution of planning and data gathering from available sources and stakeholders.
9. Establish and agree on performance measures.

Supplemental Narrative Questions

1. Existing Governance Body

The existing governance body is the **Puerto Rico Interoperable Communications Committee** (PRCIC, for its Spanish acronym) **which derives its authority by virtue of Executive Order #1 signed in February 10, 2011**, with the purpose of executing all the provisions of the Puerto Rico Communications Interoperability Plan (PRSCIP). The Committee is composed of all the emergency response and law enforcement agencies at the State level, in particular:

1. Office of Public Security Affairs (OASP),
2. Police Department (PRPD),
3. Department of Justice (PRDJ),
4. National Guard (PRNG),

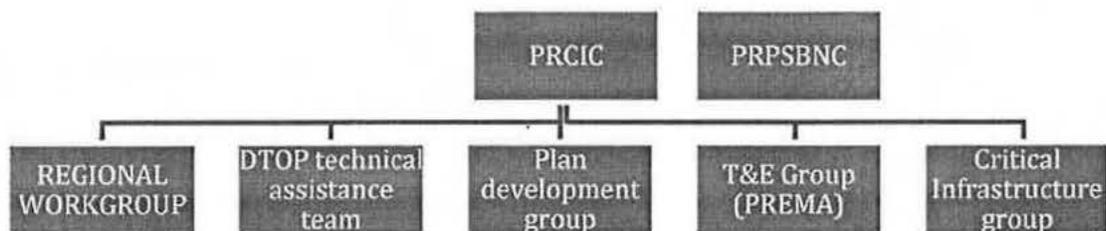
Puerto Rico Public Safety Broadband Network Project

5. Emergency Management Agency (PREMA),
6. Fire Department (PRFD),
7. Emergency Medical Service (PREMS),
8. Telecommunications Regulatory Board (PRTRB),
9. Environmental Quality Board (PREQB),
10. Office of the Chief Information Officer (PRCIO)
11. One (1) representative of each of the seven local-government (7) Homeland Security Regional Boards (HSRB).
12. Puerto Rico Department of Transportation and Public Works
13. State 9-1-1 system

The Governor is authorized to designate any other agency of the executive branch to join the Committee as well as federal agencies in the island and other non-governmental organizations (NGO). The Executive Order mandates that all participating agencies must collaborate, share information and resources to complete the goals and objectives of the PRSCIP.

The PRCIC has an Executive Committee composed of a President, Vice-President and Project Manager, as well as any other member that the Governor recommends. The Executive Committee has the responsibility of proposing strategies to implement the SCIP, ensure that efforts to implement the interoperability are aligned with the SCIP and the National Emergency Communications Plan (NECP), define a budget for the Committee to ensure enough resources for its responsibilities, and create policy and protocols to regulate internal operations as well as those for subcommittees and work groups. .
(See Illustration 1)

Puerto Rico Public Safety Broadband Network Project



The Executive Committee is authorized to create subcommittees and work groups to accomplish specific projects. All committees and subcommittees engage in projects, plan and report performance directly to the PRCIC. Currently there are several work groups:

Regional Interoperable – Responsible for the operation of the Regional Interoperable System within the regions, maintain quarterly meetings, support municipalities within the region and monitor the system from interference and inappropriate use.

Plan Development – Responsible for the statewide and Tactical Interoperable Communications (TIC) plan maintenance and update.

Technical – Responsible for the SOP development, implantation monthly test report, ongoing quarterly meetings, support agencies and assure received compliance monitoring reporting from

Puerto Rico Public Safety Broadband Network Project

interference and inappropriate use of the system, and receive compliance monitoring reporting from the regional committee and state agencies before submitting it to the FCC.

Training and Exercise – Responsible of the development and ongoing program to train user training and a monthly work use and system testing.

CIP – Responsible for gathering information and database updating.

For the SLIGP project a new Committee would be created under the PRCIC to assume direct responsibility to lead in the planning and implementation. The **Puerto Rico Public Safety Broadband Network Committee** (PRPSBNC) will be chaired by the Director of the OASP, along with the Secretary of the Department of Transportation and Public Works (PRDTPW) and the Chief Information Officer, both as co-chairs. Of course the PRCIC is ultimately responsible for the SLIGP implementation. Preliminary discussion has been commenced to create the PRPSBNC, and will be formally created by July 2013. Other PRCIC members will be brought into the fold of the PRPSBNC as the planning and implementation progresses.

Preliminarily the following agencies would be included in this PRPSBNC

State-central-level

- Police Department (PRPD)
- Department of Justice (PRDJ)
- National Guard (PRNG)
- Emergency Management Agency (PREMA)
- Fire Department (PRFD)
- Emergency Medical Service (PREMS)
- Telecommunications Regulatory Board (PRTRB)
- State 9-1-1 system
- Public Service Commission

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- Port Authority
- Puerto Rico Electric Power Authority
- Public/Private Partnership Authority
- Infrastructure Financing Authority
- Puerto Rico Planning Board

Federal Level

- US Customs and Border Protection
- Federal Emergency Management Agency
- US Immigration and Customs Enforcement
- US Coast Guard
- Drug Enforcement Administration
- Federal Bureau of Investigations

As a subcommittee of the PRCIC all coordination and activities related to the project will be discussed and approved by full participation of all stakeholders.

The inclusion into the PRPSBNC of the Office of the PRCIO, the PRDTPW and the PR Telecommunications Regulatory Board (PRTRB) are essential to the completion of both phases of the project. The PRCIO and the PRTRB procure enterprise telecommunications services at the lowest possible cost and are represented by the National Association of State Technology Directors or NASTD.org. Both have access to statewide IP/MPLS networks which could be leveraged in lowering the backhaul cost of FirstNet within each state.

As part of the PRPSBN a working group will be created to address wireless broadband and Long Term Evolution (LTE) technology from representatives of the public and private sector. Among the members participating in the PRCIC, the Puerto Rico Telecommunications Regulation Board who has direct access to private telecommunications providers and users which can facilitate the obtention of critical

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data regarding network infrastructure and coverage.

Currently the State does not provide any financial resources for training and planning activities to be pursued by the Puerto Rico Interoperable Communications Committee (PRCIC). It does not allocate federal grant funding for such planning endeavors. For example, the major portion of the PSIC grant funding has been allocated to other allowable costs such as management, a Strategic Technology Reserve and direct backbone enhancement investments (See Table 2) and most funding is has been allocated to equipment and capital projects.

PSIC Investment Justification	Federal Expenditures
Interoperable Training and Planning	--
State Multi-Agency and Region Microwave Backbone and Radio Data Internet Protocol-Based Network; Secure Law Enforcement Network	\$8,509,987.25
Strategic Technology Reserve	\$792,733.00
Management & Administration	\$286,376.53
Statewide Planning	--
Total Federal Expenditures	\$9,589,096.78
Category	Funding
Federal Funds Expended	\$9,589,096.78
Non-Federal Match Provided	\$2,397,506.25
Total Investment	\$11,986,603.03

Figure 3 - PSIC Investment Puerto Rico

The State would intend to invest funds from SLIGP to provide much needed training and education to

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the PRCIC members, regional board participants and other stakeholders, regarding transition topics, taking into consideration that interoperability with the NPSBN is a relatively new study area. Training with SLIGP funds would be used for strictly public safety broadband activities. Proper induction into these complex topics will facilitate both decision making and implementation of projects during the grant period. The projected investment for the SLIGP period is \$23,200 for the three year period of performance.

2. Statewide Communications Interoperability Plan (SCIP)

The Puerto Rico SCIP provides an overview of the current status of interoperable communications in the Commonwealth, including a discussion of existing governance structures, available technology, the existence of standard operating procedures and of interoperable communications training and exercises. In some cases, it is necessary to acknowledge the fact that additional information is necessary to fully develop an assessment of the current status of interoperable communication and alternatives. In which case, the SCIP plan provides an outline (timelines, assignment of responsibilities and benchmarks) for the completion.

Puerto Rico's statewide Interoperability communications system is referred to as the PRIS system. A fundamental element of the PRIS plan is that it provides the opportunity for all public safety/service entities to achieve the highest level of interoperability by operating upon a shared platform. That platform is a scalable 800 and 700 MHz, UHF and VHF Conventional P-25 radio system that can address the expanding roles of public safety/service entities and their interoperability needs.

