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City Administrator's Office

## MEMORANDUM

**TO:** HONORABLE MAYOR &  
CITY COUNCIL

**FROM:** Ken Gordon

**SUBJECT:** BayRICS Joint Powers Authority  
BayWEB Project Update

**DATE:** January 17, 2012

City Administrator  
Approval

Date

1/17/12

### INFORMATION

The purpose of this Information Memo is to provide an update on the Bay Area Regional Interoperable Communications System Joint Powers Authority's (BayRICS JPA) broadband Public Safety and Public Access data network project, known as BayWEB. The BayWEB project has challenges, many of which have not been resolved to the satisfaction of the City of Oakland's staff representatives involved in the negotiations, planning and development stages of the project. The project has now reached a critical decision point, and this memo highlights the four key elements of the project and the conclusions that staff have currently reached due to the unresolved issues and missing or inconclusive information associated with the project.

The following is a summary of the key elements and staff conclusions for the BayWEB project:

- 1. Federal Communications Commission (FCC) 700MHZ Spectrum Waiver Petition**  
On December 23, 2011, the City of Oakland together with the cities of San Francisco and San Jose (the "Core Cities") proceeded with filing an amended waiver petition with the FCC (**Attachment A**). The amended waiver requests the FCC to waive its rules and authorize the Core Cities to enter into a lease with the Public Safety Spectrum Trust (PSST) to use the 700 MHz Spectrum for deployment of the BayWEB project. If granted, the lease will obligate the Core Cities to comply with all FCC regulations regarding use of the 700MHZ Spectrum. Currently the Build, Own, Operate and Maintain (BOOM) Agreement (**Attachment B**) that the BayRICS JPA has negotiated with Motorola was established to deploy and operate the BayWEB project for 10 years. Based on the BOOM provision referencing federal regulatory compliance, Motorola needs to comply only with those FCC rules in existence on April 30, 2013. Although the Core Cities intend to assign the PSST lease to the BayRICS JPA for Motorola to use, because the Core Cities are the applicants of the FCC waiver, they will remain responsible for compliance with all lease requirements, including all FCC regulations.

#### Staff Conclusions:

The Core Cities need Motorola to agree to comply with all lease requirements during the 10 year period of the BOOM Agreement. The BOOM Agreement must be modified to

require Motorola's compliance with all FCC regulations during the 10 year term of the BOOM Agreement. Staff does not recommend approval of the BOOM Agreement if it comes up for a vote at the next BayRICS JPA board meeting scheduled for January 19, 2012. Staff recommends that additional negotiations be conducted with Motorola, and Motorola should bear the technical risks associated with FCC regulatory requirements.

## 2. Site Access and Use Agreement

The BayWEB project requires each jurisdiction to negotiate a separate Site Access and Use Agreement with Motorola to grant Motorola the right to enter onto, have access to, and use on a continuous and uninterrupted basis certain properties, referred to as "Sites," for Motorola's deployment, ownership, operation and maintenance of broadband wireless antennas (cell towers) and equipment. There are legal and fiscal implications that still need to be negotiated between Motorola and the City of Oakland in order to reach a mutually agreeable Site Access and Use Agreement that Oakland is comfortable executing.

### **Staff Conclusions:**

Staff has identified 11 Oakland sites for the deployment of the BayWEB project. Significant issues have surfaced during negotiations between Motorola and the City's attorneys and real estate management division. Motorola's proposed Site Access and Use Agreement template provided to all jurisdictions has come into conflict with Site License Agreements and ordinances already in use by many jurisdictions, including Oakland.

Most of the Public Agencies are not prepared to offer their Public Safety Sites for the Public Access system, which has resulted in Motorola's request to the National Telecommunications and Information Administration (NTIA), to eliminate Public Access from the scope of the BayWEB project. Oakland, as well as other jurisdictions, has continued to separately negotiate with Motorola to complete an agreement for use of sites for deployment of the BayWEB Public Safety system only.

Staff has concluded that the 11 Oakland sites identified for BayWEB should be provided for use to Motorola under the City's current Site License Agreement to allow for the following conditions:

- The City of Oakland will maintain control of its 11 sites
- Require Motorola to pay all site remediation costs associated with the preparation and use of the 11 sites. The remediation costs that Motorola has agreed to pay do not include costs for permitting, environmental studies and clearances, ongoing utilities (electrical) and indirect costs. Staff has estimated these one-time costs to be \$460,000 in the current fiscal year 2011-2012.

## 3. System Funding Plan

The BayRICS JPA agreement requires members to adopt a System Funding Plan for each project. A Draft System Funding Plan for the BayWEB project was issued to the members of the BayRICS JPA on October 18, 2011. A revised version with additional information was submitted to the JPA on Dec. 1, 2011 (**Attachment C**). There are significant cost elements of the BayWEB project which are not incorporated into the Draft Plan.

Additional costs will be presented to the JPA board members as late as the next board meeting scheduled for January 19<sup>th</sup>, which means that board members will be expected to vote to approve the plan without first presenting the conclusive costs to their jurisdictions for approvals. The missing and inconclusive costs items are likely to run into many millions of dollars and could make the monthly costs for subscribers prohibitive. The City of Oakland must take into account the fiscal implications of the known and unknown costs.

**Staff Conclusions:**

Staff concludes that the proposed Draft System Funding Plan must be amended to reflect the additional costs not yet identified. Such costs include, but are not limited to, a system refresh required for future upgrades over the 10 year period of the BOOM agreement, and roaming services to allow connectivity with BayWEB where no coverage exists inside the area proposed to be covered by the project. Staff further concludes that it will not vote to approve the Draft System Funding in its current form and will seek to convince the JPA board members to allow more time to fully assess all costs to the members before approval.

**4. Build-Own-Operate-Maintain Agreement (BOOM)**

The BayWEB project requires the BayRICS JPA to negotiate and execute an agreement with Motorola Solutions, Inc. to build, own, operate and maintain the BayWEB project for 10 years. Ownership of the BayWEB system will be transferred to the JPA to operate and manage the system at the end of the 10 years. The current draft of the BOOM agreement presented to the members of the BayRICS JPA has significant unknown current and future costs, legal risks and design issues that could directly impact the City of Oakland. The BayRICS JPA will consider approval of the BOOM Agreement on January 19, 2012.

**Staff Conclusions:**

In its Staff Report titled *Public Safety Broadband System*, dated January 12, 2012, JPA Board Member Santa Clara County identified risks in the BOOM Agreement to all JPA Board Members. Staff has studied Santa Clara County's assessment of the BOOM Agreement risks, and agrees with that assessment and with Santa Clara County's conclusion that more time is needed to mitigate the risks in the BOOM Agreement. The most recent audit of the BayWEB project by the U.S. Office of Inspector General

(Attachment D) pronounces why these risks may exist and how important it is that the JPA spend more time to mitigate them. The report indicated that:

***“BOOM negotiations afford the participating jurisdictions the opportunity to negotiate costs and terms in their best interest. However, we are concerned that delays – incurred by issues existing from the start – are hindering timely project completion and pose a risk that the project benefits may not be achieved.”***

Staff concludes that the City of Oakland, as a Board Member of the JPA, should not approve the BOOM Agreement until the following risks are further examined and mitigated:

***Deficiencies in coverage and system “robustness”*** – Motorola is limited in its ability and unwilling to ensure coverage and performance due to the uncertainty of access to enough locations. Many members of the JPA have not yet reached agreement with Motorola on a Site Access and Use Agreement, which will limit the number of “cell sites”. The project anticipated a high of 193 sites. Motorola’s best estimate at this time is 136 sites. It is likely that the number of sites will be much less than the 136. This will result in a lack of coverage and system robustness.

***Insufficient capacity*** – System throughput design has several serious limitations which will impact performance.

***Minimal performance guarantees*** – Motorola will only agree to guarantee a system that meets today’s minimum FCC standards.

***No redundancy in a critical system*** – Although the initial application referenced a redundant system “Core”, which is the heart of the BayWEB system, the current design does not include one.

***Legal Risks*** – There are a number of unacceptable provisions in the agreement that raise concerns from a legal perspective, including:

- i. ***Termination*** – Section 12 of the BOOM Agreement only provides for termination by mutual consent of both parties, or by operation of law. It does not provide for termination for convenience, termination for cause for an uncured breach if damages are an adequate remedy, requires meetings between the parties to resolve an uncured breach where damages are inadequate before termination may ensue or termination for budgetary reasons. The restriction on termination for cause where damages are adequate prevents public agencies from ending the contract if they do not want to continue the relationship, as would normally be the case. The restriction on termination for cause where damages are inadequate is important because it does not permit the public agencies to take immediate action to remedy an uncured breach of the contract. Omitting the termination for budgetary reasons is important as public agencies (such as the JPA) face ever increasing financial

hardships. Omission of the termination for convenience clause takes away the option to end the contract without cause where the public agency believes doing so would be in its best interest.

- ii. Limitation of Liability – Before “Project Readiness” occurs, Section 14 of the BOOM Agreement caps Motorola’s liability for direct damages at \$10M. After “Project Readiness” occurs, Section 14 caps Motorola’s liability for direct damages at either \$10M or “...the sum of the User Fees plus the Additional Fees, if any, that the Authority actually paid to Motorola during the entire calendar year that precedes the year in which the claim arose”, whichever is greater. For claims of Patent and Copyright infringement the cap amount is increased by \$5M. The Limitation of Liability provision is not mutual, so the JPA’s potential liability is unlimited for direct damages and any infringement for which it is held liable. The Limitation of Liability does not apply to Motorola’s liability for “...any damages for personal injury, death, damage to tangible property, or liability caused by Motorola’s intentional torts or gross negligence.”
- iii. Consequential Damages – The agreement prohibits the JPA from recovering consequential damages (such as lost profits) from Motorola, but again, the clause is not mutual so Motorola may recover consequential damages from the JPA.

It is important for the City of Oakland to continue its participation in the BayRICS JPA and retain its Board seat, since the purpose of the JPA is greater than the BayWEB project, and is intended to foster regional public safety interoperability. Staff therefore recommends that the City continue to work through the BayRICS JPA to produce a conclusive System Funding Plan and a reasonable BOOM Agreement that will limit our risks and make for a successful project.

### **Background**

The BayRICS JPA was established August of 2011. As a result of 6 months of work by 10 counties (Alameda, Contra Costa, Marin, Napa, San Francisco, Santa Clara, Santa Cruz, San Mateo, Solano, and Sonoma) and three large bay area cities (Oakland, San Jose, and San Francisco). The BayRICS JPA now provides the much needed governance for regional interoperability projects where none existed prior to the formation of the BayRICS JPA. The BayRICS JPA is governed and administered by 19 board members, which includes a Seat at Large that is currently vacant.

The City of Oakland’s membership in the BayRICS JPA was approved by the City Council on July 19, 2011. Ken Gordon, Interim Director for the Department of Information Technology (DIT) was appointed primary board member and Renee Domingo, Director for the Office of Emergency Services was appointed the alternate board member.

The catalyst for the formation of the BayRICS JPA was a federal grant awarded to Motorola Solutions, Inc. (“Motorola”) to construct a Bay Area region broadband network known as BayWEB. BayWEB is a Bay Area regional Public Safety and Public Access broadband project

funded primarily by the Broadband Technology Opportunity Program (BTOP), which is a U.S. Department of Commerce grant program funded through American Recovery and Reinvestment Act (ARRA) stimulus funds. In September 2010, Motorola received a grant in the amount of \$50,600,000 from the Department of Commerce to implement the BayWEB project and, as required by the terms of the grant, Motorola committed to provide a match of \$21,800,000 in services and equipment. Unlike other public safety stimulus projects, the grant was not awarded to the participating government entities but instead to the chosen vendor, Motorola Solutions, Inc.

Since 2009, DIT with support from City Attorney and Office of Emergency Services staff, has contributed thousands of hours of staff time to support the development of the BayRICS JPA and BayWEB project. Staff assisted the regional Homeland Security Bay Area Urban Area Security Initiative Authority (UASI) with the application process to qualify the project for grant funding through BTOP. Staff continued that participation commitment by working on various policy, technical and project evaluation committees and by playing a key role in the development of the agreement that resulted in the establishment of the BayRICS JPA. The BayRICS JPA held its first meeting on August 8, 2011, and has met regularly since that time. A negotiation committee was formed to negotiate a Build, Own, Operate and Maintain (BOOM) Agreement between Motorola and the BayRICS JPA. A Technical Advisory Committee (TAC) was also formed to advise the board on the technical issues and provide technical oversight for the BayWEB project from a user perspective. The DIT staff has been active on both committees.

After many board and committee meetings, it has become evident that key elements of the BayWEB project will have known and unknown fiscal obligations and legal risks that could be a challenge to the City of Oakland.

#### **Federal Communications Commission (FCC) 700MHZ Spectrum Waiver Petition**

In 2007, the FCC reallocated spectrum in the 700 MHz band class for public safety and commercial uses. Ten (10) MHz of spectrum was made available for early deployments of public safety 4G LTE (Long Term Evolution) broadband projects, through the Public Safety Spectrum Trust (PSST).

In the Bay Area, the three largest cities (Oakland, San Francisco and San Jose; the "Core Cities") applied for a waiver on behalf of the region to use this spectrum. At the time, there was no regional body, such as the BayRICS JPA to undertake the application or hold the lease. It was anticipated that funding would become available, through ARRA stimulus funds or other grant sources, to fund the development of these early 4G LTE systems nationwide. The Bay Area waiver was one of 21 granted nationwide by the FCC in May 2010.

Subsequently, the PSST entered into a lease with an entity entitled the "San Francisco Bay Area Urban Region" which purported to represent the Core Cities and the UASI, but was not authorized to do so.

The FCC has since determined this lease is not valid, and the Core Cities have expended significant time and legal resources in an effort to correct the problems with the waiver and lease. The FCC advised the Core Cities that the most expeditious and prudent option would be to file an amended waiver petition allowing the PSST to enter into a new lease with the original Petitioners (Oakland, San Francisco, and San Jose). The Core Cities have collaborated to complete the development of a final draft petition, which was filed with the FCC on December 23, 2011. The Petition asks the FCC to, in effect, re-award the Core Cities the right to enter into a lease with the PSST. The Core Cities' intent, once it enters into the lease is to assign the lease to the BayRICS JPA.

Should the FCC award the waiver and lease to the Core Cities, the cities would then negotiate lease terms and conditions with the BayRICS JPA. It is important to note that the petition makes commitments to the FCC that the Core Cities intend to build a Public Safety broadband 4G LTE network system that is compliant with FCC standards, regulatory requirements and conditions of the waiver. However, public safety LTE technology is in its infancy, and the FCC is still developing standards for operations and performance. Motorola has committed to build a system that meets standards up to April 30, 2013. According to the BOOM Agreement, Motorola has not committed to meeting future standards and regulations. Should regulations change or new standards be implemented, the waiver-holders (Core Cities) are ultimately responsible for compliance. For these reasons, the lease, when assigned to the BayRICS JPA must assume risk for compliance and the BOOM agreement must be modified so that the compliance risk may be passed on to Motorola, the entity that will actually use the Spectrum. Staff will work with the cities of San Francisco and San Jose to ensure that when the spectrum lease is assigned to the BayRICS JPA, Motorola or any other user of the 700 MHz Spectrum assumes the obligation to comply with all existing and future FCC regulations.

### Site Access and Use Agreement

The Site Access and Use Agreement will grant to Motorola the right to enter onto, have access to, and use on a continuous and uninterrupted basis for a period of 10 years the City of Oakland designated sites to deploy, own, operate, and maintain the BayWEB system.

The City of Oakland's Department of Information Technology (DIT) has worked with Motorola to identify up to 11 sites within the City, which are listed in **TABLE 1** below.