In conjunction with the implementation of the PRIS backbone over the next four years, this SCIP plan articulates how the backbone of the PRIS system will be used to support interoperability with legacy public safety communication systems and to support interoperability with our neighboring Virgin Islands. In Puerto Rico several non-governmental organization (NGO) are essential partners in the comprehensive homeland security response plans; we do not have tribal communities.

Originally in the planning process to write the PRSCIP participants considered the **need to design a**

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Wide-Band data network, to address the predominantly mountainous topography of the island and limitations in frequencies. The extensive experience developed from the implementation of the PRIS system will be used to develop practical solutions to the evolution and migration planning, life cycle issues for legacy systems and continued interoperability with systems operating in different spectrums including broadband (intraregional, interregional, statewide and nationally, and with US Virgin Islands).

The strategy within the SCIP has always been to build a shared standard common platform across the Commonwealth that is capable of providing the scalable public safety communication resources needed for Commonwealth, regional and local public safety responders. The comprehensive proposal and technical details of that statewide plan are available at the following web site: www.niix.org. Although the PRIS plan continues to be the guide of Puerto Rico's public safety interoperable communication planning, experience has demonstrated the following:

- A statewide backbone of the PRIS system can provide the resources for interoperability among disparate systems.
- That as the system is advanced and public safety officials see the potential benefits of the new technology and its benefits, resistance to change by users will diminish.
- The state and regional governance structure and planning structure focused upon utilizing the backbone to enhance interoperability among all public safety entities is a critical piece of the interoperability process.
- State and regional participation in the PRIS system is a local decision based up a multitude of economic, operational and governmental needs.

The strategic goals of the SCIP originally had considered addressing public safety wireless broadband needs. To provide a clear mandate to address the NPSBN, the following goals would be updated into the SCIP:

Goal 1: Integrate existing and future communications systems. Develop regional public safety interoperable communication governance structures that provides the opportunity for

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appropriate and timely input from all agencies supporting public safety in Puerto Rico (including non-governmental agencies) into integration and coordination of resources, standard operating procedures and SCIP Plan development, planning, exercising and evaluation.

Goal 2: Develop the plan to provide the highest practical level of interoperability between the PRIS backbone, existing broadband network infrastructure and independent public safety communication systems, as well as other existing public safety communication systems within the Commonwealth (local, regional, Commonwealth and federal).

Goal 3: Research and determine that most appropriate way to address the expanding need for broadband wireless data between all agencies supporting public safety.

Furthermore, various strategic projects that were original conceptualized will be updated as follows:

- **Puerto Rico State Broadband Network (PRSBN)**

This network in the 700 MHz band will be used with the proposed Regional Public Safety Broadband Network (RPSBN) to share information between different users from state and federal agencies, municipalities and jurisdictions. It will be a mobile type system network (PDA's, tablets , pads) for state law enforcement, EMS, PREMA, Fire and other first responders throughout the 700 MHz band. It will also be used for the management of the DTOP Intelligent Transportation System (ITS) to be used as part of an emergency to provide traffic light management and control the flow of traffic into the incident and evacuate the citizen near the emergency establishing corridors. Also with the development of the ITS, the video surveillance cameras could be connected to be used for law enforcement and emergency situations according to DHS requirements. The system will be constructed using facilities of the EMS to incorporate the PRIS and RPSBN.

- **State Law Enforcement and Emergency Response Secure Network (SLEERSN)**

The development of this system will use state of the art equipment to enhance and upgrade the existing network used by the Puerto Rico State Police (PRPD), Puerto Rico Emergency Management Agency

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(PREMA), Puerto Rico Fire Department (PRFD), DTOP Mass Transit System (MTU) and Judicial system to provide a secure network. The recommended system will permit the integration of multi-agency/multi discipline agencies to coordinate any activity for emergency and non-emergency situations using the highest level of interoperability according to SAFECOM. This will have a standard protocol network digitalized system that permits the flow of information in a secure environment. This system will be integrated with the PRSBN and RPSBN to integrate the local governments when necessary. As part of the plan, training of end users and train the trainer will be included.

- **Regional Public Safety Broadband Network (RPSBN)**

This network will use the 700 MHz band and 4.9GHz band. It will be integrated with the state project II (PRSBN), to share information between portable units (PAD, tablets and pads) and their base station also with state and federal agencies, municipalities and jurisdiction. It will be a mobile type system network for local law enforcement, EMS, PREMA, Fire and other first responders throughout the 700 MHz and 4.9GHz bands. It will also be used for traffic light management and control the flow of traffic into the incident and evacuate the citizen near the emergency establishing corridors. Also with the development of the ITS of the DTOP, the video surveillance cameras could be connected to be used for law enforcement and emergency situations according to DHS requirements. This planning for the use of this band will be done in coordination and collaboration with the Regional Planning Committee (RPC) of the 700 MHz band and PRSBN in order to use the necessary bandwidth and spectrum to develop a robust metropolitan network. The system will be constructed using facilities of the Municipality's to incorporate the PRIS and PRSBN. The end users and technical staff will be trained to support and use the system.

An **update of the SCIP** is necessary and will be undertaken under the SLIGP. To update the plan, new goals and projects are included. Furthermore, the update will use existing information about equipment and structures under use for interoperable communications and broadband services. The general process to review, revise and update the SCIP is modeled after its development and design. The bottom up input from local users, Regional Boards, Regional Committees, non-governmental organizations and the PRCIC will have a critical role in keeping this document relevant and useful. The SCIP review will assure that project milestones are achieved and that there is a risk management approach. Because the

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governance structure established by the Statewide Board, Regional Boards and Regional Committees is a “bottom up” approach starting with the community of emergency responders, the response community will be continuously part of the process of integrating changes real-time as they occur or are scheduled and an ongoing part of SOP development, training, exercises and usage.

Since the inception of the PRSCIP, an annual self-assessment based on the National Interoperability Continuum has been considered, knowing that it will demonstrate whether activities and projects are appropriate to achieve adequate interoperability levels. The Interoperability Continuum is presented in Figure 3 below.

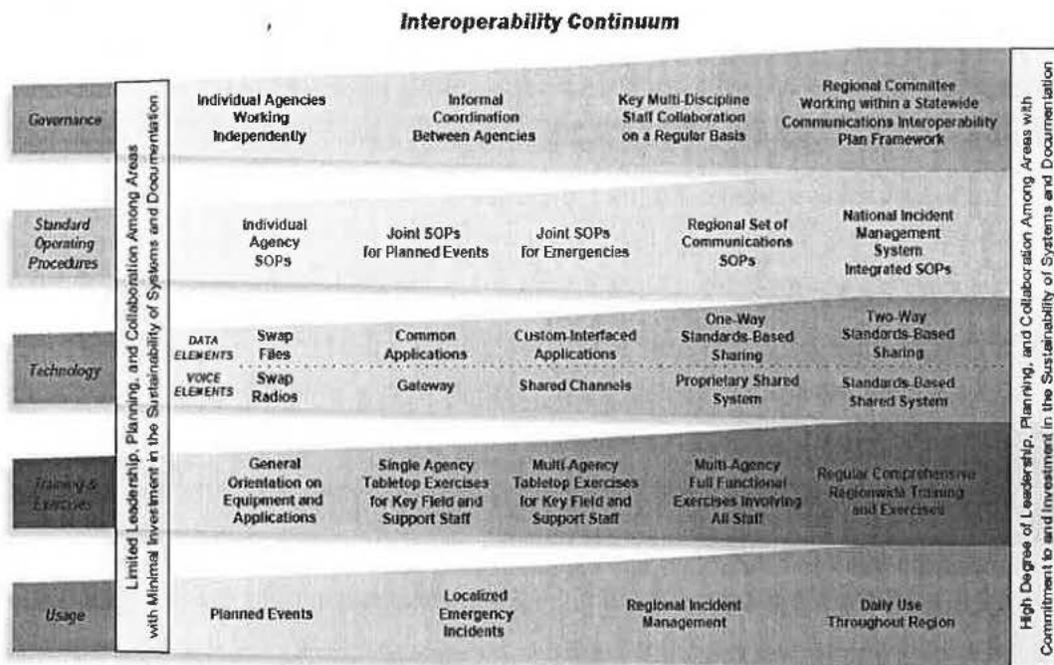


Figure 4 - SAFECOM Interoperability Continuum

The Commonwealth of Puerto Rico will invest SLIGP funding to update the PRSCIP. Grant funds in the amount of \$45,750 would be used to support the following activities:

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- Update State and Local data and information that may be used for the implementation of the PRPSBN
- Develop SOP, MOU's and other agreements under the SCIP which can be used for the PRPSBN
- Include project milestones and indicators that are related to the PRPSBN.
- Research public/private partnerships that can facilitate financial leverage for construction and maintenance of the network

3. State-level Involvement

It is important to highlight that the involvement of State level agencies will be channeled via the Puerto Rico Public Safety Broadband Network Committee (PRPSBNC). This committee would have direction from three principal agencies the OASP, the Department of Transportation and Public Works (PRDTPW) and the Office of the Chief Information Officer. Other agencies and PRCIC members will be brought into the fold of the PRPSBNC as the planning and implementation progresses.

The State-Wide Interoperable Communications Coordinator (SWIC) is currently a full-time employee of the OASP. The SWIC is the administrator of the PRSCIP and the interoperable communications network administrator, who will be responsible in the SLIGP in assuring and collaborating in the integration of the proposed Puerto Rico Public Safety Broadband Network Plan to the PRSCIP. He will be an integral part of the Puerto Rico Public Safety Broadband Network Committee (PRPSBN) and will participate along with on a Consultant/SME and a Planning/ Project Management/ Engineering Organization in assuring the conciliation of goals and objectives, to achieve activities and milestones, as well as enhance the PRSCIP. He will be in charge of convening the PRCIC and spearheading the update process of the PRSCIP. Furthermore, to bridge knowledge and skills gaps, the SWIC will coordinate and make available training and exercise opportunities via the DHS Interoperable Communications Technical Assistance Program (ICTAP).

The Chief Information Officer (PRCIO), **who** heads the Office of the Chief Information Officer, ascribed to the Office of the Governor, will advise the PRPSBNC of critical IT matters, to assess IT initiatives in the budget review process, to control ongoing IT investment implementation, and to

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conduct post-implementation reviews of completed projects to benefit from lessons learned. The Chief Information Officer (PRCIO), who heads the Office of the Chief Information Officer, ascribed to the Office of the Governor, will assist the strategy development phase, providing necessary elements to facilitate the PRPSBNC in the evaluation of the technological feasibility of the network and to ensure the integration of participating entities and agencies.

Because of their distinct roles, the SWIC and the CIO will design and agree on project milestones and indicators needed to implement the project. They will meet on a monthly basis, along with the Project Manager, to follow up on the project status. Furthermore, they both will represent the Commonwealth of Puerto Rico to monitor the successful planning and implementation of the PRPSBN and assure public policy compliance.

The Department of Transportation and Public Works (PRDTPW) manages the bulk of all critical transportation and logistics infrastructure for the Commonwealth of Puerto Rico. Among its critical assets an important microwave backbone systems crisscrosses the island linking all the critical areas of coverage as well as many telecommunications sites throughout the island. Furthermore, the PRDTPW handles the largest database critical for public safety operations, the Puerto Rico Driver's database, as well as other infrastructure databases with that in mind the PRDTPW will assign one (1) Project Coordinators which will provide support in identifying and compiling information regarding public telecommunication infrastructure and other data, devoting 100% to the project.

The Telecommunications Regulatory Board (PRTRB), will be incorporated to the project since this Board is responsible for ensuring compliance with the Telecommunications Act of Puerto Rico of 1996, and its regulations. As the main regulatory body it may: impose reasonable administrative fines, **require any kind of information which is necessary**, order the cessation of activities or acts in violation of the Act or its regulations, direct that any act is done in compliance with the Act and regulations and orders, impose and order payment of costs, expenses and professional fees, driving views, issue subpoenas in contempt, mediate or act as arbitrators between companies, conduct inspections, investigations and audits. The PRTB will provide one Project Coordinator who will assist in the retrieval, verification and compilation of data for the project, devoting 100% of its regular time.

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The Emergency Medical Service (PREMS) owns a robust microwave backbone which is supporting the implementation of the PRIS for the Commonwealth, and is providing overall support to all PRSCIP activities and milestones. The Emergency Management Agency (PREMA) has made available throughout all 78 municipal Emergency Management Offices and regional offices, a Computer Aided-Dispatch (CAD) System which has information regarding municipal and regional level public safety infrastructure. It also supports a leased intranet which facilitates information exchange between users. To assist in the effort the PREMS and PREMA will provide a Project Coordinator each, who will devote 100% of their time to project data gathering tasks.

Staffing Plan

The Staffing plan for the execution of PRPSBN considers: hiring of full-time administrative staff, and professional services contracting of technical/specialized firms. The direct cost positions would be :

1. Project Manager

A Project Manager will be appointed within the OASP and will report to the PRPSBNC Chairs, to lead the day-to-day implementation of the plan and assure that project milestones are achieved. He will work with the designated State level executive to make sure that the Commonwealth of Puerto Rico has full information and understanding of the material representations included as part of the relation with FirstNet. She/he will be responsible with the preparation and submission of all Performance Progress Reports, provide regular updates to the PRPSBNC Chairs, serve as Secretary for all Committee meetings, convene meetings and work directly with the SWIC and CIO.

The PM will supervise a Financial Coordinator/Accountant, as well as four (4) Project Coordinators to manage the SLIGP. The Project Manager would be a direct cost to the SLIGP dedicating 100% of time to the project.

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2. Finance Coordinator/Accountant

This position would devote 50% of time to assist the Project Manager to produce reporting of financial transactions, reporting and accountancy matters, including audit systems. Will assist in the preparation of weekly and monthly updates and presentation of annual accounts with recommendations, as well as the Financial Report.

Professional Service Contracts

Due to the extent of the project and its importance, the contracting of professional services is justified due to the short supply of technical expertise in interoperability topics and their relation to networks. The following professional services will be contracted through the SLIGP to accelerate deployment, legal matters, education/outreach, planning and network design:

3. Planning/ Project Management/ Engineering Organization

An established full range of program management, planning, and engineering firm will be contracted to provide support to the Project Manager and project staff on the completion of activities and project milestones. Administers and trains staff on the establishment and use of a CRM and on planning principles and should have the capacity and experience in providing extensive training, evaluation and exercise support. This firm will provide the bulk of all of FirstNet preparation and planning tasks, including network design. This Planning/ Project Management/ Engineering Organization will provide a full suite of support staff to carry out the required activities servicing directly the regional and local-government entities. External support and meeting facilitation need the technical know-how of this type of firm. Development of a website would also be contracted with close supervision of the Project Manager and the PRCIC, who in turn would provide the appropriate content.

Within the services of the firm a SME will serve as technical consultant. Preferably a veteran Electrical Engineer, will have sound knowledge of Public Safety telecommunications systems, FCC licensing and

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spectrum management. This Consultant will provide direct advice and guidance to the Project Manager in all compliance matters related to NTIA/FirstNet requirements and procurement rules. Will be in charge of inspecting the plans to assure that they follow FirstNet requirements and provides ~~further guidance into enhancing the PRSCIP, as well as recommend actions directed towards~~ establishing requirements for training and education for Public Safety stakeholders.

As part of the full services the firm will provide on a contingency basis, legal services. Due to the complexity and scope of work regarding the design and preparation of MOU's related to the use and access to communications and networks, legal services should be contracted. A Legal Advisor, accepted into the practice of law in Puerto Rico (with knowledge of the local Civil Law system) should assist with MOU development, have knowledge of telecommunications law and provide compliance advise with local contract law and federal statutes.

The contracting of the Planning/ Project Management/ Engineering Organization is justified as local governments and the HSRB's do not have the appropriate technical staff dedicated for public safety communications and an innate English language barrier into preparing technical reports and documents.