**TABLE 1: CITY OF OAKLAND BAYWEB SITES**

SITE NAME	SITE ADDRESS
Police 911 Communications Center	6767 Edgewater Drive, Oakland, CA 94621
Eastmont Mall Police Substation	2601 73 <sup>rd</sup> Ave, Oakland, CA 94605
Frank H. Ogawa Plaza	150 Frank Ogawa Plaza, Oakland, CA 94612
GWIN EBMUD Reservoir	—
Oakland City Stables	13560 Skyline Blvd, Oakland, CA 94619

Oakland Fire Station 16	3600 13 <sup>th</sup> Ave, Oakland, CA 94602
Oakland Fire Station 17	3344 High Street, Oakland, CA 94619
Oakland Fire Station 20	9716 International Blvd, Oakland, CA 94603
Oakland Fire Station 22	Air Cargo Way, Oakland, CA 94621
Seneca EBMUD Reservoir	—
San Joaquin Park	—

The BayWEB system is designed to leverage existing public safety resources by co-locating broadband equipment and antennas (cell towers) on 193 sites that Bay Area public safety agencies already use for their emergency communications, land-mobile radio systems or fire houses and police operations facilities. Motorola's BTOP grant proposal also proposed placing equipment and cell antennas for a Public Access system on these sites. Motorola intends to sell this service to third-party Wireless Internet Service Providers, who would then provide service to underserved communities, schools, libraries, and other community institutions. The City of Oakland and many other BayRICS members have decided to only offer sites for Public Safety purposes because of telecommunications permitting issues. Motorola did not conduct site walks or evaluations of the radio sites in advance of the grant application, which asserted that sites were available and "shovel-ready."

One significant concession made by Motorola is that the company has agreed to cover site remediation costs up to a \$24 million ceiling throughout the BTOP grant period (August 2013) for currently identified sites or their substitutes for all BayRICS JPA member site owners. This is anticipated to cover all costs of site remediation for all site owners. However, if new or additional sites are desired after May 31, 2012, the BayRICS JPA may be required to pay remediation for those sites. Site owners are obligated under the Agreement to provide sites for the BayWEB project rent free and assume costs for utilities, environmental clearances, permitting, leasing privately owned sites as well as any indirect costs such as community outreach, taxes and the value of staff time to work with Motorola personnel to deploy the system at each site. After reviewing the City of Oakland's designated sites with Building Services and the City Attorney's Office, it appears that entering into an agreement allowing an entity to do construction and make improvements on a city-owned site is a project under CEQA and NEPA and therefore cannot be approved prior to obtaining environmental clearance.

The estimated fiscal impact to the City of Oakland is provided in **TABLE 2** below.

**TABLE 2: SITE ACCESS AND USE AGREEMENT FISCAL IMPACT**

ITEM	One Time Costs	Ongoing Annual Costs	Total 10 Year Project Costs
Utilities	0	\$30,000	\$300,000
Environmental Clearances	\$220,000	0	\$220,000
Permitting	\$100,000	0	\$100,000
Leasing	0	0	0
Indirect Costs		\$110,000	\$1,100,000
Possessory Taxes	Unknown	Unknown	Unknown
<b>Subtotals</b>	<b>\$320,000.00*</b>	<b>\$140,000.00*</b>	
<b>PROJECT GRAND TOTAL</b>			<b>\$1,720,000.00</b>

*\*The City of Oakland would need to allocate \$460,000 in the fiscal year 2011-2012 budget to pay for its site remediation cost obligations under the agreement.*

As of January 3, 2011, the City of Oakland continues to negotiate with Motorola to consummate an Agreement. The following is a list of the City's outstanding conditions and issues that need to be addressed:

- Site access and use will be limited to the BayWEB Public Safety broadband system only. The City will not allow Public Access system equipment/service to be deployed at the sites. Motorola indicated that it will seek to exclude Public Access because of the jurisdictional ordinance and policy obstacles identified by the majority of the BayRICS JPA members.
- The City will retain all rights to lease or enter into partnerships on its property, with the understanding that any equipment installed will not interfere technologically with Motorola's equipment.
- The City understands that Motorola owns the BayWEB equipment until it is transferred to the BayRICS JPA or its designee at the end of the Motorola 10 year project; however any improvements made on the sites that are concurrently used for Oakland or regional public safety purposes (such as tower replacement or dish substitution) will be owned by the City of Oakland and remain in Oakland's ownership after the lease terminates.
- Motorola must pay all site preparation costs (utilities, environmental clearances, permitting, leasing privately owned sites as well as any indirect costs such as community outreach and taxes)

If these conditions and issues are addressed to the City's satisfaction, and the required budget is identified, staff would conduct the environmental review and community outreach and then bring an agreement forward to the City Council for approval.

### **System Funding Plan**

To ensure transparency and fiscal responsibility, the drafters of the BayRICS JPA Agreement included the following requirement:

*Before entering into any contracts for the system, the Authority must first approve a System Funding Plan. Based upon a needs analysis of the members, system priorities will be established and a long-range plan developed, which will include the costs of construction, on-going operation and maintenance, and technical and administrative support. The Systems Funding Plan will allow members to determine the system's "capability, data speeds, functionality, features, cost, financing and the expected impacts on the individual members." Members are given 90 days after the draft plan is distributed to provide input to the Board, after which time the Board takes action to adopt, revise or reject the plan.*

After a Systems Funding Plan is adopted, members have 90 days in which to withdraw from the JPA, incurring no costs except the nonrefundable initial Membership Fee of \$24,500. The 90-day windows were determined to be the minimum amount of time for the appointed representatives to seek approval of their appointing jurisdiction regarding the plan, its financial commitments, and other obligations on their jurisdictions.

Staff has reviewed the System Funding Plan and found significant cost elements to be estimated, missing, or inconclusive. Many costs elements have not been negotiated with Motorola or other entities and costs are therefore still unknown. For example, the System heavily depends on negotiating an agreement with BART to use fiber installed along their system right-of-way at no cost to the BayRICS JPA. The fiber will serve as the primary communications "backhaul" backbone of the BayWEB system. The BART agreement is still an unknown and may require substantial funding by the JPA to make any agreement with BART ready for use by the system.

Based on the costs currently identified in the System Funding Plan, staff has identified in **TABLE 3** the estimated costs to the City of Oakland if the City decided to participate in the BayWEB project over the 10 year life of the project.

**TABLE 3: SYSTEM FUNDING PLAN FISCAL IMPACT**

ITEM	One Time Costs	Ongoing Annual Costs	Total 10 Yr Project Costs
JPA Membership	0	\$24,500	\$245,000
Motorola User Fee*	0	\$273,600	\$2,736,000
JPA Surcharge Fee**	0	\$36,000	\$360,000
Backhaul Communications Lines	\$10,000	\$24,000	\$250,000
Data Encryption	\$200,000	\$20,000	\$400,000
Modems	\$690,000	\$103,500	\$1,725,000
<b>Subtotals</b>	<b>\$900,000.00***</b>	<b>\$481,600.00***</b>	
<b>PROJECT GRAND TOTAL</b>			<b>\$5,716,000.00</b>

\*Motorola User Fee is \$38/user/month x 600 users (OPD/OFD)

\*\* JPA Surcharge Fee is \$5/user/month x 600 users (OPD/OFD)

\*\*\* The City of Oakland would need to allocate \$1,381,600 in the fiscal year 2013-2014 budget to begin deploying 600 users on the system. However, there is no subscriber commitment requirement, which would allow the City to deploy users to the system on a gradual basis, thereby spreading the investment over several years.

**Build-Own-Operate-Maintain (BOOM) Agreement**

The BayRICS JPA will consider approval of the draft BOOM Agreement with Motorola to build, own, operate and maintain the BayWEB 4G LTE Public Safety network (**Note: Several Exhibits to the BOOM Agreement remain incomplete as of January 5, 2012**). BayWEB will be among the first of its kind in the nation. It is not a voice system and will not, in the foreseeable future, replace the City's land radio mobile voice P25 radio system that Oakland's first responders currently use. BayWEB is planned to provide mobile data and Internet-based services on a private public safety network that is free from commercial data traffic. Scenarios in which such a system might be used include transmitting photos of suspects or missing persons to officers in the field; sending building plans to teams fighting a fire or working a hazardous materials response; accessing databases when in the field; sending a patient's vital statistics from the EMT/paramedic to the Emergency Room; or transmitting live video from an incident scene.

There are risks to being at the forefront on new technology, including:

1. Currently the only devices available to use the public safety broadband spectrum are wireless modem devices that plug into laptops. By the time the system is operational in August 2013, various vendors are expected to offer trunk-mounted modems for police cars, handheld PDA devices, and tablets. Commercially available devices like iPads and smart phones do not currently have the chipsets or other infrastructure to operate on the public safety band.
2. The 4G LTE standard has been adopted for public safety broadband nationwide, however there are still a number of issues and operational standards to be worked out. Should technology and standards, go a different direction than choices made in developing BayWEB, the JPA could be liable for significant upgrade costs to keep the system compliant and interoperable with other public safety networks. Costs associated with such changes implemented after April 30, 2013, are likely to be borne by the BayRICS JPA under the current terms of the BOOM Agreement.

Additionally, the planning and execution of this project have not followed traditional practices. Rather than planning a system, then applying for funding as a region, then conducting procurement for a vendor, the Bay Area UASI staff oversaw the selection of a partner, Motorola, who then applied for a grant directly. System requirements, performance standards and specifications that should have been laid out in procurement documents have instead had to be negotiated after the fact with Motorola, who controlled the grant funding (**Attachments D and E**).

The current draft of the BOOM Agreement is unacceptable. Some jurisdictions have decided not to participate in the BayWEB project because of concerns for costs, but will remain a member of the BayRICS JPA to participate in other interoperability projects. Some members will provide sites if at "no cost" but will not become subscribers to the system, believing that the monthly costs are prohibitive and not competitive with a commercial solution. Namely, the counties of Santa Clara, Santa Cruz, Marin, Napa, Solano, and the city of San Jose have taken this position.

Motorola made significant concessions in agreeing to pay for site remediation costs above and beyond the \$20 million match required under the BTOP grant requirements, and to enter into site agreements directly with local jurisdictions. Additionally, Motorola agreed to no minimum user commitment on the part of the BayRICS JPA. This was significant; as Motorola stated in the grant application that it anticipated 50,000 users on the system. This number of users is impossible for the BayRICS JPA to guarantee as it is easily *twice* the population of public safety personnel in the 10-county region. By eliminating this requirement, Bay Area jurisdictions may choose to subscribe to or exit BayWEB service with the same freedom they have with commercial broadband carriers (absent any investment made for devices that may not work on a different system). In return, the BayRICS Authority voted to allow Motorola to use a free market-based pricing mechanism after the first year of service (during which their fee would be

\$38/month). The BOOM Negotiation Team asked the BayRICS JPA to vote on the pricing model and on other key issues when the two sides reached impasse in discussions. The BayRICS JPA agreed to the following:

- Take on responsibility for billing system users
- Provide system back-haul (*i.e. a data communications link connecting a BayWEB radio cell site to the system's core located in San Francisco for the entire network*)
- Accept Motorola's position that roaming onto commercial networks will not be provided within the boundaries of the system, and that any roaming agreements outside the area (for mutual aid, etc.) would be the BayRICS JPA's responsibility to fund and deploy
- The BOOM Agreement does not include a "Technology Refresh" clause during the 10 year period of Motorola's ownership and management of the network

All of these requirements carry significant unknown costs and risks. "Back-haul" is the fiber or microwave transport network that connects individual base stations (Oakland's 11 cell sites) to the network core through which all data flows. For commercial carriers, building sufficient backhaul can be the most expensive piece of building a wireless system after constructing tower sites, and it is often the most underestimated cost. The BayWEB system is designed to rely on BART fiber and existing public safety microwave systems currently in use within the 10 Bay Area counties. However, the BayRICS JPA does not have a signed agreement with BART — and, according to the BOOM Agreement, if BART falls through, the BayRICS JPA will be responsible not only for finding new backhaul, but also for Motorola's redesign costs. The BART fiber network exists only along the BART lines and so does not connect to Santa Clara, San Mateo, or North Bay counties. The JPA is looking for alternative public fiber that can connect in these regions as the existing microwave backhaul has significantly smaller capacity and would need to be upgraded.

With respect to performance, coverage, and regulatory requirements, Motorola would not agree to provide ongoing compliance with FCC regulations through the 10-year life of the project. The system will be compliant and meet FCC requirements that are in place on April 30, 2013. This means the system that is scheduled to become operational by July 2013 will meet the goals of the project, but any improvements or compliance requirements down the road will be the responsibility the BayRICS JPA. The BOOM Agreement must be modified to require Motorola's compliance with all FCC regulations during the 10 year term. Staff recommends that additional negotiations be conducted with Motorola, and Motorola should bear the technical risks associated with FCC regulatory requirements.

The BayRICS JPA received staff reports from its BOOM Negotiations Team on December 1, 2011 (**Attachment F**) and from its Technical Advisory Committee on January 5, 2012 (**Attachment G**). These reports provide an overview of the potential benefits, risks, legal liability and costs related to the BayWEB BOOM Agreement beyond those detailed in this memorandum.

Staff does not recommend approval of the BOOM Agreement if it comes up for a vote at the next BayRICS JPA board meeting scheduled for January 19, 2012. If a NO vote prevails, the BayWEB project would not be built, and the \$50,000,000 in ARRA funding would be returned to the Treasury. The BayRICS JPA and waiver holders would have to explore other options for developing a broadband system for public safety, or wait for Congress to approve the construction of a nationwide network. The 4G LTE commercial option is currently available at a price of \$38/month/subscriber.

Given the significant compromises made in developing the BOOM Agreement, the uncertainty that the funds invested will result in a system that meets public safety needs throughout the 10 years of the project, and the fiscal risks to the BayRICS JPA and its members, staff is concerned that the City as a member may accept future cost liabilities that cannot be currently identified. In addition, the City has not budgeted for the known costs that it is obligated to pay under the BayWEB project agreements.

Respectfully submitted,

/s/

KEN GORDON

Interim Director of Information Technology

**Attachments:**

- Attachment A:** Federal Communications Commission Petition Submittal Dated December 13, 2011
- Attachment B:** BOOM Agreement Dated November 29, 2011
- Attachment C:** Draft System Funding Plan of October 18, 2011 revised December 1, 2011
- Attachment D:** United States Office of the Inspector General BayWEB Audit Report Dated January 10, 2012
- Attachment E:** United States Department of Commerce Response to the Office of Inspector General BayWEB Audit Report Dated January 10, 2012
- Attachment F:** BOOM Agreement Staff Report Dated December 1, 2012
- Attachment G:** Technical Advisory Report Dated January 5, 2012

### Your submission has been accepted

<b>ECFS Filing Receipt - Confirmation number: 20111223646668</b>		
<b>Proceeding</b>		
<b>Name</b>	<b>Subject</b>	
06-229	In the Matter of Implementing a nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band. Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communication .	
<b>Contact Info</b>		
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**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of )

The City and County of San Francisco, )  
the City of Oakland and the City of San Jose )

PS Docket No. 06-229

Request for Waiver of the Commission's Rules to )  
Deploy a 700 MHz Interoperable )  
Public Safety Broadband Network )

**WAIVER -- EXPEDITED ACTION REQUESTED**

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December 23, 2011

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## SUMMARY

By this petition, the City and County of San Francisco, the City of Oakland, and the City of San Jose (the “Bay Area Cities”) ask the Commission to waive the 60-day time limit for entering into a *de facto* transfer spectrum lease with the Public Safety Spectrum Trust (“PSST”) established in the Commission’s May 2010 *Waiver Order* and expeditiously authorize a new *de facto* transfer spectrum lease between the PSST and the Petitioners, the Bay Area Cities, because the original lease was not authorized by the Bay Area Cities and should be deemed invalid.

The new *de facto* transfer lease would encompass the Bay Area jurisdictions that intend to participate in the Bay Area Wireless Enhanced Broadband (“BayWEB”) project. Should the Commission grant the waiver, the Bay Area Cities will seek Commission and PSST approval to assign the new lease to the Bay Area Regional Interoperable Communications Systems (“BayRICS”) Authority.

On May 11, 2010, the Commission granted the Bay Area Cities and 20 other waiver petitions seeking early deployment of broadband safety networks. In its *Waiver Order*, the Commission directed the PSST to enter into long term *de facto* transfer leases with Petitioners. On July 30, 2010, and within the 60-day timeframe required under the *Waiver Order*, the PSST entered into a *de facto* transfer lease (the “2010 Lease”) with a lessee named the “San Francisco Bay Area Urban Area Region.” Subsequently, the 2010 Lease’s validity was questioned on two grounds: First, the Sheriff of Alameda County, signer of 2010 Lease, was not authorized to execute such lease on behalf of the Bay Area Cities; and second, the lessee named in the 2010 Lease, the “San Francisco Bay Area Urban Area Region,” was not an existing entity and was not authorized to enter into the 2010 Lease on behalf of the Petitioners, as described more fully herein. To avoid conflict or confusion, the Petitioners request that the Commission nullify the

2010 Lease. Subsequently, in August 2011, the jurisdictions that intend to participate in the BayWEB project (other than the Counties of Napa and Santa Cruz) formalized their relationship by establishing a joint powers authority – the BayRICS Authority, which oversees the operation and deployment of the BayWEB project.

Grant of the instant waiver will serve the public interest by allowing the Bay Area Cities to enter the new spectrum lease with the PSST to immediately deploy a 700 MHz public safety broadband network after years of substantial planning and investment. Grant of the waiver is also consistent with the Commission’s goal “to realize the public safety benefits that ... early deployments can provide” and with the Petitioners’ 2009 Request for Waiver. Moreover, denial of the waiver would jeopardize the timing for rollout of the network and critical, one-time funding awarded by the National Telecommunications and Information Administration (“NTIA”) to Motorola to implement the BayWEB project that will consist of approximately 136 sites throughout the BayWEB Jurisdictions. The \$50.6 million grant from NTIA carries with it two overriding deadlines that govern timing of the BayWEB project, thus making access to the 700 MHz spectrum vis a vis a new *de facto* transfer lease a critical factor in helping meet those milestones.

For these reasons, the BayRICS Authority Jurisdictions, by and through the Bay Area Cities, seek Commission approval for the original Petitioners to enter into a new *de facto* transfer spectrum lease with the PSST as soon as possible in order to ensure swift deployment of the BayWEB project that will encompass all of the BayWEB Jurisdictions.

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Public Safety Broadband Network	)	
	)	

**WAIVER -- EXPEDITED ACTION REQUESTED**

**I. INTRODUCTION**

The City and County of San Francisco, the City of Oakland, and the City of San Jose (the "Bay Area Cities"), pursuant to Section 1.925 of the Commission's rules,<sup>1</sup> respectfully request that the Commission waive the 60-day time limit for entering into a *de facto* transfer spectrum lease with the Public Safety Spectrum Trust ("PSST") established in the Commission's *Waiver Order*<sup>2</sup> and expeditiously authorize a new *de facto* transfer spectrum lease between the PSST and the Petitioners, the Bay Area Cities, that encompasses all of the Bay Area jurisdictions that intend to participate in the Bay Area Wireless Enhanced Broadband ("BayWEB") project, as described herein. Furthermore, should the Commission grant the waiver, the Bay Area Cities

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<sup>1</sup> 47 C.F.R. § 1.925.

<sup>2</sup> See *Requests for Waiver of Various Petitioners to Allow Establishment of 700 MHz Interoperable Public Safety Wireless Broadband Networks*, Order, PS Docket No. 06-229, FCC 10-79 ¶¶ 26, 27 (rel. May 12, 2010) ("Waiver Order"). In the *Waiver Order* granting the Bay Area Cities and 20 other Waivers for early deployment in the 700 MHz public safety broadband spectrum, the Commission stated that it expects the Public Safety and Homeland Security Bureau "will be able to act on future waiver requests quickly and consistent with the [FCC's decision], after issuance of an appropriate Public Notice seeking comment when a new waiver is received." *Waiver Order* at ¶ 68.

will seek Commission and PSST approval to assign the new lease to the Bay Area Regional Interoperable Communications Systems (“BayRICS”) Authority. (A copy of the BayRICS Joint Powers Authority Agreement is provided in Exhibit A.)

Additionally, the Bay Area Cities seek to amend their previously filed quarterly reports and Public Safety LTE Interoperability Showing Technical and Operational Response to conform to the lessee(s) named in and jurisdictions covered by the new spectrum lease and to provide the Commission with additional information, as described herein.

The Bay Area Cities also request that the Commission nullify the 2010 Lease and declare it invalid as it was not properly issued to the Petitioners, but rather, to an entity that was not and is not authorized to receive such 2010 Lease.

Grant of the waiver will serve the public interest by ensuring that early deployment of an integrated wireless broadband data network for public safety is provided to the Bay Area jurisdictions originally intended for coverage as expressly referenced in the Bay Area Cities’ 2009 Request for Waiver.<sup>3</sup> The 2009 Request for Waiver sought coverage for all jurisdictions in the recently created BayRICS Authority,<sup>4</sup> as well as other jurisdictions that have not to date decided whether to join the BayRICS Authority, specifically the Counties of Napa and Santa Cruz (collectively referred to herein as the “BayWEB Jurisdictions”).<sup>5</sup>

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<sup>3</sup> See Bay Area UASI Request for Waiver p.1 (March 24, 2009).

<sup>4</sup> The BayRICS Authority member jurisdictions are the counties of Alameda, Contra Costa, Marin, San Francisco, Santa Clara, San Mateo, and Sonoma; the core cities of Oakland, San Francisco and San Jose; the East Bay Hub, which consists of representative cities of Contra Costa and Alameda Counties; and the South Bay Hub, which consists of representative cities of Santa Clara and Santa Cruz Counties; and the State of California. Although the State of California is included as a member of the BayRICS Authority, the new spectrum lease seeks to encompass all listed jurisdictions other than the State of California.

<sup>5</sup> Collectively, the Bay Area Cities, all other jurisdictions in the BayRICS Authority, and the Counties of Napa and Santa Cruz are collectively referred to herein as the “BayWEB Jurisdictions.” Solano County, which was referenced in the 2009 Request for Waiver and covered by the 2010 Lease, has expressed an interest in participating in the

All of the BayWEB Jurisdictions support this expedited Request for Waiver and the new spectrum lease. A resolution (the "Resolution") signed by representatives of the BayRICS Authority, as well as correspondence from Napa and Santa Cruz Counties authorizing and empowering the Bay Area Cities or the BayRICS Authority to enter into such lease are set forth in Exhibit B. The BayRICS Authority will act as a single point of contact and unified body having responsibility for the BayWEB project.<sup>6</sup>

The Bay Area Cities request that the Commission grant the Waiver Request and allow the Bay Area Cities to enter into the new lease with the PSST. Should the Commission grant the Waiver Request and approve a new lease between the PSST and the Bay Area Cities, the Bay Area Cities will seek PSST and Commission approval to assign the new *de facto* spectrum lease to the BayRICS Authority.

Depriving the BayWEB Jurisdictions of the spectrum and the opportunity to deploy this powerful wireless data network will impede its ability to fulfill the obligations under the Commission's *Waiver Order* to swiftly deploy a public safety broadband network that will provide rapid response and recovery to disasters, be they man-made or natural, local or large-scale.

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BayWEB project. However, the BayRICS Authority had not received a letter of support from Solano County as of the date of this Waiver Request filing.

<sup>6</sup> The BayRICS Authority point of contact is Chairman Richard Lucia, who is the Undersheriff of Alameda County. However, prior to the assignment of the proposed *de facto* transfer lease to BayRICS Authority, the point of contact is Barry Fraser, Interoperability Project Manager for the City and County of San Francisco.

## II. STATEMENT OF FACTS

### A. Bay Area Cities Request for Waiver

On March 24, 2009, the Bay Area Cities filed a Request for Waiver with the Commission “as members of the Bay Area Urban Area Security Initiative (“Bay Area UASI”) ... to allow the Bay Area Cities to use the public safety broadband spectrum in the 700 MHz band to deploy a regional, mobile, interoperable public safety broadband network.”<sup>7</sup>

Subsequently, on May 27, 2009, the Bay Area Cities submitted an Amended Request for Waiver to underscore the commitment of the Bay Area Cities to ensure that “a Bay Area public safety broadband network would be compatible with national standards and fully interoperable with a nationwide network or other regional networks meeting national standards.”<sup>8</sup>

The 2009 Request for Waiver expressly noted that the Bay Area UASI is a regional cooperation organization comprised of the BayWEB Jurisdictions that support the instant waiver petition. Specifically, the 2009 Request for Waiver identified and referenced the Counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma, that comprise more than 100 incorporated cities, and numerous port, transportation and special districts.<sup>9</sup> The 2009 Request for Waiver further asserted that grant of the waiver would allow the Bay Area Cities, in conjunction with the Bay Area UASI, to proceed

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<sup>7</sup> See Bay Area UASI Request for Waiver p. 2.

<sup>8</sup> See Amended Request for Waiver, p.1 (May 27, 2009). The Request for Waiver and Amended Request for Waiver of the Bay Area Cities are referred to collectively herein as the “2009 Request for Waiver.”

<sup>9</sup> See Request for Waiver, p. 2 (expressly stating that “The parties submitting this request, the Bay Area Cities, are the three largest cities in the Region. In turn, the Bay Area Cities are three of the principal members of the Bay Area UASI, a regional cooperation organization. In addition to the Cities of Oakland, San Francisco, and San Jose, the Bay Area UASI comprises ten counties (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma), more than 100 incorporated cities, four port districts, a number of special districts, and over ten regional transportation agencies.”)

with the design and construction of an interoperable voice and broadband data network in the San Francisco Bay area known as the BayWEB project.<sup>10</sup> The 2009 Request for Waiver expressly contemplated waiver and lease coverage for the entirety of the BayWEB Jurisdictions. While the 2009 Request for Waiver referenced all BayWEB Jurisdictions and the resulting 2010 Lease (as defined in subsection B below) covered those jurisdictions, the Bay Area Cities acknowledge that the 2009 Request for Waiver did not expressly state that the BayWEB Jurisdictions had authorized the Bay Area Cities to act on their behalf. The Resolution and letters of support from Napa and Santa Cruz Counties and the State of California set forth in Exhibit B seek to clarify any ambiguity and confirm the Bay Area Cities' authority.

On May 11, 2010, the Commission granted the Bay Area Cities and 20 other waiver petitions seeking early deployment of broadband safety networks.<sup>11</sup> In its *Waiver Order*, the Commission directed the PSST to enter into long term *de facto* transfer leases with Petitioners.<sup>12</sup> The leases were to be executed and submitted to the Public Safety and Homeland Security Bureau Chief within 60 days of approval by the Office of Management and Budget.<sup>13</sup> The Commission found that prompt execution of the leases would ensure that "jurisdictions are fully committed to moving forward with a productive relationship with the PSST, the Emergency Response Interoperability Center ("ERIC") and the Commission to realize the public safety benefits that these early deployments can provide."<sup>14</sup>

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<sup>10</sup> March 24, 2009 Request for Waiver, p. 2.

<sup>11</sup> See *Waiver Order*, Appendix A.

<sup>12</sup> *Waiver Order* at ¶ 24.

<sup>13</sup> *Waiver Order* at ¶ 27.

<sup>14</sup> *Waiver Order* at ¶ 27.

**B. 2010 *De Facto* Transfer Spectrum Lease**

On July 30, 2010, and within the 60-day timeframe required under the *Waiver Order*, the PSST entered into a *de facto* transfer lease (the “2010 Lease”) with the named lessee known as the “San Francisco Bay Area Urban Area Region.”<sup>15</sup> The Sheriff of Alameda County, California, executed the lease on behalf of the San Francisco Bay Area Urban Area Region. The 2010 Lease provided a *de facto* transfer lease for the 700 MHz spectrum covering the same geographic territory as that of the BayWEB Jurisdictions participating in the BayWEB project. That geographic territory (with the exception of Solano County<sup>16</sup>) corresponds with the jurisdictions that now comprise the BayWEB Jurisdictions. The territory covered by the 2010 Lease also corresponded with the jurisdictions referenced in the 2009 Request for Waiver.

Subsequently, the 2010 Lease’s validity was questioned on two grounds: First, the Sheriff of Alameda County was not authorized to execute the lease on behalf of the Bay Area Cities; and second, the Lessee in the 2010 Lease, the “San Francisco Bay Area Urban Area Region,” was not authorized to enter into the 2010 Lease, as described more fully herein. For these reasons, Petitioners request that the Commission nullify the 2010 Lease and declare it to be invalid.

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<sup>15</sup> A copy of the 2010 Lease is attached as Exhibit B. The Public Safety and Homeland Security Bureau approved the lease on September 2, 2010. See *Public Safety and Homeland Security Bureau Approves Long Term De Facto Transfer Spectrum Lease Agreements Filed by Conditional Waiver Recipients to Establish 700 MHz Interoperable Public Safety Wireless Broadband Networks*, Public Notice, 25 FCC Rcd 12673 (2010).

<sup>16</sup> Solano County was covered under the 2010 Lease but has not yet joined the BayRICS Authority or submitted a letter of support.

### C. BayRICS Authority Formed

In the interim, the jurisdictions that intend to participate in the BayWEB project (other than the Counties of Napa and Santa Cruz) formalized their relationship by establishing a joint powers authority – the BayRICS Authority – in August 2011.<sup>17</sup> The BayRICS Authority was established with a complementary, but distinct, role from the Bay Area UASI. The UASI was established through a Memorandum of Understanding among the participating jurisdictions acting under federal and state law as a means by which to allocate federal UASI funds. By comparison, the BayRICS Authority was formed to oversee the day-to-day construction and operation of the BayWEB project and other regional interoperable public safety communications projects and systems and to provide a single, authorized point of contact for all aspects of the BayWEB project. The BayRICS Authority held its first formal meeting on August 8, 2011.

The “San Francisco Bay Area Urban Area Region” (named as the Lessee in the 2010 Lease) was not formally created by the jurisdictions and was neither a formal cooperation organization like the Bay Area UASI (referenced in the 2009 Request for Waiver) nor a joint powers authority like the newly formed BayRICS Authority. The “San Francisco Bay Area Urban Area Region” thus failed to meet the requirement of Section 337 of the Telecommunications Act that public safety services be provided by “State or local government entities” or “by nongovernmental organizations that are authorized by a governmental entity

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<sup>17</sup> The following BayRICS Authority Members will participate in the initial rollout of BayWEB: the Counties of Alameda, Contra Costa, San Francisco, San Mateo, Santa Clara, and Sonoma; the Cities of San Francisco and Oakland; the East Bay Hub and the South Bay Hub; and the State of California. The City of San Jose has approved use of the San Jose radio sites for the BayWEB project and authorized the Mayor of San Jose to sign and file the impending waiver petition. Meanwhile, Marin County, while a member of the JPA, intends to partner with its BayRICS Authority Members on future phases of BayWEB.

whose primary mission is the provision of such services.”<sup>18</sup> In the discussions that followed between the Bay Area Cities and the Bureau, all parties agreed that the 2010 Lease was invalid, making this Petition necessary.<sup>19</sup>

As a result of these circumstances, the BayRICS Authority Jurisdictions, by and through the Bay Area Cities, seek Commission approval for the original Petitioners, the Bay Area Cities, to enter into a new *de facto* transfer spectrum lease with the PSST that would encompass all of the BayWEB Jurisdictions.

Should the Commission grant the waiver and authorize the new lease in the name of the Bay Area Cities, the Petitioners will seek PSST and Commission approval to assign the new lease to the BayRICS Authority. As referenced above, all of the BayWEB Jurisdictions and the State of California have submitted written authorizations empowering the Bay Area Cities or the BayRICS Authority to enter into such a lease with the PSST for the 700 MHz spectrum that covers the BayWEB Jurisdictions.<sup>20</sup> In addition, the PSST has expressed its willingness to consent to assignment of a new lease from the Bay Area Cities to the BayRICS Authority. (See PSST letter at Exhibit F.) Moreover, assignment of the new lease from the Bay Area Cities to the BayRICS Authority is consistent with the terms of the 2010 Lease approved by the Commission and the Standard Lease provided in the *Waiver Order*.<sup>21</sup> Should the Commission agree in the future to permit assignment of the new lease from the Bay Area Cities to the BayRICS

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<sup>18</sup> 47 U.S.C. §§ 337(f)(1)(B)(i), (ii).

<sup>19</sup> On February 11, 2011, the City of San Jose sent correspondence to Public Safety and Homeland Security Bureau Chief advising of such lack of authority, and on April 6, 2011, the Cities of Oakland, San Francisco, San Jose, and the County of Alameda sent correspondence to the Bureau Chief seeking guidance regarding how the lease could be corrected and issued in the name of a properly authorized lessee.

<sup>20</sup> See Exhibit C.

<sup>21</sup> *Waiver Order*, Appendix B, p. 31.