To engage private industry and utilities the PRPSBNC there is a important caveat that must be noted. First, in the case of Puerto Rico electric power and water utilities are owned by the Commonwealth. These two agencies can be included by express mandate of the Governor into the PRCIC, and partake in the planning and implementation process for the broadband network. The Puerto Rico Power Authority (PREPA) owns a broadband network called "PREPAnet", which has significant coverage throughout the island. The Puerto Rico Aqueduct and Sewer Authority (PRWSA) manages the totality of the water distribution critical infrastructure in the island and adjacent islands. In the case of private industry we will conduct meetings using the conduit of the Telecommunications Regulatory Board and the recently created Public/Private Partnership Authority (P3). These utility services can be brought into the planning and implementation process thru the express invitation of the Office of the Governor.

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The private sector will be reached through the assistance of the a PRPBNC member the Telecommunications Regulatory Board (PRTRB); whose records indicate that there are approximately fifty-four (54) certified and registered telecommunications providers in Puerto Rico.

Another way we will engage the private sector is through Broadband Provider Committee which is part of the Puerto Rico Broadband Taskforce, an industry group that is continuing its work to implement the recommendations of the State Broadband Plan released in May 2012. Also direct participation from recipients of the Statewide Broadband Initiative (SBI); the PRCIO, Communication Service for the Deaf, Inc. (CSD), Critical Hub Networks Inc., and Iniciativa Tecnológica Centro-Oriental, Inc. (INTECO, for its Spanish acronym). Each recipient has access to both data and industry contacts that can be shared.

According the progress reports for Critical Hub Networks Inc., local carriers such as Liberty Cablevision, WorldNet, Xecure, Aeronet, AWV, Big Dog, OSNet, AT&T, Puerto Rico Webmasters (PRW), Tropical Networks, Columbus Networks, CoquiTel, Nustream and Inteco have established interconnectivity with their system. These carriers, as well as other three (3) pending network are reaching interconnection agreements.

4. Coordination with Local Government Jurisdictions

As previously stated, local jurisdictions are organized under a municipal government system authorized by statutory law. There are seventy-eight (78) municipal governments throughout the island with limited statutory powers to perform most public safety functions. Puerto Rico Municipalities and some major cities have **NO** jurisdiction over: potable water facilities or potable water distribution system, sanitary sewer facilities including sanitary recollection system, electric power distribution lines including state power generation plants, airports, port docks, (Excluding Ponce and Mayaguez), dams, public schools, rovers, lakes, beaches, underground water and water canals. Public utilities are owned by the State-central-level government.

The PRPSBN will involve local governments working with the structure already in-place of seven

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local-government (7) Homeland Security Regional Boards (HSRB). This interaction using the operation of regional boards provides an ongoing opportunity through regularly scheduled meetings to foster continued communications-related discussion, problem identification and resolution and input into the regional and statewide communications plan activities. Furthermore, this methodology ensures that buy-in can be achieved.

Technical and operational standards of the Puerto Rico Interoperable System (PRIS) are developed through an open process with broad multi-disciplinary multi-jurisdictional participation. As a general rule, standards related to interoperability are presented to the PRCIC Operations and Technical Committee (OTC). They can be presented by any person and are frequently presented by local users groups or regional board user committees. Following a discussion of the operational and technical issues related to the standard, the OTC may recommend adoption of the proposed operational standard or may refer it for further discussion and comment. A proposed technical and operations standard establishing standard operating procedure is finally adopted when adopted and approved by the PRCIC during which occasion there is also an opportunity for additional discussion, amendment and adoption or rejection.

Throughout the PRSCIP process and under the HSRB's local jurisdictions have been developing regional partnerships through memorandums of understanding (MOU) and inter-local agreements with the focus on planning, exercising, training and communications. Regional and municipal assessments were conducted to determine the needs of the local governments, their compliance with the Federal Communications Commission (FCC) Rules and Regulations, NTIA requirements and the needs for training. Also the OASP establish the Senior Advisor Committee to inform and take the information of the state agencies and their participation in the planning process.

Municipal governments lack adequate equipment and possess legacy radio systems, which do not comply with FCC regulations. An informal assessment has revealed that most local jurisdiction responders lack efficient and adequate broadband access, even through private carriers within their jurisdiction. Furthermore, municipal level staff have slowly entered the realm of interoperability as a topic, and land mobile radio. We presume that not all staff may have extensive experience in IP

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networks, applications deployment, or cellular networks. We do know that local IT/Telecomm/Public Safety technology departments do not have adequate staffing capacity to address the needs of the project. Also, these challenges can be overcome through SOP development, training, exercises and daily use of available infrastructure.

5. Regional Coordination

To support the interoperability effort, implement the Statewide Plan, and ensure that the needs of responders are met, Puerto Rico established a practitioner-driven governance structure. This governance structure follows the FCC order and consists of a full time Commonwealth Interoperability Program Manager (SWIC), and a State Advisory Group (Advisory Group). In addition to these established governance bodies, Initiative Action Teams (TATs) are assembled to convene stakeholders and experts in specific fields to collaborate on interoperability issues, as needed.

The PRPSBN will achieve adequate coordination with seventy-eight (78) local government jurisdictions working with seven local-government (7) Homeland Security Regional Boards (HSRB), a **regional governance structure implemented since 2006** to administer, deliberate and decide over investments using the DHS-FEMA State Homeland Security Grant Program (HSGP). Each HSRB is constituted by one authorized official representative from each municipal government in the region, who is, in most cases, the Deputy Mayor, the Police Commissioner or the Emergency Management Administrator. All seven (7) regions are modeled over the PREMA regional structure, having operational control and authority over each Emergency Operations Center (EOC). Each municipal government in the HSRB has equal stake at the proposed investments and benefit equally as recipients of grant funding. Every HSRB has State level representation via a PREMA Regional Coordinator.

The OASP developed the regional planning approach to promote an atmosphere of cooperation and partnerships within the emergency response agencies across the Commonwealth. The HSRB's governance approach encourages transparency, accountability and collaboration through:

- Leadership representation of a broad spectrum of local public safety responders (Municipal

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Police, State and Municipal EMA).

- Participatory decision making.
- Relationship Building at the local and regional levels.

An essential element of this structure is the presumption that regional boards will evolve to represent regional interests. To date, the following regional boards have been formed to address and coordinate regional interoperability issues:

- North Regional Board (NRB) - A joint powers board representing ten (10) municipalities was created to transfer responsibility for the PRIS regional projects.
- South Regional Board (SRB) - A joint powers board representing fifteen (15) municipalities was created to transfer responsibility for the PRIS regional projects.
- East Regional Board (ERB) - A joint powers board representing twelve (12) municipalities was created to transfer responsibility for the PRIS regional projects.
- West Regional Board (WRB) - A joint powers board representing sixteen (16) municipalities was created to transfer responsibility for the PRIS regional projects.
- Central Regional Board (CRB) - A joint powers board representing thirteen (13) municipalities was created to transfer responsibility for the PRIS regional projects.
- Metro I Regional Board (MIRB) - A joint powers board representing six (6) municipalities was created to transfer responsibility for the PRIS regional projects.
- Metro II Regional Board (MIIRB) - A joint powers board representing five (5) municipalities was created to transfer responsibility for the PRIS regional projects.

Each regional board has currently a regional interoperability committee that is part of the PRCIC in Puerto Rico.

For the preparation of this application the Commonwealth of Puerto Rico has not collaborated or reached out to another State or territory, for strictly time-limit considerations. Nonetheless, our natural partner for this project would be the U.S. Virgin Islands. Both Puerto Rico and the USVI have similar challenges in the planning and implementation of this project, and from the federal response

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perspective work and liaise with the same agencies and their respective management structure. With formula assigned to both territorial jurisdictions more leverage could be afforded and accomplished, increasing redundancy, resilience and robustness.

6. Tribal Nations

No tribal nations exist within Puerto Rico

7. Rural Coverage

Making a determination of a rural area in Puerto Rico requires understanding the geographical and topographical challenges of this Caribbean archipelago. Puerto Rico is the easternmost of the Greater Antilles (18 15 N, 66 30 W), and the fourth largest island in the Caribbean after Cuba, Hispaniola (which comprises the Dominican Republic and Haiti), and Jamaica. The Island is located at the crossroads between North and South America, at just 3.5 hours airtime from New York, 60 minutes from Caracas, and at only 4 days sailing from Atlantic ports in the U.S. and ports in the Gulf of Mexico. The Puerto Rican territory includes other three small islands, Vieques, Culebra and Mona, as well as numerous islets. Both Vieques and Culebra are populated and organized into municipalities.