Authority, the BayRICS Authority commits to meeting all applicable FCC requirements and the terms of the new *de facto* spectrum lease with the PSST, as demonstrated in the Commitment to Compliance summary in Exhibit F.

#### **D. Interoperability and Performance**

The Bay Area Cities, acting through and in coordination with the BayRICS Authority possesses the technical and operational proficiency necessary to achieve operability and interoperability of public safety broadband networks in accordance with the Commission's requirements set forth in its Orders released on May 12, 2010, December 10, 2010 and January 26, 2011.<sup>22</sup> Because the Bay Area Cities' Interoperability Showing Technical and Operational Response was submitted prior to the December 10, 2010, and January 26, 2011, and prior to the creation of the BayRICS Authority, this section is intended to demonstrate the Bay Area Cities and BayRICS Authority's full commitment to comply with requirements adopted subsequent to the initial interoperability filing<sup>23</sup> as well as a supplement submitted to the Commission on September 8, 2010.<sup>24</sup>

As the Commission is well aware, critical funding has been awarded by the National Telecommunications and Information Administration ("NTIA") to Motorola Solutions Inc. ("Motorola") to implement the BayWEB project. The BayRICS Authority is in the final stages of negotiations with Motorola to establish the terms and conditions under which Motorola will be

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<sup>22</sup> *Waiver Order; Requests for Waiver of Various Petitioners to Allow Establishment of 700 MHz Interoperable Public Safety Wireless Broadband Networks*, Order, PS Docket No. 06-229, FCC 10-2342, 25 FCC Rcd 17156 (rel. Dec. 10, 2010); *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, Amendment of Part 90 of the Commission's Rules*, WT Docket No. 06-150, PS Docket No. 06-229, WP Docket No. 07-100, Third Report and Order and Fourth Notice of Proposed Rulemaking, FCC 11-6, (rel. Jan. 26, 2011).

<sup>23</sup> Interoperability Showing Technical and Operational Response, San Francisco Bay Area, filed on July 14, 2010.

<sup>24</sup> Letter to FCC Secretary Marlene H. Dortch, Interoperability Showing Supplement for San Francisco Bay Area Urban Area, PS Docket No. 06-229, filed Sept. 8, 2010 ("September 2010 Supplement").

allowed to build, operate and maintain the BayWEB system. An agreement is expected to be signed in January 2012. Motorola is committed to building the system to be fully compliant with all Commission requirements and standards and is committed to testing that will demonstrate full compliance as of the date of operation. Subject to the Commission's approval of lease assignment, the BayRICS Authority will ensure that the system will be modified as necessary to comply with all future Commission requirements. The BayRICS Authority and Motorola have agreed to a change order process under which BayRICS and Motorola will cooperate to make all necessary future system modifications. The Bay Area Cities and BayRICS Authority understand that Commission interoperability standards are a condition of the waiver, and that compliance with such standards must be demonstrated prior to any use of the public safety spectrum. Therefore, the BayRICS Authority will not execute any agreements with Motorola that involve the use of the spectrum without the same commitment.

Many of the design details of the BayWEB system are still being negotiated by the parties. However, the BayRICS Authority is committed to ensuring that the final system design will meet all Commission operability and interoperability requirements. For example, the Commission in its January 26, 2011, Order concluded that it should require public safety broadband networks to provide outdoor coverage at minimum data rates of 256 Kbps uplink (UL) and 768 Kbps downlink (DL) for all types of devices, for a single user at the cell edge.<sup>25</sup> However, in its supplemental interoperability filing of September 8, 2010, the Bay Area Cities cited a "target data rate" of 768 Kbps DL and 200 Kbps UL.<sup>26</sup> The Bay Area Cities anticipate

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<sup>25</sup> January 26, 2011, Order at ¶ 61.

<sup>26</sup> September 2010 Supplement at p. 3.

that the BayRICS Authority will provide outdoor coverage at minimum data rates of 256 Kbps UL.

Moreover, the Bay Area Cities and the BayRICS Authority agree with the Commission's tentative conclusion that all PS LTE devices should be subjected to rigorous conformance testing to verify compliance to 3GPP LTE Release 8 or higher standards, and as needed to comply with all future orders regarding LTE device conformance testing.

The BayRICS Authority anticipates that the BayWEB project will constitute the first phase of a statewide 700 MHz interoperable public safety wireless broadband network. As part of this effort, the BayRICS Authority will work closely with the State of California to ensure that compliance is maintained throughout each phase of deployment and to that end, will submit interoperability showing updates and reports to the Commission. The State of California also commits in this filing to ensure that early deployments by the Bay Area Cities and BayRICS Authority as well as others within its borders will be consistent with current and future FCC orders relating to nationwide interoperability. The State of California will continue to coordinate with the Bay Area Cities and BayRICS Authority as it deploys its network to ensure that its efforts are consistent with other early buildouts in the state.<sup>27</sup>

The design methodology for the network includes approximately 136 eNodeB sites to meet, at a minimum, an Application Load Model with 200 users per site with minimum application data rate of 256 Kbps uplink and 768 Kbps downlink. Proposed coverage maps for BayWEB are included as Appendix A. In addition, the BayRICS Authority Technical Advisory Committee is working with Motorola to develop a specific load per user per busy hour levels and detailed sector utilization models.

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<sup>27</sup> See Letter of Support, State of California, attached hereto as Exhibit C.

As soon as reasonably feasible after the system design is completed, the Bay Area Cities and the BayRICS Authority will resubmit a completed Interoperability Showing and will work with the Commission to revise it as necessary to satisfy the waiver conditions related to operability and interoperability of the network. In addition, the Bay RICS Authority seeks to work with the Commission going forward to refine and enhance operability and interoperability baselines as we develop additional data from the BayWEB deployment and operation. A Commitment to Compliance summary is provided in Exhibit F.

### III. EXPEDITIOUS GRANT OF THE REQUESTED WAIVER WOULD SERVE THE PUBLIC INTEREST

The public interest will be served by the FCC granting the instant waiver request allowing the Bay Area Cities to enter the new spectrum lease with the PSST and thereby engage in early deployment of a 700 MHz public safety broadband network. To obtain a waiver under the FCC's rules, a petitioner must demonstrate either that: (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the present case, and that a grant of the waiver would be in the public interest; or (ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.<sup>28</sup> An applicant seeking a waiver faces a high hurdle and must plead with particularity the facts and circumstances that warrant a waiver.<sup>29</sup> Although a successful waiver petition needs to satisfy only one of the two tests, the Bay Area Cities' Request for Waiver satisfies both tests. Grant of the new spectrum lease would be in the public interest because it will allow the BayWEB

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<sup>28</sup> 47 C.F.R. § 1.925(b)(3)(2009).

<sup>29</sup> WAIT Radio v. FCC, 413 F.2d 1153,1157 (D.C. Cir. 1969), *aff'd*, 459 F.2d 1203 (1973), *cert. denied*, 409 U.S. 1027 (1972) *citing* Rio Grande Family Radio Fellowship, Inc. V. FCC, 406 F.2d 664 (D.C. Cir. 1968).

Jurisdictions to fulfill the Commission's goal "to realize the public safety benefits that ... early deployments can provide."<sup>30</sup> Furthermore, a grant of the waiver to permit a new lease with the PSST and the Bay Area Cities would be consistent with the 2009 Request for Waiver and with the public interest as expressly reflected in the support of the BayWEB Jurisdictions demonstrated in this petition.

The BayWEB Jurisdictions seek the early deployment of a state-of-the-art interoperable voice and data network. Were the Commission to deny the waiver, the Commission would frustrate its articulated goals of enabling early deployment as "a major step towards development of a nationwide interoperable public safety broadband wireless network."<sup>31</sup>

Moreover, denial of the waiver would jeopardize the timing for rollout of the network and critical funding awarded by the National Telecommunications and Information Administration ("NTIA") to Motorola to implement the BayWEB project. Funded by a \$50.6 million grant from NTIA and a \$21.9 million match from Motorola, the middle-mile network being deployed initially will consist of approximately 136 sites distributed throughout the BayWEB Jurisdictions<sup>32</sup> that would be covered by the lease sought herein. Consistent with the requirements of the American Recovery and Reinvestment Act,<sup>33</sup> the NTIA grant imposes two overriding deadlines that govern the timing of the BayWEB project. First, NTIA's "substantial completion" deadline requires that two-thirds of the network be built and two-thirds of the Broadband Technology Opportunity Program ("BTOP") grant funding be spent by August 13,

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<sup>30</sup> *Waiver Order* at ¶ 27.

<sup>31</sup> *Id.* at ¶ 1.

<sup>32</sup> See Coverage Map of BayWEB Sites, attached as Exhibit D.

<sup>33</sup> The American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5.

2012. Second, NTIA's final deadline for expending or encumbering BTOP funds and completing the BayWEB project is August 13, 2013.<sup>34</sup> Motorola informed the BayWEB Jurisdictions that failure to meet these deadlines risks action by NTIA to suspend Motorola's ability to draw funds necessary to complete the project, or in the extreme, to terminate the award.<sup>35</sup>

These deadlines drive a series of critical path operational deadlines for the work necessary to construct the project. In an August 8, 2011, letter to the Public Safety and Homeland Security Bureau, the Bay Area Cities, on behalf of the BayWEB Jurisdictions, provided a detailed list of operational deadlines that must be met in order to comply with the terms of the NTIA award.<sup>36</sup> Although Motorola had hoped to begin site testing of the core location on November 10, 2011, that date has slipped. However, in order to conduct site testing of the core, Motorola has indicated that it must have access to the 700 MHz spectrum throughout the BayWEB service area. Once network equipment is installed, any delay in the availability of the 700 MHz spectrum for use by the BayWEB Jurisdictions would delay the milestone deadlines and could ultimately impede the ability of Motorola to meet its deadlines under the award.<sup>37</sup>

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<sup>34</sup> See Department of Commerce, NTIA Financial Assistance Award Number NT10BIX5570089, awarded August 13, 2010.

<sup>35</sup> See Department of Commerce, NTIA, Broadband Technology Opportunities Program, *Notice of Funds Availability and Solicitation of Applications*, 75 Fed. Reg. 3792, 3799 & 3812 (Jan. 22, 2010).

<sup>36</sup> Letter from the Bay Area Cities to Jennifer Manner, Deputy Chief, Public Safety & Homeland Security Bureau (August 8, 2011), attached as Exhibit E.

<sup>37</sup> *Id.* at 3.

Additionally, the PSST also supports this Waiver Request, as it would allow the BayRICS Authority, on behalf of the Bay Area Cities, to immediately serve as the single point of contact for the PSST, thereby providing clarity and improved efficiency and communications.<sup>38</sup>

In view of the unusual circumstances surrounding the 2010 Lease, Petitioners have no reasonable alternative but to request that the Commission nullify the 2010 Lease and grant a new *de facto* transfer spectrum lease in order to comply with the conditions of the *Waiver Order* and to facilitate prompt deployment of the BayWEB project.

#### IV. CONCLUSION

For the reasons set forth above, the Bay Area Cities respectfully request that the Commission grant Petitioners' waiver request to nullify the 2010 Lease and permit the Bay Area Cities to enter into a new *de facto* transfer spectrum lease with the PSST that encompasses the BayWEB Jurisdictions. Furthermore, if the Commission finds that the Bay Area Cities should be the lessee under the new lease, the Bay Area Cities will seek Commission and PSST approval to authorize them to assign the new lease to the BayRICS Authority.

In order to preserve the critical deployment milestones of the BayWEB project and the BTOP funding that relies on those deadlines being met, the Bay Area Cities respectfully request that the Commission act on this petition promptly so that the 7,000,000 residents in the BayWEB Jurisdictions benefit from accelerated rollout of an interoperable voice and broadband data network for their emergency responders.

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<sup>38</sup> See Letter of support from PSST, attached as Exhibit F.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'MCE', with a long horizontal flourish extending to the right.

Mark C. Ellison  
Patton Boggs LLP  
2550 M Street NW  
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*Counsel to the City and County of San Francisco,  
the City of Oakland, and the City of San Jose*

December 23, 2011

## Attachment 1

### Commitment to Comply with FCC Waiver Order Requirements

	Requirement	Orders	Compliance
	<p>Accordingly, we find it appropriate to require the petitioners to adhere to the technical criteria that ERIC will establish, through rules adopted by the Commission or Bureau. (In this respect, we require the Bureau to issue a Public Notice to seek comment on the technical parameters adopted herein and other technical issues concerning broadband network deployment for consideration by the Commission in the broader rulemaking proceeding).</p> <p>In this respect, we also agree with commenters who suggest that: (1) we should adopt a mandatory common air interface for all early deployments; (2) in addition to the air interface, certain additional baseline interoperability criteria are timely and appropriate; and (3) Petitioners should be required to submit further technical details regarding their deployments in order to ensure ongoing interoperability. We also note that many of these obligations are a part of the 3GPP Release 8 standard, and as such will likely impose little burden to implement.</p>	10-79 ¶ 36	Comply
1	<p><b>Deploy LTE Release 8</b> For these waiver deployments, the most expeditious and reasonable method of ensuring consistency and interoperability at this early stage is to require the use of LTE, and specifically the use of at least 3GPP Standard, Evolved Universal Terrestrial Radio Access ("E-UTRA"), Release 8 ("LTE"), and associated Evolved Packet Core ("EPC").</p> <p>We will require that all networks deployed in the 700 MHz public safety broadband spectrum adopt LTE, specifically at least 3GPP Standard E-UTRA Release 8 and associated EPC.</p>	10-79 ¶38	Comply
		11-6 ¶10	

	Requirement	Orders	Compliance
2	<p><b>Coordination among Petitioners on Interference</b> Accordingly, as a condition of waiver, we require each Petitioner, before deployment, to coordinate and address interference mitigation needs with any adjacent or bordering jurisdictions that also plan deployment. Any later jurisdictions that seek to deploy should coordinate with the prior-deployed system. Our goal is to ensure an open communications among adjacent regions. In this respect, in light of the nascent nature of these deployments, we believe it will be helpful to memorialize these agreements in writing, and require submission of these agreements to ERIC within 30 days of their completion. Similarly, we require that parties provide ERIC with notice of any changes or updates within 30 days. Should the parties be unable to reach an agreement within 90 days after coordination begins, they may submit the dispute to the Public Safety and Homeland Security Bureau for resolution.</p>	10-79 ¶ 42	Comply
3	<p><b>Devices support B14 5MHz</b> As recommended by Section 6.3.1.5 of the NPSTC BBTF Report, band class 14 must be supported for 5 MHz public safety broadband channel (763-768 MHz, 793-798 MHz) in Frequency Division Duplex (FDD) mode as per 3GPP TS 36.101 v8.6.0.</p>	10-79 ¶ 47	Comply
4	<p><b>Honor roaming requests</b> Petitioners must honor each others' written requests to support roaming. If parties are unable to reach a roaming agreement within ninety days of the date a request is made in writing, the matter may be referred by either party for Bureau review and action.</p>	10-2342 ¶ 10	Comply
5	<p><b>Submit, at least 90 days prior to date of service availability, notice to the Bureau of need for a PLMN ID for its network</b>  We therefore adopt ERIC's recommendation to defer consideration of a comprehensive scheme for PLMN IDs until this matter is addressed in the broader rulemaking in this docket. However, we recognize the importance of establishing an interim mechanism for the assignment of PLMN IDs to early-deployed networks. We will therefore require each Petitioner to submit, at least ninety days prior to its date of service availability, notice to the Bureau of its need for a PLMN ID for its network. This notice may be submitted as part of a quarterly report. After receiving this notice, the Bureau will, based on ERIC's recommendations, work with the Petitioner to determine an appropriate course for obtaining a PLMN ID for its network.</p>	10-2342 ¶ 10	Comply