Based on the latest U. S. Census, the population of Puerto Rico is roughly three million seven hundred twenty six thousand (3,725,789) people. The Island, with an area of 3,435 square miles (9,000 sq. km)-110 miles long by 39 miles wide-has a mountainous interior and is surrounded by a wide coastal plain where the majority of the population lives. With this high population density many of what could be called as “rural” areas are not necessarily isolated from a major urban area. To illustrate, the San Juan-Caguas-Guaynabo Metropolitan Statistical Area is composed of 41 municipalities which cover almost half of the island. Nonetheless, because of topography rural areas can be considered municipalities within the central mountain range and the islands of Culebra and Vieques.

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According to US Census in 2000 (doc. Puerto Rico Planning Board) estimates of an Urban Cluster consists of densely populated area with a minimum population of 2,500 but not more than 49,999 inhabitants. In the graph the section colored dark orange is the San Juan-Caguas-Guaynabo Metropolitan Statistical Area described above.

In these rural areas there are broadband and LTE coverage has significant “gaps” where commercial carriers have significant difficulty to reach and provide service. Due to this fact most first responders cannot rely on cellular phones to manage incidents and at times have problems with their portable systems.

Municipalities in rural areas actively participate in the PSCIP, PRCIC and the HRSB's, in which they provide input regarding the challenges they face to achieve coverage in gaps. Their needs would be prioritized with data gathered from the full assessment to be prepared via the update of the PRSCIP.

8. Existing Infrastructure

To collect data on Puerto Rico Public Safety infrastructure and equipment is included in the Communication Assets Survey and Mapping (CASM), managed by the OASP. CASM is provided by the US Dept. of Homeland Security, Office of Emergency Communications through the Interoperable Technical Assistance Program (DHS/OEC ICTAP). The system should allow us to information with

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which to create investment justifications, funding requests, and the development of plans to close gaps and improve interoperability. CASM is a web-based single repository to support interoperable communications analysis to:

- Facilitate information sharing
- Hold communication assets inventory assessment

(Agency, region, statewide)

- Foster inter-agency interoperability analysis
- Enable development of Tactical Interoperable

Communication Plans (TICPs)

- Evaluate an agency's "Need vs. Ability" to communicate

Currently, the SWIC is in charge of updating the CASM and has had regular updates, including inventory, identification of interoperability gaps. To update the Puerto Rico CASM a request for information is made on a yearly basis to each local government and state agency via the PRCIC and the HRSB. At this juncture the CASM is being updated and customized to the particular needs of an island jurisdiction such as Puerto Rico.

Also available should be the data collected by the PR Chief Information Officer using the Puerto Rico State Broadband Development Grant under the NTIA's State Broadband Initiative (SBI). Although, apparently this project was originally funded for broadband planning activities and two years of data collection, in September of 2010, this project was amended to extend data collection activities for an additional three years and to identify and implement best practices. As the project should near its closeout, with the results of the project the PRCIO could supplement other information included in the

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CASM and other databases.

9. Existing Government-Owned Networks

To create a public safety grade (PSG), robust and resilient network, the update of the PRSCIP and its full assessment of equipment and structures that will ensue, will provide all the information necessary to ensure that these comply with federal regulation and local building regulations. This includes determining steps to make these systems reliable and resilient to adequately support the PRPSBN. To identify such requirements the full assessment of sites would be required. Reliability will be achieved through equipment redundancy and minimizing single points of failures and through careful system design. Resiliency will be achieved through careful considerations of local-tropical environmental factors and how high risk events such as earthquakes, wild land fires, hurricanes, floods, lightning, and even vermin can disrupt or damage the NPSBN network. Consideration to common atmospheric conditions such as extreme temperature shifts, high/low humidity, or even salty air affects resiliency. One failure common in Puerto Rico are sporadic power service outages. The assessment and plan needs to consider the much needed investment on incorporate both battery and backup generators at the radio sites to insure reliable power for the equipment. Lessons learned from past disasters indicate that telecommunications infrastructures in remote mountains should be better built when possible and have contingency plans that consider service continuity.

To identify contractual requirements regarding the hardening, security, reliability and resiliency for private carrier sites, the Telecommunications Regulatory Board (PRTRB) has authority to regularly inspect security measures and controls. In many sites both public safety equipment and private telecommunications or broadcasters share leased space and infrastructures. The PRTRB can facilitate the process by making regular assessments of the sites and request information on what the lease agreements indicate regarding responsibility or liability regarding loss or vandalism on these sites. This is valuable information in determining site selection, since site overcrowding is common in Puerto Rico.

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10. Network Users

Following guidance from the National Public Safety Telecommunications Council (NPSTC) the primary user base of the NPSBN will include those entities and services that are essential to ensure timely and effective response to emergency events whether local, state, federal, or international in scope. In particular we will provide access to agencies with the Emergency Support Functions (ESF's) responsibilities, as defined in the National Response Framework (NRF) as lead and supporting agencies (e.g., utilities, public works, hospitals, transit, transportation, military, National Guard, and others), who are critical support in the preparedness, response, mitigation and response to all-hazards incidents.

The CIO's SBI funded planning and mapping database should give us sufficient information regarding potential users. Furthermore, other SBI funded organizations such as Communication Service for the Deaf, Inc. (CSD), Critical Hub Networks Inc., and Iniciativa Tecnologica Centro-Oriental , Inc. (INTECO); could provide us access to their databases and provide valuable contacts within their industry networks.

Although not considered in this question, the federal sector in the island is probably the most significant potential user of such a broadband network. Due to the significant distance from the CONUS, several law enforcement agencies rely on commercial carriers for broadband service and telecommunications which can be interrupted many times. With an estimated workforce of 3,500 persons in law enforcement and response, this could be a considerable addition to state and local-government counterparts. That is without considering approximately 3,000 additional federal employees working for other agencies island-wide.

To have a rough idea of the potential usage of such a network, the Puerto Rico Telecommunications Regulatory Board published the 2012 usage statistics mobile phone use island-wide, reporting 3,060,113 users; representing 76.8 per 100 users. Considering that official population of the island 3,725,789, the commercial carrier infrastructure to support such a market is considerable.

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11. Education and Outreach

Under the purview of the PRPSBNC, the existing organizing structures under the PRCIC and its regional structure HSRB, will be used as a forum to commence education and outreach of all relevant stakeholders. Also, the Puerto Rico Broadband Taskforce would be incorporated to the educational effort.

Led by the contracted Planning/ Project Management/ Engineering Organization, and with the participation of the PRCIC and PRPBNC, the following would be the approach to educate users throughout the island:

1. A kick-off event would be held within 30 days of the award date – Inviting all public and private stakeholders his will serve to provide a open forum for a detailed brief of the expected project plan.
2. Regional follow-up events – Starting 15 days after the kickoff, the team will visit each of the seven HSRB's to educate and answer questions regarding the plan. This will allow that each of the 78 municipal governments are briefed on the intended plan.
3. Meeting with the Puerto Rico Broadband Taskforce - This meeting, to occur 60 days after the kick-off will allow members of this taskforce understand the extent of the project plan, their participation in it, and the required information sought from them.
4. NPSBN Puerto Rico Conference – This one day event to be scheduled within 5 months of the kick-off will provide multisector seminars and conferences to educate about the NPSBN. The conference will be repeated on the following two (2) years to assure that all related matters are covered and that updates regarding the consultation with FirstNet are discussed.
5. Media Tour – Prior to the NPSBN Puerto Rico Conference a media tour would ensue to lure interested stakeholders into the conference and start a public discussion about the project.
6. PRCIC and PRPSBNC joint meetings - Four meetings will be scheduled per year to review and address matters regarding the update of the PRSCIP and the preparation of the PRPSBN.
7. Training workshops - Since interoperability with the NPSBN is a relatively new study area

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Induction training into interoperability would be provided starting after the first 7 months of the SLIGP program start. Two workshops covering different topics will be scheduled monthly, if possible, for the remaining 4 months of the first year. During the remaining two (2) years of the SLIGP workshops will be scheduled after careful consideration of project needs and timelines.

12. Memorandum of Agreements

The specific obstacles that could impede the participate fully in the nationwide public safety network revolve around the islands physical distance from the Continental United States (CONUS) and the implications regarding the “Opt-in, Opt-out” decision from particular public sector stakeholders. Reliability and resilience of such a network is of utmost importance for Puerto Rico due to the persistent risk of hurricanes, flooding, landslides, earthquakes and electric service interruptions, coupled with the distance for additional support from the federal government in case of a major disaster. It is important to have the capacity to sustain damage and avoid interruption of service, be robust and accessible to all public-safety users.

Questions regarding the actual financing mechanism to sustain such a network and the capacity of local jurisdictions to pay fees for use/lease of the network will arise and need clarification. This issue is of utmost importance considering a severe structural financial deficit for the Commonwealth which could hinder these type of investments. The feasibility of using public-private partnership mechanisms will also require further discussion and debate.

For the completion of fully functional MOU’s or any other legal mechanism, it is our position that a legal memorandum must be developed regarding Conflict of Laws issues that might ensue in the planning and implementation process, which are normal within Federal and State relations. For example, the territory's Civil Law legal system, particularly related to topics on Real or Property Law could represent a predicament that should be reviewed further. Puerto Rico has a Telecommunications Law which has particular requirements that might not be contemplated in federal law.

Another obstacle that must be resolved with the input of NTIA/FirstNet is the use and access to

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infrastructure and facilities that have been purchased by the Commonwealth of Puerto Rico using federal funds from other agencies. The drafting and agreement in MOU's should reflect this fact.

An obstacle to gathering data from local private carriers is the potential unwillingness to provide information, since there is no requirement to disclose such data. In such as small highly competitive market this a very distinct possibility. This would require additional work from our legal team to prepare Non-Disclosure Agreements and to cultivate sound relationships with these providers.

14. Tools

The principal software tool available that could be applied to the planning and data collection activities under the direct management of the OASP is a Computer-Aided Dispatch (CAD) System. This system, with corresponding computer stations, are currently installed in 78 municipal level Emergency Management Offices, and the OASP started the installation in several municipal Police stations. The CAD can be inputted and updated with data to generate capabilities to perform:

- **Mapping** - These mapping systems can be interfaced with the CAD geofile to display units and incident locations.
- **Unit display** - CAD can have a database of field units, which is used to display a list of active units. This database includes the unit ID, assigned personnel, special capabilities (K-9, SWAT, etc.). The database is linked to the incident database, allowing the dispatcher to display unit status: in-service, out-of-service, etc. Using commands or on-screen buttons, the dispatcher can change a unit's status or assign it to incidents.

Currently, the CAD has been updated with information regarding municipal and regional level public safety infrastructure. It also supports a leased intranet which facilitates information exchange between users.

The PR Telecommunications Regulatory Board has a web based database on the current registry of telecommunications towers, public and private, within the island.

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The PRCIO in a partnership with ConnectPR (<http://www.connectpr.org/>) developed a web-based application called Puerto Rico Broadband Stat, an interactive map that provides information regarding private carrier access to broadband according to postal zip code.

The OASP could leverage data obtained using “GeoPSIC-Puerto Rico”, a *Google Earth*TM file that contains PSIC project information specific to the U.S. Territory of Puerto Rico. All PSIC-funded projects were categorized into one of five major project types associated with improving interoperable communications, specifically mobile infrastructure (MI); mobile/portable equipment (MPE); planning, training, and exercises (PTE); dispatch operations and response centers (DORC); and transmission and receiving sites (TR).

Relevant GIS information can be obtained from State-owned data sources such as:

- Transmission and distribution lines from PREPA
- Inventory of State and Municipal roads from PRDTPW
- Satellite data imaging from the Municipal Property Tax Center (CRIM, for its Spanish acronym)
- Census data sets from the Puerto Rico Planning Board

14. Phase Two Funding

The Goal of the **Puerto Rico Public Safety Broadband Network Project** is to plan and coordinate the development and implementation of a viable, resilient and efficient Island-wide broadband network designed to manage and share information to protect the critical infrastructure and people of Puerto Rico. For the purpose of this project three elements are considered to sustain the intended capabilities:

- To achieve effectiveness - we seek to assess implementation, and evaluate the reach and alignment of strategies.
- To gain community support- we seek to develop positive relationships, turn stakeholders into system leaders and encourage ownership.

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- To assure organizational capacity - we seek to develop administrative structures and linkages, adopt appropriate policies and procedures, secure resources and acquire appropriate expertise.

Following the SLIGP guidance the activities described below should complete the objectives of the program and spearhead the implementation phase.

Objectives

- 1) Gather, compile and present preliminary data collected from known sources for additional consultation with First Net.
- 2) Complete draft MOU's and Non-Disclosure agreements
- 3) Process and geocode data sets to be provided with FirstNet
- 4) Start Broadband studies focusing on:
 - a) User Needs Assessment
 - b) Commercial Carrier Assessment
 - c) Development of Network Requirements
 - d) Inventory of available networks and coverage
 - e) Network design
 - f) Network Security Requirements
 - g) Coverage area study
 - h) Implementation plan
 - i) Evaluation of Public/Private partnerships
 - j) Rural mountainous coverage assessment
 - k) Sustainable state funding mechanisms
 - l) SCIP Compliance
 - m) NG9-1-1 system integration

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- 5) Review and comment first draft of a PRPSBNP.
- 6) Establish and agree on interoperability performance measures.
- 7) Perform an annual update and maintenance of an interoperability database of local, regional, and statewide equipment, governance, along with standard operating procedures.

15. Other

In the preparation of this application the OASP contracted URS Caribe LLC, who provided reasonable proposal preparation/grant writing services following SLIGP guidance. Some information for the preparation of this application was provided by the Chairman of the RPC and the State-Wide Interoperable Communications Coordinator. References are made from the PRSCIP and other documents of the Commonwealth of Puerto Rico.

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APPENDIX

List of Abbreviations

CAD - Computer aided dispatch

CONUS – Continental United States

EMS – Emergency Medical Services

FCC – Federal Communications Commission

NECP – National Emergency Communications Plan

NPSBN – National Public Safety Broadband Network

OASP – (Spanish acronym, Office of Public Security Affairs)

PSIC – Public Safety Interoperability Communications

PSG – Public Safety Grade

PRCIC – Puerto Rico Interoperable Communications Committee

PRDTPW – Puerto Rico Department of Transportation and Public Works

PREMA – Puerto Rico Emergency Management Agency

PRIS – Puerto Rico's Statewide Interoperability Communications System

PRPD – Puerto Rico Police Department

PRPSBNC – Puerto Rico Safety Broadband Network Committee

PRSCIP – Puerto Rico Statewide Communication Interoperability Plan

RFP – Request for Proposal

RPC – Regional Planning Committee

SAA – State Administrative Agency

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SCIP – Statewide Communications Interoperability Plan