	Requirement	Orders	Compliance
6	<p><b>[Support] ... backward compatibility</b></p> <p>We will require that any releases after Release 8 ensure backward compatibility between all subsequent releases from Release 8 and onwards. By imposing this requirement on the network operator, we will ensure that the technical baseline for interoperability is preserved.</p>	11-6 ¶11	Comply
7	<p><b>... compliance with Release 8 or higher of 3GPP standards from day one of service operation</b></p> <p>We ... determine ... that certain Release 8 (LTE) interfaces must be supported. The required interfaces include:</p> <ul style="list-style-type: none"> <li>• Uu- LTE air interface</li> <li>• S6a – Visited MME to Home HSS</li> <li>• S8 – Visited SGW to Home PGW</li> <li>• S9 – Visited PCRF to Home PCRF for dynamic policy arbitration</li> <li>• S10 – MME to MME support for Category 1 handover support</li> <li>• X2 – eNodeB to eNodeB</li> <li>• S1-u – between eNodeB and SGW</li> <li>• S1-MME – between eNodeB and MME</li> <li>• S5 – between SGW and PGW</li> <li>• S6a – between MME and HSS</li> <li>• S11 – between MME and SGW</li> <li>• SGi – between PGW and external PDN</li> <li>• Gx – between PGW and PCRF (for QoS policy, filter policy and charging rules)</li> <li>• Rx – between PCRF and AF located in a PDN</li> <li>• Gy/Gz – offline/online charging interfaces</li> </ul> <p>In order to promote both multivendor interoperability and interoperability when roaming, we will require that all public safety broadband networks be capable of supporting each of the aforementioned LTE Release 8 interfaces from day one of service operation. We also believe it is critical that the support of these interfaces be demonstrated. Accordingly, we will require each public safety broadband network operator to submit to the Bureau before deployment a certification that it is instituting the required interfaces in compliance with Release 8 or higher of 3GPP standards prior to the date it achieves service availability.</p>	11-6 ¶12	Comply

	Requirement	Orders	Compliance
8	<p><b>Remain subject to existing technical rules, orders</b></p> <p>For those entities currently undertaking deployment pursuant to our previously granted waivers, their activities remain subject to existing technical rules, the requirements of the <i>Waiver Order</i> and <i>Interoperability Waiver Order</i>, and the new requirements adopted in this <i>Third Report and Order</i>, and future rules that may be adopted in this proceeding.</p>	11-6 ¶14	Comply
<p><b>Interface Support (from day one of service operation)</b></p> <p>We require Petitioners to incorporate the following system elements:  Interfaces: All 3GPP Release 8 (LTE) interfaces that are in support of the required applications and the required roaming in this order are required to be supported. These interfaces are:</p>		10-79 ¶47	
9	Uu	10-79 ¶ 47 10-2342 ¶11 11-6 ¶12	Comply
10	S6a	10-79 ¶47, 10-2342 ¶11, 12 11-6 ¶12	Comply
11	S8	10-79 ¶ 47 10-2342 ¶11 11-6 ¶12	Comply
12	S9	10-79 ¶ 47 10-2342 ¶ 11 11-6 ¶ 12	Comply
13	S10 for Category 1 Handover support	10-79 ¶ 47 10-2342 ¶11 11-6 ¶12	Comply
14	X2	10-79 ¶ 47 10-2342 ¶11 11-6 ¶12	Comply
<p>ERIC has since determined that interoperability requires Petitioners to support ...an additional set of interfaces necessary to ensure the interoperability of equipment and devices manufactured by different vendors. Accordingly, we will require that Petitioners' systems also support the following interfaces.</p>		10-2342 ¶12	
15	S1-U	10-2342 ¶12 11-6 ¶12	Comply
16	S1-MME	10-2342 §12 11-6 ¶12	Comply
17	S5	10-2342 ¶12 11-6 ¶ 12	Comply
18	S11	10-2342 ¶ 12 11-6 ¶ 12	Comply
19	SGi	10-2342 ¶ 12 11-6 ¶ 2	Comply
20	Gx	10-2342 ¶ 12 11-6 ¶ 12	Comply
21	Rx	10-2342 ¶ 12 11-6 ¶ 12	Comply

	Requirement	Orders	Compliance
22	Gy/Gz	10-2342 ¶ 12 11-6 ¶ 12	Comply
We will require that all public safety broadband networks be capable of supporting each of the aforementioned LTE Release 8 interfaces from day one of service operation. We will require each public safety broadband network operator to submit to the Bureau before deployment a certification that it is instituting the required interfaces in compliance with Release 8 or higher 3 GPP standards prior to the date it Achieves service availability.		11-6 ¶ 12	
<b>Roaming and Security</b>			
23	<b>Home Routed</b> We require each Petitioner's system to be capable of supporting roaming by all other Petitioners' systems, and to support roaming by additional future regional, state, Tribal and local public safety broadband systems. In this respect, two categories of roaming as specified in 3GPP Release 8 (TS 23.401) and the NPSTC BBTF Report must be supported: (1) home-routed traffic, such that a "visiting" user's traffic is routed back to the home network to enable the use of home resources, and ...	10-79 ¶ 45 10-2342 ¶ 9	Comply
24	<b>Local Breakout</b> (2) local breakout traffic, such that a visiting user can utilize the resources of the host network. We expect that ERIC will build on these roaming requirements as it considers the additional interoperability and governance requirements.	10-79 ¶ 45 10-2342 ¶ 9	Comply
25	<b>Security per 33.401</b> The optional security features <sup>102</sup> as specified in 3GPP TS 33.401 must be supported as recommended by Section 6.3.3 of the NPSTC BBTF report. Additionally, the use of network layer VPN must be allowed on the deployed network.	10-79 ¶ 47	Comply
26	Support the optional security features specified in 3GPP TS 33.401 ... "integrity protection and verification of data" and "ciphering/deciphering of data," must be supported for signaling.	10-2342 ¶ 25	Comply
27	either or both of IPv4/IPv6	10-2342 ¶ 13	Comply
<b>Interoperability Testing (self-certification)</b> The Interoperability Testing (IOT) must be performed on the following 3GPP Release 8 (LTE) interfaces. Initially, we will permit Petitioners to demonstrate interoperability of the interfaces specified by self-certification, which may be supplemented through demonstrations to ERIC. As 3GPP standards progress, however, we will require Petitioners to meet more detailed IOT requirements consistent with those standards.			
28	Uu-LTE air interface	10-79 ¶ 47	Comply
29	S1-u interface btwn eNodeB and SGW	10-79 ¶ 47	Comply
30	S1-MME interface between eNodeB and MME	10-79 ¶ 47	Comply
We require ... that each Petitioner submit, in the quarterly report following its date of service availability, a plan for conducting [interoperability testing] on the interfaces [below].		10-2342 ¶ 20	

	Requirement	Orders	Compliance
31	S6a	10-2342 ¶ 19	Comply
32	S8	10-2342 ¶ 19	Comply
33	S9	10-2342 ¶ 19	Comply
34	<p><b>Submit Interoperability plans to ERIC</b>  Accordingly, as a condition of waiver, we require that Petitioners submit to ERIC, during a specific filing window, their detailed plans to achieve interoperability. Such showings must be properly detailed and reflective of the complex nature of 4G wireless broadband networks. For example, the showings may include detailed deployment and technical data and information that Petitioners obtain from industry partners. To the extent such information is confidential or proprietary, Petitioners may submit this information under request for confidential treatment. ERIC will thereafter recommend for Bureau approval on delegated authority, the initial set of technical requirements that will be applicable to those Petitioners submitting plans. Once the Bureau adopts these technical requirements, Petitioners will then be permitted to commence operations upon certification to ERIC that they will meet these technical requirements.</p>	10-79 ¶ 55	Comply
35	<p><b>Certify vendor participation in PSCR</b>  ... As a condition of the waiver relief granted by this Order, we require the Petitioners and other public safety entities seeking early deployment waivers to participate in the PSCR/DC Demonstration Network. As part of this participation, waiver recipients must certify that their vendors are participating actively in the Demonstration Network through submission of their equipment to be evaluated under the test plan established by NIST. We will consider showings of such vendor participation favorably in evaluation of the interoperability showings submitted by waiver recipients.</p>	10-79 ¶ 61	Comply
36	Submit in quarterly report ... a plan for conducting IOT on the interfaces	10-79 ¶ 20	Comply
<b>Applications</b>		10-79 § 46	
Consistent with the NPSTC BBTF Report and to ensure that there are a common set of initial applications available on an interoperable, nationwide basis, we require, as a condition of waiver, that Petitioners' systems initially support the following applications:			
37	Internet Access	10-79 ¶ 46	Comply
38	VPN Access to any authorized site and to home networks	10-79 ¶ 46	Comply
39	Status or Information Homepage	10-79 ¶ 46	Comply
40	Access to responders under the Incident Command System	10-79 ¶ 46	Comply
41	Field-based Server applications	10-79 ¶ 46	Comply
<b>RF Performance</b>			

	Requirement	Orders	Compliance
42	<p><b>Interference Mitigation Techniques</b>            We require each Petitioner to implement the Static Inter-Cell Interference Coordination ... by its date of service availability to ensure that the network operates without interference</p>	10-2342 126	Comply
43	<p><b>Out Of Band Emissions</b>            As a condition of the waivers, for operations in the 763-768 MHz band and the 793-798 MHz band, the power of any emission outside the lessee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:  <input type="checkbox"/> On any frequency outside the 763-768 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least <math>43 + 10 \log (P)</math> dB; and  <input type="checkbox"/> On any frequency outside the 793-798 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least <math>43 + 10 \log (P)</math> dB.</p>	10-79 144	Comply
44	<p>We require Petitioners' systems to provide outdoor coverage at minimum data rates of 256 Kbps uplink (UL) and 768 Kbps downlink (DL), for all types of devices, for a single user at the cell edge ... based on a sector loading of seventy percent, throughout the entire network. Each petitioner must certify compliance with these requirements in the quarterly report that follows its date of service availability. The certification must be based on a representation of the actual "as-built" network and accompanied by UL and DL data rate plots that map specific performance levels, to include 257 Kbps UL and 768 Kbps DL.</p>	10-2342 122	Comply

	Requirement	Orders	Compliance
45	We require each operator of an early-deployed network to submit, for ERIC's review, a plan for achieving significant population coverage within its jurisdiction within ten years of its date of service availability. Although we do not precisely define "significant population coverage," we clarify ... that this standard is more robust than "substantial service," a coverage standard applicable under Commission rules to certain types of wireless communications services. We anticipate that for an for any early-deployed network, a plan to achieve "significant population coverage" would likely include plans to cover all major population centers within the Petitioner's jurisdiction, as well as major highways and thoroughfares; airports, bus terminals, rail stations and other transportation hubs; convention centers, sports arenas, and other venues that attract large crowds; areas susceptible to hurricanes, floods or other natural disasters; and strategic locations identified as vulnerable to terrorist attack. In addition, we would expect that such planning would cover more rural areas as appropriate for a particular Petitioner's geography. A Petitioner's plan may be submitted as part of the quarterly report that follows its date of service availability.	10-2342 ¶123	Comply
46	We will require that Petitioners' systems provide a probability of coverage of 95 percent for all services and applications throughout the network as built.	10-2342 ¶124	Comply
47	<p><b>PTCRB Certification</b></p> <p>Initially, we will permit Petitioners to demonstrate interoperability of the interfaces specified above by self-certification, which may be supplemented through demonstrations to ERIC. As 3GPP standards progress, however, we will require Petitioners to meet more detailed IOT requirements consistent with those standards.</p> <p>We require that, within six months of either (1) the Commission or Bureau's release of a public notice announcing the availability of the PCS-Type Certification Review Board (PTCRB) testing process for Band 14, or (2) the Petitioner's date of service availability—whichever date is later—each Petitioner must certify to the Commission that it has completed this process in consultation with a certified laboratory. In this certification, each network operator must also commit to any future testing called for within the certification process. Petitioners may submit these certifications as part of their quarterly reports.</p>	<p>10-79 ¶147</p> <p>10-2342 ¶118</p>	Comply
48	<p><b>Equipment Certification</b></p> <p>For transmitters in the 763-769 and 793-799 bands</p>	11-6, Appendix A 47 C.F.R § 90.203(p)	Comply

	Requirement	Orders	Compliance
49	<b>Spectrum Use in the Network</b>	11-6, Appendix A 47 C.F.R § 90.1407(d)-(f) 11-6, Appendix B 47 C.F.R § 90.1407(f)-(j)	Comply
50	<b>Protection of Incumbent Narrowband Operations</b>	11-6, Appendix A 47 C.F.R § 90.1409(a)-(d)	Comply

# **Exhibit A**

**JOINT POWERS AGREEMENT TO ESTABLISH  
THE BAY AREA REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM  
(BayRICS) AUTHORITY**

THIS JOINT POWERS AGREEMENT (this "Agreement"), dated for convenience of reference as of May 2nd, 2011, is made among the public agencies that are the signatories to this Agreement.

Each public agency executing this Agreement is referred to individually as a "Member," and collectively as "Members."

This Agreement is made with reference to the following facts and circumstances:

A. The Members wish to develop and establish a regional, interoperable public safety broadband communications system and other advanced information systems for interoperable public safety communications (collectively, the "Public Safety System").

B. The Members further wish to develop and establish a wireless broadband system for public access with a focus on provision of affordable broadband service for community anchor institutions ("Public Access System," and together with the Public Safety System, the "Systems"). Community anchor institutions include public libraries, schools, parks and recreation districts, health care facilities, local governmental facilities, community centers, and members of the public in the Bay Area, as defined below.

C. The Bay Area UASI Approval Authority allocated federal Urban Areas Security Initiative grant funds to establish and develop a regional interoperable public safety digital microwave communications system for the Bay Area ("BayLOOP"), which will support regional public safety voice and data systems that are intended to become part of the Public Safety System.

D. The Members wish to work cooperatively in developing these Systems for use within the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, Santa Clara, Santa Cruz, San Mateo, Solano, and Sonoma (collectively, the "Bay Area"), and have determined that working in concert is in the region's public interest, as doing so would provide the most effective and economical interoperable communications and broadband architecture for all participating public entities and agencies.

E. The Members are committed to cooperatively addressing the challenges of sustaining and managing shared interoperability assets and projects specific to voice and data communications, while looking for opportunities to enhance interoperability and increase the effectiveness and resiliency of existing and emerging technologies.

F. The Members are committed to complying with all applicable Federal Department of Homeland Security guidelines and Federal Communications Commission ("FCC") rules to promote national interoperability of the Public Safety System, including the development of the regional, standards-based, multi-vendor Public Safety System.

G. The Members have the authority to enter into this Agreement under the Joint Exercise of Powers Act, California Government Code Section 6500 *et seq.* (the "Act").

ACCORDINGLY, in consideration of the recitals and mutual obligations of the Members as set forth below, the Members agree as follows:

[Signature pages omitted]

## ARTICLE I - GENERAL PROVISIONS

### 1.01 Purpose.

This Agreement creates a local governmental entity to exercise the powers shared in common by its Members to engage in regional, cooperative planning and coordination of governmental services, and to develop the Systems and other communications and data system projects that promote interoperability in the Bay Area or are otherwise consistent with the goals of this Authority. The Members seek to create a structure and process to resolve technical and operational issues in the development, operation and management of such Systems; identify funding mechanisms for the Systems; and anticipate and address future advanced information and communications needs. Such purposes are to be accomplished, and the Members' common powers exercised, as set forth in this Agreement.

### 1.02 Creation of Authority.

Under the Act, the Members create a public entity to be known as the "Bay Area Regional Interoperable Communications System ("BayRICS") Authority" (hereinafter the "Authority"). The Authority shall be a public entity separate and apart from the Members. The geographic jurisdiction of the Authority is all territory within the Bay Area that includes the geographic boundaries of the Members, with the exception of the State of California; however, the Authority may undertake any action outside those geographic boundaries as is legal, necessary and incidental to accomplishing its purpose.

### 1.03 Eligibility for Membership; Membership.

To be eligible to be a Member in the Authority, an agency or entity must meet the following requirements: (1) be a public agency, as defined by the Act; and (2) have jurisdiction in the Bay Area.

- (a) **Initial Membership:** Prior to and for a period of sixty days after the Effective Date (hereinafter the "Initial Membership Period"), an eligible public agency may become an initial Member of the Authority as follows: (1) delivering to the Authority's Secretary a duly approved and executed copy of this Agreement; and (2) paying the Initial Membership Fee as specified in Section 5.01(a).
- (b) **Subsequent Membership:** Eligible public agencies that seek membership after the expiration of the Initial Membership Period, may become Members of the Authority as follows: (1) delivering to the Authority's Secretary a duly approved and executed copy of this Agreement; (2) paying the Subsequent Membership Fee as specified in Section 5.01(b); (3) obtaining the express approval of the Authority's Board of Directors (the "Board") to become a Member; and (4) complying with any further requirements mandated by the Board. Admission of Members after the Initial Membership Period shall not require amendment to this Agreement. The Secretary shall keep a historical roster of Members and their dates of admission and withdrawal.