SIEC – Statewide Interoperable Executive Committee

SLIGP – State and Local Implementation Grant Program

SOP – Standard Operating Procedure

SMAMRRDN – State Multi Agency Regional Radio Data Network

SLEERSN – State Law Enforcement and Emergency Response Secure Network

STR – Strategic Technology Reserve

SWIC – Statewide Interoperability Coordinator

TIC – Tactical Interoperable Communication

TA – Transit Administrator

DTPW – Department of Transportation and Public Works

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Category	Detailed Description of Budget (for full grant period)			Breakdown of Costs	
	Quantity	Unit Cost	Total Cost	Federal	Non-Federal
a. Personnel					
Project Manager, OASP - One project manager will spend 100% of his time on the project for 3 years. (Base salary \$4,200/month)	3 years	\$50,400	\$151,200	\$151,200	\$ -
One Finance Coordinator/Accountant at 50% of time (Base salary \$2,800/month).	3 years	\$16,800	\$50,400	\$50,400	\$ -
SWIC at 20% of time during 10 months of Year 1 and 100% remaining 2 months. Thereafter, 100% of time during Years 2 and 3. (Base salary \$4,200/month)	3 years	\$50,400	\$117,600	\$0	\$117,600
Total Personnel			\$319,200	\$201,600	\$117,600
b. Fringe Benefits					
Project Manager - Fringe is calculated at 25% of salary, for the portion of time spent on SLIGP activities	\$151,200	25%	\$37,800	\$37,800	\$ -
Finance Coordinator/Accountant - Fringe is calculated at 25% of salary, for the portion of time spent on SLIGP activities.	\$50,400	25%	\$12,600	\$12,600	\$ -
SWIC - Fringe is calculated at 25% of salary, for the portion of time spent on SLIGP activities	\$117,600	25%	\$29,400	\$0	\$29,400
Total Fringe Benefits			\$79,800	\$50,400	\$29,400
c. Travel					
Pre-award Travel (May 2013) - One FirstNet Regional Meeting for 10 individuals. Airfare estimated at \$700/ticket; hotel is estimated at \$180/night for two nights; per diem is estimated at \$50/day for 3 days. Total cost per person is \$1,210.	10 trips	\$1,210	\$ 12,100.00	\$ 12,100.00	\$ -
One (1) FirstNet Regional Meeting during Year 1 and two (2) Regional Meetings per year for Years 2 and 3 for 10 individuals. Airfare estimated at \$700/ticket; hotel is estimated at \$180/night for two nights; per diem is estimated at \$50/day for 3 days. Total cost per person is \$1,210.	50 trips	\$1,210	\$ 60,500	\$ 60,500	\$ -
Hotel rooms for 50 participants at \$150/night for one night for Outreach Activity and hotel rooms for 90 participants at \$150/night for one night for the NPSBN Puerto Rico Conference	140 rooms	\$150	\$ 21,000	\$ 21,000	\$ -
Total Travel			\$ 93,600.00	\$93,600	\$0
d. Equipment					
N/A	0	\$0	\$0	\$0	
Total Equipment			\$0	\$0	\$0
e. Supplies					
Laser Printer	1 unit	\$924	\$924	\$924	\$ -
Office Supplies budgeted at \$375/month for 3 years	36 months	\$375	\$13,500	\$13,500	\$ -
Laptops	2 units	\$1,100	\$2,200	\$2,200	\$ -
Total Supplies			\$16,624	\$16,624	\$0
f. Contractual					
Project Management and Planning services provided by a full service engineering organization for 6 individuals: Federal share:					

g. Construction	Quantity	Unit Cost	Total Cost	Federal	Non-Federal
N/A			\$0		
Total Construction			\$0	\$0	\$0
h. Other	Quantity	Unit Cost	Total Cost	Federal	Non-Federal
Wireless Connection for Laptops 2 laptops/month x 12 months/year x 3 years = 72; the monthly cost for each laptop's connection is \$75.	72 units	\$75	\$5,400	\$5,400	\$ -
Outreach activity - Kick-off event - One day event for 150 individuals, to be held at a local hotel/convention center in the San Juan Metropolitan area. Activity includes: meeting room \$2,000; audio and video services \$1,000; and materials for activity \$25/participant.	150 participants	\$45	\$6,750	\$6,750	\$ -
NPSBN Puerto Rico Conference - One day event (first year only) for 200 individuals, to be held at a local hotel/convention center in the San Juan Metropolitan area. Activity includes: meeting room \$2,000; audio and video services \$2,000; and materials for activity \$40/participant.	200 participants	\$60	\$12,000	\$12,000	\$ -
4 yearly PRCIC and PRPSBNC joint meetings (50 individuals per meeting for 4 hours) throughout the island. An estimated cost per meeting of \$500/meeting will cover materials and printing	600 participants	\$10	\$6,000	\$6,000	\$ -
Printing 5 brochures 5,000 copies each	25,000 copies	\$0.05	\$1,250	\$1,250	\$ -
Training - 2 training sessions per month totaling 58 training sessions during the first 29 months, after the NPSBN conference. Each 4-hour session at \$400 covers training materials, training aids, or any SME resources on the topics, for 40 individuals per training.	2,320 participants	\$10.00	\$23,200	\$23,200	\$ -
Total Other			\$54,600	\$54,600	\$ -
Total Direct Charges			\$1,790,784	\$1,432,624	\$ 358,160.00
I. Indirect Costs	Quantity	Unit Cost	Total Cost	Federal	Non-Federal
n/a					
Total Indirect			\$0	\$0	\$0
TOTALS			\$1,790,784	\$1,432,624	\$358,160

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Budget Justification

For the execution of the Puerto Rico Public Safety Broadband Network Project, the grantee agency of the Commonwealth of Puerto Rico will be the Office of Public Security Affairs that was created by Executive Order #25 signed on May 2, 2005, ascribed to the Office of the Governor, and it is designated as the State Administrative Agency (SAA) for the administration of the State Homeland Security Grant Program, as well as other related security programs.

It should be noted that for the first year of performance of the SLIGP, the federal cost share estimates remain below the \$500,000 indicated in the application guidance. Below is a summary of the projected costs to prepare for the consultative process with FirstNet.

Narrative

Personnel

Federal: \$201,600

Non-Federal: \$117,600

Project Manager - will be appointed within the OASP to lead the day-to-day implementation of the plan and assure that project milestones are achieved. He will work with the designated State level executive to make sure that the Commonwealth of Puerto Rico has full information and understanding of the material representations included as part of the relation with FirstNet and will be responsible for the preparation and submission of the Performance Progress Report and any other federal reporting requirements. The Project Manager will supervise a Financial Coordinator/Accountant assigned to the SLIGP. The Project Manager will be a direct cost to the SLIGP dedicating 100% of time to the project. The base salary for the Project Manager will be \$4,200 a month or \$50,400 per year. Total costs during the three-year period is \$151,200.

Statewide Interoperability Coordinator (SWIC) - As the central coordination point for Puerto Rico, it plays a critical role in a state's interoperability effort. The SWIC works with emergency response leaders across all levels of government to implement a statewide strategic vision for interoperability. As part of this effort, SWICs are responsible for the implementation of the Statewide Communication Interoperability Plan (SCIP), which establishes a vision for interoperability in the state. The SWIC will oversee the daily operation of the state's interoperability efforts, coordinate interoperability and communications projects, maintain the governance structures, assemble the working groups to develop and implement key initiative and updating and implementing the SCIP. The SWIC will devote 20% of time during the first 10 months of year 1 and 100% of time the remaining 2 months. The SWIC will be appointed 100% during years 2 and 3. The base salary for this position is \$4,200 per month or \$50,400 per year. Total cost during the three-year period will be paid by Non-federal sources totaling \$117,600

Finance Coordinator/Accountant - will be selected from OASP staff and will devote 50% of time to assist the Project Manager to produce reporting of financial transactions, reporting and accountancy matters, including audit systems. Will assist in the preparation of weekly and monthly updates and

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presentation of annual accounts with recommendations, as well as the Financial Report. The base salary for a Finance Coordinator/Accountant is estimated at \$2,800 per month, for a total of \$33,600 per year. Since this position will devote only 50% of time, the cost to the SLIGP of this position will be \$1,400 per month or \$16,800 per year. Total costs during the three-year period is \$50,400.

Fringe benefits

Federal: \$50,400

Non-Federal: \$29,400

Fringe benefits are estimated to be a standard rate of 25% of the base salary for all positions. For the salaries indicated above the calculated benefits for the Project Manager are \$12,600 per year, totaling \$37,800; and for the Financial Coordinator/ Accountant are \$4,200 per year, totaling \$12,600 respectively for the three-year period for the federal share. The non-federal share for SWIC fringe benefits are \$29,400.

Travel

Federal: \$93,600

Non-Federal: \$0

1. Pre-award travel (May 2013) for one (1) FirstNet Regional Meeting for 10 individuals. Airfare estimated at \$700/ticket, hotel is estimated at \$180/night for two nights, and per diem is estimated at \$50/day for 3 days. Total cost per person is \$1,210 for a total of \$12,100.
2. One (1) FirstNet Regional Meeting during Year 1 and two (2) Regional Meetings per year for Years Two and Three for 10 individuals. Airfare estimated at \$700/ticket, hotel is estimated at \$180/night for two nights, and per diem is estimated at \$50/day for 3 days. Total cost per person is \$1,210 for a total of 50 trips or \$60,500 during the three-year period.
3. Hotel rooms cost for 50 participants, first year only, at \$150/night for one night for Outreach Activity and hotel rooms for 90 participants at \$150/night for one night for the NPSBN Puerto Rico Conference for a total of 140 rooms or \$21,000.