### 1.04 Initial Members Entitled to Appoint Directors.

- (a) Each Appointing Authority identified in subsections 1 through 14 of Section 2.01 is entitled to appoint a Director to the Board only if the public agency which that official or body represents becomes a Member of the Authority within the Initial Membership Period. Appointing Authorities of public agencies identified in subsections 1 through 14 of Section 2.01 which become Members after the Initial Membership Period may be permitted to appoint Directors to sit on the Board only if such appointment authority is expressly approved by the Board.
- (b) Each Appointing Authority identified in subsections 15 through 18 of Section 2.01 is entitled to appoint a Director to the Board only if the required number of cities for that Regional City Group, as set forth in the applicable Exhibit A through D, become Members of the Authority within the Initial Membership Period. If the required number of cities within a Regional City Group do not become Members during the Initial

Membership Period, such Regional City Group shall lose its right to appoint a Director to the Board. The Appointing Authorities identified in subsections 15 through 18 of Section 2.01 which attain the required number of Member cities after the Initial Membership Period may be permitted to appoint Directors to sit on the Board only if such appointment authority is expressly approved by the Board.

**1.05 Effective Date; Term.**

This Agreement shall become effective, and the Authority shall come into existence, on the date on which; (a) at least ten of the nineteen public agencies representing the Appointing Authorities identified in Section 2.01 have fulfilled the requirements of Section 1.03(a) for Initial Membership; and (b) those Appointing Authorities have notified the Secretary of their appointment of a Director and Alternative Director (the "Effective Date"). The Secretary shall designate in writing the Effective Date, and provide written notice of the Effective Date to all Members, Bay Area counties, and cities specified in Exhibits A through D. The failure of the Secretary to designate the Effective Date or provide written notice shall not invalidate this Agreement. The Agreement shall continue from the Effective Date until terminated as provided in Section 6.04.

**ARTICLE II - BOARD OF DIRECTORS.**

**2.01 Composition of the Board.**

The Authority shall be governed and administered by the Board, which shall consist of a maximum of nineteen Directors selected by the following appointing authorities (each an "Appointing Authority" and, collectively, the "Appointing Authorities") in writing, as authorized pursuant to the terms of this Agreement:

1. The Mayor of the City of Oakland, California;
2. The Mayor of the City of San Francisco, California;
3. The Mayor of the City of San Jose, California;
4. The Board of Supervisors of the County of Alameda, California;
5. The Board of Supervisors of the County of Contra Costa, California;
6. The Board of Supervisors of the County of Marin, California;
7. The Board of Supervisors of the County of Napa, California;
8. The Board of Supervisors of the County of San Francisco, California;
9. The Board of Supervisors of the County of San Mateo, California;
10. The Board of Supervisors of the County of Santa Clara, California;
11. The Board of Supervisors of the County of Santa Cruz, California;
12. The Board of Supervisors of the County of Solano, California;
13. The Board of Supervisors of the County of Sonoma, California;
14. The Governor of the State of California;
15. The incorporated cities within the geographic area of Alameda and Contra Costa Counties and listed in Exhibit A attached hereto (referred to herein as the "East Bay Cities");
16. The incorporated cities within the geographic area of San Mateo County and listed in Exhibit B attached hereto (referred to herein as the "West Bay Cities");
17. The incorporated cities within the geographic area of Santa Clara and Santa Cruz Counties and listed in Exhibit C attached hereto (referred to herein as the "South Bay Cities");
18. The incorporated cities within the geographic area of Marin, Napa, Sonoma, and Solano Counties and listed in Exhibit D attached hereto (referred to herein as the "North Bay Cities" and together with the East Bay Cities, the West Bay Cities, and the South Bay Cities, collectively, the "Regional Cities Groups" and each, a "Regional City Group"); and
19. Seat at Large to be determined by the Board.

## 2.02 Appointment of Directors.

- (a) Except as provided in Section 1.04, each of the officials or bodies listed in subsections 1 through 14 in Section 2.01 above shall appoint one Director and one Alternate Director to the Board when the public agency that official or body represents becomes a Member. Such officials or bodies shall make reasonable efforts to make the appointments within fifteen days of the date when the agency that official or body represents becomes a Member.
- (b) Except as provided in Section 1.04, each of the Regional Cities Groups listed in subsections 15 through 18 in Section 2.01 above may appoint one Director and one Alternate Director to the Board, when the required number of the cities in the applicable Regional City Group (that specific number set forth on the bottom of the applicable Exhibit A-D) have (i) each delivered to the Secretary a duly approved and executed copy of this Agreement, and (ii) paid one Initial Membership Fee per Section 5.01 on behalf of such Regional City Group. Each of the Directors and Alternate Directors appointed by a Regional City Group shall be from one of the incorporated cities within such Regional City Group that has become a Member, and shall represent the interests of all the cities in its Regional City Group. Each Regional City Group shall make reasonable efforts to appoint its Director and Alternate Director within fifteen days of the date it has satisfied the requirements of subsections (i) and (ii) of this subsection 2.02(b). The City Managers representing the Member cities within a Regional City Group will determine which city will represent the Regional City Group, determine how the Member cities will provide input to the chosen representative Director and Alternate Director, and how the Member cities will share and pay the Initial Membership Fee and the Annual Fee thereafter. Those cities identified in subsections 1 through 3 in Section 2.01 are excluded from participating in, or affecting the membership calculations of any Regional City Group.
- (c) The Board may select a Member or group of Members not otherwise represented on the Board as the Appointing Authority for the Seat at Large under subsection 19 in Section 2.01 (the "At Large Appointing Authority"). The At Large Appointing Authority shall appoint one Director and one Alternate Director to the Board. The Appointing Authority shall make reasonable efforts to appoint its Director and Alternate Director within fifteen days of the date it receives notice of its designation as the At Large Appointment Authority from the Board.
- (d) The Appointing Authority shall promptly provide written notice to the Secretary of the appointment or removal of a Director or Alternate Director. Within seven days of the Secretary's receipt of such notice, the Secretary shall notify all Members of the current number of duly appointed Directors and provide such notice at the beginning of any Board Meeting.
- (e) At the time of appointment and for the duration of service, Directors and Alternate Directors shall be officers or employees of Members.
- (f) The term of office of each Director and Alternate Director shall be until a successor has been appointed, except for the At Large Seat which shall be a two year term.
- (g) An Alternate Director may act in his or her Director's absence and shall exercise all rights and privileges of a Director.
- (h) Each Director and each Alternate Director shall serve at the pleasure of the Appointing Authority and the Appointing Authority may remove the Director or Alternate Director at any time without notice or cause.
- (i) All Directors and Alternate Directors shall serve without compensation. The Board may authorize, through the bylaws, reimbursement of reasonable and necessary expenses incurred by Directors or Alternate Directors upon review of supporting documentation.
- (j) Each Appointing Authority shall authorize its Director and Alternate Director to take all actions necessary to conduct the business required by the Authority in a timely manner.

### **2.03 General Purpose of Board.**

The general purpose of the Board is to:

- (a) Coordinate information and address the needs, requirements, and resources of Members regarding the development and operation of the Authority, to ensure the goals and objectives of the Systems are fulfilled;
- (b) Provide structure for administrative and fiscal oversight of the Authority;
- (c) Identify and pursue funding sources for the Authority and Systems approved by the Authority;
- (d) Set appropriate policies for the Authority and the Systems;
- (e) Educate Members on advanced technologies in communications and information systems that may help them do their work more efficiently and with cost savings;
- (f) Maximize the use of available resources; and
- (g) Oversee all advisory committee activities.

### **2.04 Specific Responsibilities of the Board.**

The specific responsibilities of the Board shall be as follows:

- (a) Approve contracts with commercial companies, contractors, or subcontractors or other entities regarding development, operation, maintenance and expansion of the Systems or other projects duly approved by the Authority;
- (b) Approve and revise as necessary an administrative funding plan (the "Administrative Funding Plan") for the Authority to operate and fulfill its obligations under this Agreement;
- (c) Specify the Subsequent Membership Fee and the Annual Membership Fee, per Section 5.01;
- (d) Approve and revise, as necessary, a systems funding plan (the "Systems Funding Plan") regarding the construction and on-going operation, maintenance and ownership of the Systems;
- (e) Before the beginning of each Fiscal Year (as defined in Section 7.03), adopt, in its sole discretion, either an annual or a multi-year budget for the Authority;
- (f) Ensure strict accountability of all funds and reports of all receipts and disbursements;
- (g) Contract for, or employ, necessary and sufficient administrative, technical, support and other staff, consultants and contractors, and provide for necessary direction, management and oversight for all staff, consultants and contractors;
- (h) Adopt personnel rules and regulations if employing staff;
- (i) Adopt rules for procuring supplies, equipment and services;
- (j) Adopt rules for the disposal of surplus property;
- (k) Identify the needs and requirements of Members, as well as subscribers of the Systems;
- (l) Establish Systems priorities;
- (m) Establish long-range plans for the Systems;
- (n) Establish procedures for Systems implementation, monitoring and maintenance;
- (o) Adopt and revise, as necessary, an appropriate and cost effective maintenance plan for the Systems;
- (p) Adopt and revise, as necessary, Systems operating policies and procedures, as well as technical and maintenance requirements;
- (q) Conduct and oversee System audits at intervals not to exceed three years;
- (r) Adopt bylaws, rules and regulations as necessary for the purposes of this Agreement; provided that nothing in the bylaws, rules and regulations shall conflict with this Agreement or the Act;
- (s) Establish fees for Members and Non-Members to access and use the Systems. The Board shall ensure that such fees for Members are less than fees for non-members of the Authority for comparable services;
- (t) Represent the Authority in external communications; and
- (u) Discharge other duties consistent with the purposes of this Agreement as appropriate or required by statute.

## **2.05 Startup Responsibilities.**

The Authority shall have the duty to do the following within the timeframe specified below or, if no timeframe is specified, within a reasonable time not to exceed one year from the Effective Date:

- (a) To use its best efforts to establish within two months of the Effective Date advisory committee(s) in accordance with Section 3.09;
- (b) To use its best efforts to establish within two months of the Effective Date a website for posting agenda and other notices and information about the Authority and Board.
- (c) To use its best efforts to develop and adopt within one month of the Effective Date an Administrative Funding Plan for the Authority to operate and fulfill its obligations under this Agreement;
- (d) To use its best efforts to develop and adopt expeditiously, as described in Section 5.02, a Systems Funding Plan specifying a means or formula for funding the design, construction, operation, maintenance, expansion, and lifecycle replacement of any systems that further the purposes of this Authority. A Systems Funding Plan shall include but is not limited to the following: (i) the design, construction, operation, maintenance, expansion and lifecycle replacement costs of the Systems; (ii) specification as to how site costs and/or site remediation (*e.g.*, electrical, air conditioning, backup generators, and power) of specified antenna sites by jurisdiction shall be paid; (iii) the estimated costs to be borne by the Authority should ownership of the Systems later be transferred to the Authority; (iv) good faith estimates of costs and types of devices that will be able to operate on the Public Safety System; (v) monthly user fees for the Systems; and (vi) identification of additional funding sources, if necessary;
- (e) During the eighty days following the Effective Date, to negotiate any contracts with commercial companies, contractors, subcontractors or entities that specify the timing and sequencing of construction of the Systems consistent with the functional specifications, and other business terms related to the Systems, including but not limited to development, operation and maintenance of the Systems. In any agreement with a contractor or entity, the Authority may not bind or commit any Member to incur any financial obligation or provide any resources to the Systems (*e.g.*, use of a communications site, use of communications fiber over which the Member has control or ownership) or to participate in use of the Systems without that Member's written authorization. This Section 2.05(e) is subject to the restriction set forth in Section 5.02 prohibiting the Authority's approval of any agreement relating to any System until the Board has approved a Systems Funding Plan.
- (f) To contract for, hire or otherwise retain an Executive Director for the Authority, to administer the Authority. The Board shall specify in the bylaws or personnel rules the responsibilities, duties and authority of the Executive Director.
- (g) To use its best efforts to develop and adopt, within eighty days, bylaws and other governance documents for the Authority;
- (h) To secure administrative office space, equipment, and furnishings as necessary;
- (i) To encourage other governmental and quasi-governmental entities and agencies, including but not limited to the state and federal government, other neighboring counties, and special districts, to participate in the Systems;
- (j) To develop policies and procedures for the voluntary transfer and/or sharing of assets from Members; and
- (k) To evaluate the need for, acquire and maintain insurance as deemed necessary by the Board to protect the interests of the Authority, the Members, and the public.

## **2.06 Meetings of the Board.**

- (a) Regular Meetings. The Board shall approve a schedule for its regular meetings provided, however, that the Board shall hold at least one regular meeting quarterly. The Board shall

fix the date, hour and location of regular meetings by resolution and the Secretary shall transmit a copy of the resolution to each Member.

- (b) Special Meetings. Special meetings of the Board may be called by the Chair or as provided for in the bylaws.
- (c) Call, Notice and Conduct of Meetings. All meetings of the Board shall be noticed, held and conducted in accordance with the provisions of the Ralph M. Brown Act, California Government Code Section 54950 *et seq.* As soon as practicable, but no later than the time of posting, the Secretary shall provide a copy of the posted agenda to each Member, Director and Alternate Director.
- (d) First Meeting. The Board shall make reasonable efforts to convene its first meeting no later than fifteen days after the Effective Date.

#### **2.07 Minutes.**

The Secretary shall prepare minutes of all Board meetings and as soon as practicable after each meeting, and shall make the draft minutes available to each Director, Alternate Director, the Members and other interested parties upon request. The Board shall approve the minutes at the next regularly scheduled meeting.

#### **2.08 Voting; Weighted Voting.**

All voting power of the Authority shall reside in the Board, and shall be subject to the following terms and conditions:

- (a) Each Director shall have one vote; an Alternate Director may vote in place of, and only in the absence of, that Alternate Director's Director.
- (b) Each Director or Alternate Director (as applicable) must be physically present at a meeting to vote; no absentee ballot or proxy is permitted.
- (c) Except as otherwise expressly set forth in this Agreement (including without limitation Sections 2.09, 4.02, 6.04 and 7.02), the Board is authorized to adopt and apply weighted voting methods for approval of items brought before the Board under the following conditions:
  - i. The Board may utilize weighted voting only if it has previously adopted weighted voting criteria and methodologies in the Authority's bylaws;
  - ii. Weighted voting will be the exception, rather than the norm, for the Authority to conduct business;
  - iii. Board items that involve expenditure or commitment of the Authority's funds or other resources must exceed \$500,000 in value to be subject to weighted voting;
  - iv. A Director must expressly move and call for a weighted voting method on a particular item pending before the Board, which motion must be seconded by at least one other Director;
  - v. The call for such weighted vote must be made before or after any vote but prior to moving to the next agenda item or the end of the Board meeting, whichever is earlier; and
  - vi. Any Board item subject to a weighted voting method shall first be approved by a vote of the quorum of the Board (as provided in Section 2.09), followed by a weighted vote. Board items subject to weighted voting must be approved by both a regular quorum vote of the Board as well as a weighted vote of the Board to be approved.

#### **2.09 Quorum; Votes**

A majority of the Directors duly appointed to the Board, as described in Section 2.02, as of any Board meeting date (taking into consideration the loss of any Board seats as provided in Section 6.01(e)) shall constitute a quorum of the Board for the transaction of business. For example, if ten Directors have been duly appointed to the Board on the date of its first meeting, a quorum is six or more Directors, and, if at a subsequent Board meeting date, fourteen Directors have been duly appointed, a quorum is eight or more Directors. If there is less than a quorum present at a

meeting, no Board action can be taken, and the Secretary may adjourn such meeting. The affirmative vote of at least a quorum is required to take any action by the Board.

**2.10 No Personal Liability of Directors.**

Under the Act, no Director or Alternate Director shall be personally liable for any debts, obligations or liabilities of the Authority or on any bonds issued by the Authority, nor subject to any personal liability or accountability by reason of the Authority's incurrence of debts, obligations or liabilities or issuance of bonds.

**ARTICLE III – OFFICERS, EMPLOYEES AND ADVISORY COMMITTEES**

**3.01 Chairperson; Vice-Chairperson.**

At the first regular meeting of the Board, the Board shall elect a Chairperson and Vice-Chairperson from among the Directors. The initial Chairperson and Vice-Chairperson shall serve until the end of the first Fiscal Year (as defined in Section 7.03 of this Agreement). Then, at the first regular meeting of each Fiscal Year, the Board shall elect a Chairperson and Vice-Chairperson to serve a one year term. If the Chairperson or Vice-Chairperson resigns from or is otherwise unable to perform the duties of the office, or his or her represented agency ceases to be a Member, then at the next regular meeting of the Board held after the vacancy or inability to serve occurs or as soon as practicable thereafter, the Board shall elect a new Chairperson or Vice-Chairperson, as applicable, to serve the balance of the term.

The Chairperson, or the Chairperson's designee, shall sign all contracts and other agreements on behalf of the Authority, and the Chairperson shall perform such other duties as the Board may require. The Chairperson shall approve the agenda for all Board meetings, preside over Board meetings, and call special meetings of the Board outside of the regular meeting schedule. The Chairperson may establish committees of the Board in addition to the advisory committees specified in Section 3.09.

If the position of Chairperson is vacant or the Chairperson is otherwise unable to serve, the Vice-Chairperson shall sign contracts or other agreements, and perform all of the Chairperson's duties until the Board elects a new Chairperson.

**3.02 Treasurer.**

At its first meeting, the Board shall appoint a Treasurer of the Authority, which shall be the treasurer of one of its Members. To the extent permitted by the Act, the Board may change, by resolution, the Treasurer of the Authority.

The Treasurer shall be the depository, shall have custody of the accounts, funds and money of the Authority from whatever source, and shall have the duties and obligations set forth in the Act. For grants awarded to Members or third parties for use with the Systems, the Treasurer will work with the Member or third party to put in place appropriate fiscal controls to meet any grant requirements.

**3.03 Auditor.**

At its first meeting, the Board shall appoint an Auditor of the Authority who shall be of the same public agency as the Treasurer to comply with Government Code Section 6505.5. To the extent permitted by the Act, the Board may change, by resolution, the Auditor of the Authority.

The Auditor shall perform the functions of auditor for the Authority and shall have the duties and obligations set forth in the Act. As required by the Act, the Auditor shall make or cause an independent annual audit of the accounts and records of the Authority by a certified public accountant or public accountant, in compliance with generally accepted auditing standards. A

report of the financial audit will be filed as a public record as provided in Government Code Section 6505.

**3.04 Legal Counsel.**

At its first meeting, the Board shall retain legal counsel for the Authority.

**3.05 Secretary to the Authority.**

At its first meeting, the Board shall appoint a Secretary to provide administrative support to the Authority. If this Agreement assigns duties to the Secretary and no Secretary has yet been appointed, the Office of the Alameda County Sheriff shall perform the duties of the Secretary until a Secretary has been appointed by the Board. To the extent permitted by the Act, the Board may change, by resolution, the Secretary of the Authority. The person serving as the Secretary shall not also serve as a Director.

The Secretary shall perform the duties required under this Agreement. The Secretary shall maintain a current list of Members and contact information for notices under Section 7.01.

**3.06 Bonding of Persons Having Access to Property.**

Pursuant to Government Code Section 6505.1, the Board shall designate the public officer or officers or person or persons who have charge of, handle, or have access to any property of the Authority, and shall require such individuals to file an official bond in an amount fixed by the Board.

**3.07 Executive Director; Other Employees.**

The Board shall appoint an Executive Director, who shall administer the Authority and report to the Board. The Board shall have the power by resolution to appoint and employ other officers, employees, consultants and independent contractors as may be necessary to carry-out the purpose of this Agreement.

**3.08 Privileges and Immunities from Liability.**

All of the privileges and immunities from liability, applicable to the activities of officers, agents or employees of a public agency when performing their respective functions shall apply to the officers, agents or employees of the Authority to the same degree and extent while performing any of the functions and other duties of such officers, agents or employees under this Agreement. None of the officers, agents or employees directly employed by the Authority shall be deemed, by reason of their employment by the Authority, to be employed by the Members or subject to any of the requirements of the Members.

**3.09 Advisory Committees.**

The Board shall establish advisory committees including a Technical Advisory Committee, the primary purpose of which will be to review and recommend to the Board policies and procedures related to Systems performance, maintenance and other technical issues, and which shall be established at the first Board meeting. The Board may establish additional advisory committees to meet the needs of the Authority. The Board shall make reasonable efforts to establish membership of the Technical Advisory Committee and any other committees, and any offices required by the committees. The committees shall be subject to the Ralph M. Brown Act (California Government Code Section 54950 et seq.), and the chairperson of the committees shall report back to the Board of Directors as specified in the bylaws.

## ARTICLE IV – POWERS

### 4.01 General Powers.

The Authority shall have the powers common to the Members and that are necessary or convenient to accomplishing the purposes of this Agreement, subject to the restrictions set forth in Section 4.04.

### 4.02 Power to Issue Bonds

The Authority shall have the power, with a two-thirds super majority vote of all Directors, to issue bonds as specified under the Act.

### 4.03 Specific Powers.

The Authority is authorized, in its own name, to perform all acts necessary for the exercise of the foregoing powers, including, but not limited to, any or all of the following:

- (a) To make and enter into contracts, including but not limited to, agreements for the purpose of acquiring real and/or personal property, equipment, employment and professional services, and including agreements with Members;
- (b) To make and enter into contracts with wholesalers, subscribers, users, or resellers that desire to utilize the Systems for their broadband and other communications needs and entities that desire to utilize the Systems only for mutual or automatic aid;
- (c) To plan and conduct environmental review and other analyses in connection with its plans, and design buildings, facilities or communication improvements of any kind;
- (d) To acquire, construct, manage, maintain, or operate telecommunications systems or service and to provide the equipment necessary to deliver public services;
- (e) To acquire, construct, manage, maintain or operate any building, works or improvements;
- (f) To acquire, hold, lease, or dispose of property, both real and personal;
- (g) To apply for and hold FCC waivers or licenses to frequencies, and to enter spectrum lease agreements;
- (h) To employ or engage contractors, agents, legal counsel, or employees;
- (i) To sue and be sued;
- (j) To apply for, receive and utilize grants and loans from federal, state or local governments or from any other available source in order to pursue the purposes of the Authority;
- (k) To accept donations;
- (l) To incur debts, liabilities and obligations, provided that no debt, liability or obligation of the Authority shall constitute a debt, liability or obligation of the individual Members;
- (m) To impose, levy, collect or cause to be collected, or to receive and use, communication impact or development fees on new residential, commercial, and industrial development, but only upon the express approval of the affected Member jurisdiction and as otherwise authorized by local, state, and federal law;
- (n) Under Government Code Section 6509.5, to invest any money that is not required for the immediate necessities of the Authority, as the Authority determines is advisable, in the same manner and upon the same conditions as local agencies, under Section 53601 of the California Government Code;
- (o) To carry on technical and other investigations of all kinds necessary to further the purposes of the Authority; and
- (p) To promulgate, adopt, and enforce any rules and regulations, as may be necessary and proper to implement and effectuate the terms, provisions, and purposes of this Agreement.

### 4.04 Restriction on Exercise of Powers.

Under Sections 6508 and 6509 of the Act, all common powers exercised by the Authority shall be exercised in a manner consistent with, and subject to, the restrictions and limitations upon the exercise of such powers as are applicable to the County of Alameda, a California charter county.

#### **4.05 Limited Liability of the Authority.**

Consistent with Government Code section 6508.1, the debts, liabilities and obligations of the Authority shall be limited to the assets of the Authority and shall under no circumstances be the debts, liabilities and obligations of any of the Members. A Member may (but has no obligation to) separately contract for or assume responsibility in writing for specific debts, liabilities, or obligations of the Authority. In furtherance of this Section, the Authority shall indemnify the Members as provided in Section 7.16 below.

### **ARTICLE V – CONTRIBUTIONS; ACCOUNTS AND REPORTS; FUNDS**

#### **5.01 Initial, Subsequent and Annual Membership Fees.**

The Authority may use the funds generated by fees charged to its Members to support administrative, legal, and other authorized costs incurred by the Authority.

- (a) **Initial Membership Fee.** To become a Member of the Authority within the Initial Membership Period, each eligible public agency shall pay an Initial Membership Fee as specified below (each such fee, as applicable, the "Initial Membership Fee").
  - i. Each public agency identified in subsections 1 through 14 in Section 2.01 shall pay an Initial Membership Fee to the Authority of Twenty Four Thousand Five Hundred Dollars (\$24,500) as a condition of appointing its Director and Alternate Director
  - ii. Each Regional Cities Group identified in subsections 15 through 18 in Section 2.01 shall pay a single Initial Membership Fee to the Authority of Twenty Four Thousand Five Hundred Dollars (\$24,500) for the group as a whole, which will enable each of the cities within the Regional City Group to obtain membership status upon satisfying the other requirements of this Agreement. If an eligible city has paid an Initial Membership Fee of Five Thousand Dollars (\$5,000.00) because the required number of cities within its Regional City Group did not become Members within the Initial Membership Period, its payment shall be credited toward the applicable Regional City Group's Subsequent Membership Fee, as defined in Section 5.01(b).
  - iii. Except as otherwise set forth above, public agencies eligible to become Members, but not specifically identified in subsections 1 through 14 in Section 2.01 shall pay an Initial Membership Fee to the Authority of Five Thousand Dollars (\$5,000.00) as a condition of becoming Members.
- (b) **Subsequent Membership Fee.** Each eligible public agency applying to become a Member after the Initial Membership Period, whether or not identified in Section 2.01, shall pay a Subsequent Membership Fee as a condition to becoming a Member (each such fee, as applicable, hereinafter a "Subsequent Membership Fee"). The Board shall determine the amount of each Subsequent Membership Fee, but in no event shall it be less than the Initial Membership Fee the public agency would have been required to pay to become a Member within the Initial Membership Period.
- (c) **Annual Fee.** Each Member shall pay an Annual Fee, by not later than July 1st of each Fiscal Year to maintain membership in the Authority (each such fee, as applicable, hereinafter, the "Annual Fee"). The Board shall set each Annual Fee in an amount not to exceed the Initial Membership Fee or Subsequent Membership Fee, as the case may be, paid by the respective Member; however, the Board may adjust the Annual Fee each Fiscal Year to reflect changes in the Consumer Price Index. The Board shall round the adjusted Annual Fee to the nearest whole dollar. A Member is not required to pay its first Annual Fee if the Member paid its Initial or Subsequent Membership Fee, as applicable, within six months of its first Annual Fee due date.

#### **5.02 Adoption of Systems Funding Plan.**

- (a) A goal of the Authority is to develop the Systems Funding Plan as specified in Sections 2.04(d) and 2.05(d). The Board shall not approve any agreement for construction of or relating to any Systems until the Board has approved a Systems Funding Plan.
- (b) Before the Board may consider adopting the Systems Funding Plan, it shall distribute the proposed Systems Funding Plan to the Members under Section 7.01. The proposed Systems Funding Plan shall be accompanied by a description of the Systems, and information to allow Members to determine the Systems' capability, data speeds, functionality, features, cost, financing and the expected impacts on individual Members. The Board shall designate a period, which shall not be less than ninety days, during which Members may provide comments to the Board regarding the proposed Systems Funding Plan. After the comment period has expired, the Board may:
  - i. Revise the Systems Funding Plan to address some or all of the Member comments;
  - ii. Reconsider the Systems Funding Plan at a later date; or
  - iii. Reject the Systems Funding Plan.
- (c) Adopt the Systems Funding Plan as proposed;
- (d) The Board shall give notice to Members under Section 7.01 within five days of adoption of the Systems Funding Plan (the actual date such notice is provided to members, the "Systems Funding Plan Notice Date"). The notice shall include a copy of the adopted Systems Funding Plan and the date by which Members may withdraw pursuant to Section 6.01(a).
- (e) If the Board decides to exercise its option under Section 5.02(b)(ii) to revise the Systems Funding Plan to address Member comments and the Board adopts a revision that changes any Member's financial obligation from the previous version of the Systems Funding Plan, the thirty day time period specified in Section 6.01(a) for withdrawal from the Authority shall automatically be extended to ninety days from the Systems Funding Plan Notice Date.

#### **5.03 Additional Contributions; Disproportionate Impact.**

The Board shall not require Members to provide any additional contributions to the Authority of any kind or nature whatsoever, for any purpose. Except as otherwise expressly set forth in this Agreement, the Board is not authorized to require Members to provide funds, resources, equipment or personnel in order to maintain membership in the Authority, maintain a Director's seat on the Board, and/or participate in the Systems. Members have the ability to provide additional contributions to the Authority, but only upon approval of their governing authorities. In addition, the Board shall not take any of the following actions without the express approval of the affected Member(s):

- (a) Require any Member to adopt any tax, assessment, fee or charge;
- (b) Require any Member to expend its resources, or utilize its property or equipment in a particular fashion, as part of a project or similar action taken by the Authority; and/or
- (c) Approve a project or similar action without taking into consideration whether that action would disproportionately and negatively impact any Member based on objective and quantifiable factors.

The provisions of this section shall not affect the ability of the Authority to charge user fees or other costs associated with a Member's use of the Systems.

#### **5.04 Accounts and Reports.**

The Treasurer shall establish and maintain such funds and accounts as may be required by good accounting practice or by any provision of any trust agreement entered into with respect to the proceeds of any bonds issued by the Authority, or by the State Controller or the United States Government. The books and records of the Authority in the hands of the Treasurer shall be open to inspection at all reasonable times by duly appointed representatives of the Members. The

Treasurer, within 180 days after the close of each Fiscal Year, shall give a complete written report of all financial activities for such Fiscal Year to the Members.

**5.05 Funds.**

The Treasurer shall receive, have custody of and/or disburse Authority funds in accordance with the laws applicable to public agencies and generally accepted accounting practices, and shall make the disbursements required by this Agreement in order to carry out any of the purposes of this Agreement.

**5.06 Use of Spectrum.**

It is the Authority's intent to operate a regional interoperable public safety broadband communications system on any radio spectrum that the FCC authorizes for public safety use, specifically including spectrum licensed to the Public Safety Spectrum Trust in the 700 MHz frequency (763-768/793-798 MHz) from the FCC for use by public safety and any other spectrum upon which the FCC allows public safety operation by the Authority in the future. It is the Authority's intent to maximize dedicated public safety spectrum in order to obtain high levels of communications reliability during major disasters, major events, or other emergencies. The Authority is authorized to apply for any FCC spectrum licenses or leases that are appropriate for public safety operation for the Bay Area region. For the Public Access System, unlicensed spectrum shall be used to provide this service consistent with FCC rules and regulations.

**5.07 Operational and Technical Policies.**

The Authority may set forth operational and technical policies for appropriate usage of the Systems so that the Systems are operated in a manner that permits usage by all Members in a fair and reasonable manner. Such operation and technical policies shall be developed by the Technical Advisory Committee and approved by the Board after review.

**5.08 System Components**

The Systems will be comprised of components that may include, but are not limited to, radio sites and facilities, microwave and fiber backhaul, base station equipment, antennas, evolved packet core network(s), network management systems, ancillary network components and end-user equipment (the "System Components"). Members may provide System Components to the Authority through written agreements signed by both the Member and the Authority. Such agreements shall at a minimum specify the following with respect to the System Components being provided, if known: (a) detailed descriptions and locations; (b) possession and ownership; (c) operation, maintenance and upgrade requirements; (d) parameters regarding use of and access to the particular System Components; (e) provisions addressing the Member's removal or discontinued shared use of System Components from the Systems; and (f) provisions to excuse a loss of use of System Components through a change in circumstances that make it impossible or impracticable for a Member to continue to provide System Components previously used in the Systems. Any such agreement regarding Systems Components shall be consistent with the provisions of Section 6.01(d).

**5.09 Non-Member Use of Systems.**

Public entities or agencies that are not Members of the Authority may use the Authority's Public Safety System on a usage fee basis as subscribers; however users of public safety spectrum must comply with any federal laws or FCC regulations limiting use to public safety entities. Public entities, public agencies, community anchor institutions and other retail users may purchase service from the Authority's Public Access System from such System's wholesalers, resellers or other distribution channels approved by the Authority. The Board shall adopt rules and reasonable rates for this use of the Systems in a fair and nondiscriminatory manner.