Supplies

Federal: \$16,624

Non-Federal: \$0

Supplies include specifically a laser printer (estimated at \$924), office supplies (budgeted at \$375 per month for 36 months) and two (2) laptop computers (\$1,100 ea.). Supplies will be used for direct project activities for the Project Manager and Financial Coordinator.

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Contractual

Federal: \$1,015,800

Non-Federal: \$211,160

Project Management and Planning Services- A full service Project Management and Engineering Organization will be contracted to provide guidance and support to the Project Manager and project staff on the completion of activities and project milestones. This firm will provide the bulk of all of FirstNet preparation and planning tasks. This Planning/ Project Management/ Engineering Organization will provide a full suite of support staff to carry out the required activities servicing directly the regional and local-government entities. The firm will provide a:

Project Coordinator - Administers and trains staff on the establishment and use of project management tools and on planning principles and should have the capacity and experience in providing extensive training, evaluation and exercise support. Will devote 40 hours per week at a rate of \$120 during the duration of the project of 48 weeks per year. The total cost for the 3 years is \$691,200.

Technical Consultant – Will provide direct advice and guidance to the Project Manager in all compliance matters related to NTIA/FirstNet requirements and procurement rules. Will be in charge of inspecting the plans to assure that they follow FirstNet requirements and provides further guidance into enhancing the PRSCIP, as well as recommend actions directed towards establishing requirements for training and education for Public Safety stakeholders. With an average rate per hour of \$85, the project will require the Consultant to devote 25 hours per week for 48weeks per year. The total cost for the 3 years is \$306,000.

Legal Consultant – A legal advisor, accepted into the practice of law in Puerto Rico (with knowledge of the local Civil Law system) will assist with MOU development and compliance with local contract law and other related federal statutes. The legal services will only be provided during the first year of the grant and compensated at \$100 per hour for an estimated time allotted of 2 hours per week for 48 weeks. For the 3 years an estimated cost of \$9,600 is contemplated.

Data Collectors – Two data collectors will dedicate time to development and collectionof data for the project. These are calculated at \$24/hour for a weekly load of 30 hours at 48 weeks per year during the three year period. Estimated cost is \$207,360.

Grant Writing Services (PRE-AWARD) – Professional Grant Writing services were contracted to develop and write the grant application for a base rate of \$100 for a total of 128 work hours of which 90 hours are the federal share and 38 hours are the non-federal share.

Other

Federal: \$54,600

Non-Federal: \$0

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Wireless Connection for Laptops – Laptop wireless connection service will be for 2 laptops to engage in fieldwork for the project manager and backup. Service per month is estimated at \$75. Total estimated cost for wireless service is \$5,400.

Outreach

- 1) Kick-off event - A one-day event, for approximately 150 persons, to be held at a local hotel/convention center venue in the island. Room cost of \$2,000, audio and video for \$1,000, and materials for \$45 per participant. The total estimated cost of \$6,750.
- 2) NPSBN Puerto Rico Conference - A one day event, for approximately 200 persons, to be held at a local hotel/convention center venue. Room cost of \$2,000, audio and video for \$2,000, and materials for \$40 per participant. The total estimated cost is \$12,000 or \$60 per participant.
- 3) Four yearly PRCIC and PRPSBNC joint meetings - Will be held at different locations throughout the island to facilitate participation from all stakeholder and regional groups. For an estimated number of 50 participants meeting during 4 hours. An estimated cost per meeting of \$500 will cover materials and printing. Approximately 600 individuals will be served for a total cost of \$6,000.
- 4) Printing – Brochures with broadband related guidance information will be produced for outreach activities throughout. Five (5) brochures will be prepared issuing a total of 5,000 copies on each edition. Total cost for printing is \$1,250.

Training - Interoperability and network trainings will be scheduled through 29 months after the first NSBPN Puerto Rico Conference, with the intent of organizing two (2) training sessions per month, a total of 58 training sessions will be held. Each 4-hour session at \$400 will cover materials, resources and other aids for 40 participants per session. Expecting to serve approximately 2,320 participants the estimated total cost is \$23,200.

Cash Match for Project – The Commonwealth of Puerto Rico will provide a cash match for \$358,160 from revenues of the 911 services. Match is the product of a telecommunications fee paid by users throughout the island to support emergency dispatch. This cash match will be used to cover the contractual budget category. Matching funds will be used to cover for the SWIC’s salary and fringe benefits and contractual budget items.

No indirect cost are claimed.

TOTAL PROJECT COST -	\$1,790,784
FEDERAL SHARE (80%) -	\$1,432,624
NON-FEDRAL SHARE (20%) -	\$358,160

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.
19. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

<p>* SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL</p> <p>Sally Garrafa</p>	<p>* TITLE</p> <p>Executive Director</p>
<p>* APPLICANT ORGANIZATION</p> <p>Puerto Rico Office for Public Safety and Security</p>	<p>* DATE SUBMITTED</p> <p>03/18/2013</p>

Standard Form 424B (Rev. 7-97) Back

Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, 'New Restrictions on Lobbying.' The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Commerce determines to award the covered transaction, grant, or cooperative agreement.

LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying,' in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

*** NAME OF APPLICANT**

Puerto Rico Office for Public Safety and Security

*** AWARD NUMBER***** PROJECT NAME**

Puerto Rico Broadband Safety Network

Prefix:

Mrs.

*** First Name:**

Sally

Middle Name:*** Last Name:**

Garrafa

Suffix:

* Title: Executive Director

*** SIGNATURE:**

Sally Garrafa

*** DATE:**

03/18/2013



Alejandro J. García Padilla
Governor
Commonwealth of Puerto Rico

March 15, 2013

State and Local Implementation Grant Program
Office of Public Safety Communications (OPSC)
National Telecommunications and Information Administration
U.S. Department of Commerce
1401 Constitution Avenue, NW
HCHB, Room 7324
Washington, DC 20230

RE: Letter of Designation of State Coordinator Commonwealth of Puerto Rico - SLIGP

Dear Sirs:

As Governor of the Commonwealth of Puerto Rico, I am designating the Puerto Rico Office of Public Safety and Security (OASP, for its Spanish acronym) as the authorized government body to coordinate the State and Local Implementation Grant Program (SLIGP). The designated state officer and coordinator for the implementation of the SLIGP will be Mr. Miguel A. Ríos-Torres, State Administrative Agent (SAA). Under his supervision, Mrs. Sally Garrafa-Echevarría, as Executive Director of OASP, will be the Authorizing Official for the grant and Mr. Oscar Rodríguez will serve as Project Manager.

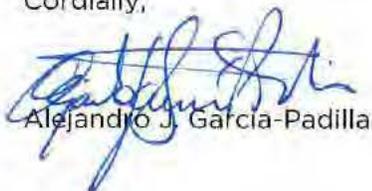
Executive Order #25 signed on May 2, 2005, creates the OASP under the direct purview of the Office of the Governor, and it is designated as the State Administrative Agency for the management of the State Homeland Security Grant Program, as well as other related security programs. The OASP is in charge of providing guidance to the Governor in all matters related to homeland security policy and works with State and Local all-hazards response and law enforcement agencies, sub-granting well over \$20 million dollars and collaborating with these entities in adequate programmatic and financial administration of grant funds. I believe that the OASP has the required expertise to adequately manage and comply with the expected reporting requirements.

For this grant, the OASP will work with the Office of the Chief Information Officer and the Department of Transportation and Public Works, which will constitute the main governance body, to implement the broadband initiative, in tandem with the Interoperable Communications Committee. They will assure that representations contained in this application are fulfilled.

An existing OASP led regional administrative structure will facilitate participation, the enhancement of communications technology and use of existing infrastructure.

My administration has the firm resolve to develop a robust and reliable public safety broadband network to address both the public safety, as well as the operational needs of our government.

Cordially,


Alejandro J. García-Padilla