## ARTICLE VI – WITHDRAWAL AND TERMINATION

### 6.01 Withdrawal by Members.

Members may withdraw from the Authority as follows:

- (a) Within thirty days of the Systems Funding Plan Notice Date, as such period may be extended pursuant to the provisions in Section 5.02(d) (“Initial Withdrawal Period”), a Member shall submit written notice to the Chairperson and Secretary of its withdrawal from the Authority, which withdrawal notice shall be effective immediately. Such withdrawing Member will not incur any additional financial obligations as a result of membership in the Authority during such Initial Withdrawal Period; provided, that the initial Annual Fee or any Annual Fee paid by such withdrawing Member prior to withdrawal will not be returned.
- (b) After the Initial Withdrawal Period, a Member that did not provide System Components (except end-user equipment) shall provide to the Chairperson and Secretary written notice of its withdrawal from the Authority which withdrawal notice shall be effective immediately; provided, that any Annual Fee already paid will not be returned to such withdrawing Member;
- (c) After the Initial Withdrawal Period, a Member that provided System Components (except end-user equipment) shall provide to the Chairperson and Secretary twelve months advance written notice of its withdrawal from the Authority, which withdrawal shall be effective at the end of the notice period or earlier as permitted by the Board; provided, that any Annual Fee already paid will not be returned to such withdrawing Member
- (d) If withdrawing under Section 6.01(c), a Member that provided System Components shall be required to pay a withdrawal payment. Such withdrawal payment shall be determined through a good faith negotiation between the withdrawing Member and the Authority, and shall be in an amount approved by the Board. The purpose of the withdrawal payment is to require the Member to cover the Authority’s actual and direct expenses reasonably related to the withdrawal including, but not limited to, equipment relocation fees, leasing, and permit fees relating to System Components that the Member had dedicated to supporting the Systems, as well as related administrative costs and professional services fees. The withdrawing Member may mitigate this withdrawal payment by entering into an agreement for the Authority’s continued use of the Member’s assets, as described in Section 6.03. If the parties are unable to reach an agreement on the amount of the withdrawal payment, the parties shall mutually choose a neutral third party who shall be authorized to make such a determination and resolve the matter.
- (e) If a withdrawing Member is an Appointing Authority to the Board, such Member shall lose its appointing authority and seat on the Board as of the date such Member gives notice of its withdrawal.
- (f) If the withdrawing Member is a City within a Regional City Group, and the withdrawal of that Member reduces the number of Members in that Regional City Group below the threshold required to appoint a Director, as specified in Section 2.01 and the applicable Exhibit A through D for that Regional City Group, then such Regional City Group shall lose its Appointing Authority and seat on the Board effective as of the date the Member gives notice. If one or more additional cities from within such Regional City Group become Members of the Authority, such that the required number of cities within that Regional City Group are Members for purposes of appointing a Director, as specified in the applicable Exhibit A through D, the Regional City Group shall regain its ability to appoint a Director to the Board.

### 6.02 Financial Liabilities of Withdrawing Members.

Except as otherwise provided in Section 5.02:

- (a) A withdrawing Member shall remain liable for all financial liabilities incurred during its membership in the Authority; however, except for the Annual Fee required per Section

5.01(c) paid for the year in which the withdrawal notice is given, the Member shall not be liable for any new financial liabilities incurred after submitting written notice of its withdrawal, including but not limited to future Annual Fees.

- (b) The Authority and the withdrawing Member may negotiate a buy-out agreement for early termination of membership to retire any ongoing financial obligations the Member shares with the Authority.

#### **6.03 Retention of Assets by Withdrawing Members.**

Any System Component(s) that a withdrawing Member provided to the Authority shall remain the sole asset of that Member unless the Member and the Authority otherwise agree. If requested by the Authority, a withdrawing Member shall consider options for the Authority's continued use of such Member's System Component(s). Acceptance of any option is at the sole discretion of the withdrawing Member. Also, the use by the Authority of the withdrawing Member's System Component(s) shall be terminated upon the effective date of withdrawal, unless otherwise agreed between the Authority and Member.

#### **6.04 Termination of Authority; Disposition of Authority Assets.**

If at any point there are fewer than ten Directors on the Board, then the Board shall determine, at least once annually, whether the Authority is able to continue to fulfill its purpose and obligations required by this Agreement. In such a circumstance, the Board may recommend termination of this Agreement and dissolution of the Authority to the Directors' respective public agencies. The Authority may be terminated by a two-thirds super-majority vote of Directors and upon written consent from their respective public agencies. Upon termination of this Agreement and dissolution of the Authority, and after payment of all obligations of the Authority, the Board shall distribute Authority assets, including real or personal property, in proportion to the contributions made by Members. The Board may sell or liquidate Authority property and shall distribute the proceeds thereof in proportion to the contributions made by Members.

Any System Component(s) provided by a Member to the Authority shall remain the asset of that Member and shall not be subject to distribution under this section.

### **ARTICLE VII – MISCELLANEOUS PROVISIONS**

#### **7.01 Notices.**

Any notice required or permitted to be made under this Agreement shall be in writing and shall be delivered in the manner prescribed in this Section 7.01 at the address set forth below such party's signature block to this Agreement. The parties may give notice by:

- (a) Personal delivery;
- (b) E-mail;
- (c) U.S. Mail, first class postage prepaid;
- (d) "Certified" U.S. mail, postage prepaid, return receipt requested;
- (e) Facsimile.

At any time, by providing written notice to the Secretary, any party may change the place, facsimile number or e-mail for giving notice. All written notices or correspondence sent in the described manner will be deemed given to a party on whichever date occurs earliest:

- (a) The date of personal delivery;
- (b) The third business day following deposit in the U.S. mail, when sent by "first class" mail;
- (c) The date on which the party or its agent either signed the return receipt or refused to accept delivery, as noted on the return receipt or other U.S. Postal Service form, when sent by "certified" mail; or
- (d) Notices delivered by electronic mail shall be deemed received upon the sender's receipt of an acknowledgment from the intended recipient (such as by the "return receipt requested" function, as available, return electronic mail or other written acknowledgment

of receipt); provided that, if such notice is not sent during normal business hours of the recipient, such notice shall be deemed to have been sent on the next business day of the recipient.

**7.02 Amendment.**

This Agreement may be amended upon a two-thirds supermajority vote of the Members and a unanimous vote of the Board and execution of such amendment by each of the Members approving such amendment and each of the Members seated on the Board. However, this Agreement shall not be amended, modified or otherwise revised, changed or rescinded, if such action would:

- (a) Materially and adversely affect either the rating of bonds issued by the Authority, or bondholders holding such bonds; or
- (b) Limit or reduce the obligations of the Members to make, in the aggregate, payments which are for the benefit of the owners of the bonds.

**7.03 Fiscal Year.**

The Authority's Fiscal Year shall be July 1 to June 30.

**7.04 Consents and Approvals.**

Any consents or approvals required under this Agreement shall not be unreasonably withheld.

**7.05 Incorporation of Act.**

The provisions of the Act, as it may be amended from time to time, which are required to be included in this Agreement, are incorporated into this Agreement by reference.

**7.06 Enforcement of Authority.**

The Authority is authorized to take any or all legal or equitable actions, including, but not limited to, injunction and specific performance, necessary or permitted by law to enforce this Agreement.

**7.07 Severability.**

If any one or more of the terms, provisions, promises, covenants, or conditions of this Agreement were, to any extent, adjudged invalid, unenforceable, void, or voidable for any reason whatsoever by a court of competent jurisdiction, each and all of the remaining terms, provisions, promises, covenants, and conditions of this Agreement shall not be affected and shall be valid and enforceable to the fullest extent permitted by law.

**7.08 Successors.**

This Agreement shall be binding upon and shall inure to the benefit of the successors and permitted assignees of each Member.

**7.09 Assignment.**

No Member shall assign any rights or obligations under this Agreement without the prior written consent of the Board.

**7.10 Governing Law.**

This Agreement is made and will be performed in the State of California, and as such California substantive and procedural law shall apply. Venue for any litigation under this Agreement shall be within any jurisdiction that constitutes or includes active Members at the time of litigation within the State of California.

**7.11 Headings.**

The section headings in this Agreement are for convenience only and are not to be construed as modifying or governing the language of this Agreement.

**7.12 Counterparts.**

This Agreement may be executed in counterparts.

**7.13 No Third Party Beneficiaries.**

This Agreement, including the obligations of the Authority described in this Agreement, are not intended to benefit any party other than the Authority and its Members, except as expressly provided otherwise in this Agreement. No agency that is not a signatory to this Agreement shall have any rights or causes of action against any party to this Agreement as a result of that party's performance or non-performance under this Agreement, except as expressly provided otherwise in this Agreement.

**7.14 Filing of Notice of Agreement or Amendment.**

Within thirty days after the Effective Date of the Agreement or any amendment to the Agreement, the Secretary shall prepare and file notices as required by Government Code Section 6503.5. The Secretary shall also file a copy of the Agreement or any amendment to the Agreement with the Controller as required by Government Code Section 6503.6.

**7.15 Conflict of Interest Code.**

The Board shall adopt a conflict of interest code as required by law.

**7.16 Indemnification.**

The Authority shall defend, indemnify and hold harmless each Member (and each Member's officers, agents, and employees, successors and assigns) from any and all liability, including, but not limited to, claims, losses, suits, injuries, damages, costs and expenses (including, without limitation, attorney's fees and consequential damages), of every kind, nature and description, (collectively, "Losses") directly or indirectly arising from or as a result of: (i) any accident, injury to or death of any person or loss or damage to property that may be directly or indirectly caused by the acts or omissions of the Authority or its officers, employees or agents; (ii) any act of the Authority or its agents, servants, employees or officers in the observation or performance of any of its responsibilities under this Agreement, or any failure by the Authority to perform any such responsibilities; and/or (iii) any actions or inactions of Members taken as a result of their membership in the Authority. Notwithstanding the foregoing, the Authority shall not be required to indemnify any Member against any Losses that are caused by the negligence or willful misconduct of such Member seeking indemnification or any of their respective officers, agents, employees, successors or assigns.

**7.17 Dispute Resolution/Legal Proceedings.**

Disputes regarding the interpretation or application of any provision of this Agreement shall, to the extent reasonably feasible, be resolved through good faith negotiations between the Members and/or the Authority.

**7.18 Non-Waiver.**

No waiver of the breach or default of any of the covenants, agreements, restrictions, or conditions of this Agreement shall be construed to be a waiver of any succeeding breach of the same or other covenants, agreements, restrictions, or conditions of this Agreement. No delay or failure in exercising any right, power or remedy in the event of breach or default of this agreement shall be construed as a waiver thereof, or acquiescence therein.

**7.19 Complete Agreement.**

This Agreement constitutes the full and complete agreement of the parties with respect to the subject matter hereof. All prior negotiations and written and/or oral agreements between the parties with respect to the subject matter of this Agreement are merged into this Agreement.

## **Exhibit A**

### **List of East Bay Cities**

#### **Alameda County Incorporated Cities**

- 1) Alameda
- 2) Albany
- 3) Berkeley
- 4) Dublin
- 5) Emeryville
- 6) Fremont
- 7) Hayward
- 8) Livermore
- 9) Newark
- 10) Piedmont
- 11) Pleasanton
- 12) San Leandro
- 13) Union City

#### **Contra Costa County Incorporated Cities**

- 1) Antioch
- 2) Brentwood
- 3) Clayton
- 4) Concord
- 5) Danville
- 6) El Cerrito
- 7) Hercules
- 8) Lafayette
- 9) Martinez
- 10) Moraga
- 11) Oakley
- 12) Orinda
- 13) Pinole
- 14) Pleasant Hill
- 15) Richmond
- 16) San Pablo
- 17) San Ramon
- 18) Walnut Creek

Seven of the thirty one East Bay Incorporated Cities becoming Members of the Authority allows this group to hold one Board seat under subsection 15 in Section 2.01.

**Exhibit B**

**List of West Bay Cities**

**San Mateo County Incorporated Cities**

- 1) Atherton
- 2) Belmont
- 3) Brisbane
- 4) Burlingame
- 5) Colma
- 6) Daly City
- 7) East Palo Alto
- 8) Foster City
- 9) Half Moon Bay
- 10) Hillsborough
- 11) Menlo Park
- 12) Millbrae
- 13) Pacifica
- 14) Portola Valley
- 15) Redwood City
- 16) San Bruno
- 17) San Carlos
- 18) San Mateo
- 19) South San Francisco
- 20) Woodside

Five of the twenty West Bay Incorporated Cities becoming Members of the Authority allows this group to hold one Board seat under subsection 16 in Section 2.01.

## **Exhibit C**

### **List of South Bay Incorporated Cities**

#### **Santa Clara County Incorporated Cities**

- 1) Campbell
- 2) Cupertino
- 3) Gilroy
- 4) Los Altos
- 5) Los Altos Hills
- 6) Los Gatos
- 7) Milpitas
- 8) Monte Sereno
- 9) Morgan Hill
- 10) Mountain View
- 11) Palo Alto
- 12) Santa Clara
- 13) Saratoga
- 14) Sunnyvale

#### **Santa Cruz County Incorporated Cities**

- 1) Capitola
- 2) Santa Cruz
- 3) Scotts Valley
- 4) Watsonville

Four of the eighteen South Bay Incorporated Cities becoming Members of the Authority allows this group to hold one Board seat under subsection 17 in Section 2.01.

## **Exhibit D**

### **List of North Bay Incorporated Cities**

#### **Marin County Incorporated Cities**

- 1) Belvedere
- 2) Corte Madera
- 3) Fairfax
- 4) Larkspur
- 5) Mill Valley
- 6) Novato
- 7) Ross
- 8) San Anselmo
- 9) San Rafael
- 10) Sausalito
- 11) Tiburon

#### **Napa County Incorporated Cities**

- 1) American Canyon
- 2) Calistoga
- 3) Napa
- 4) St. Helena
- 5) Yountville

#### **Sonoma County Incorporated Cities**

- 1) Cloverdale
- 2) Cotati
- 3) Healdsburg
- 4) Petaluma
- 5) Rohnert Park
- 6) Santa Rosa
- 7) Sebastopol
- 8) Sonoma
- 9) Windsor

#### **Solano County Incorporated Cities**

- 1) Benicia
- 2) Dixon
- 3) Rio Vista
- 4) Suisun City
- 5) Vacaville
- 6) Vallejo

Seven of the thirty-one North Bay Incorporated Cities becoming Members of the Authority allows this group to hold one Board seat under subsection 18 in Section 2.01.

# **Exhibit B**



**VIA ELECTRONIC DELIVERY**

August 6, 2010

Admiral James Arden Barnett, Jr.  
Chief, Public Safety & Homeland Security Bureau  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

**Re: Long-Term De Facto Transfer Spectrum Lease, PS Docket No. 06-229  
San Francisco Bay Area Urban Area Region**

Dear Admiral Barnett:

Pursuant to the terms and conditions of the Commission's May 12 Order in the above-referenced proceeding,<sup>1</sup> the Public Safety Spectrum Trust Corporation ("PSST") has entered into a long-term *de facto* transfer spectrum lease with the San Francisco Bay Area Urban Area Region. The PSST and San Francisco Bay Area Urban Area Region have executed the attached spectrum lease and now submit the lease for approval by the Public Safety & Homeland Security Bureau.

Please contact me directly with any questions.

Respectfully submitted,

Chief Harlin R. McEwen  
Chairman  
Public Safety Spectrum Trust Corporation  
(607) 227-1664  
[chiefhrm@pubsaf.com](mailto:chiefhrm@pubsaf.com)

cc: David Furth, Deputy Chief, FCC Public Safety & Homeland Security Bureau  
Richard T. Lucia, Undersheriff, Alameda County Sheriff's Office  
Laura Phillips, Executive Director, Dept. of Emergency Management, City & County  
of San Francisco

<sup>1</sup> *Requests for Waiver of Various Petitioners to Allow the Establishment of 700 MHz Interoperable Public Safety Wireless Broadband Networks*, Order, 25 FCC Rcd 5145 (2010).

## San Francisco Bay Area Urban Area Region

### LONG TERM DE FACTO TRANSFER SPECTRUM LEASE AGREEMENT

This Long Term *De Facto* Spectrum Lease Agreement ("Lease" or "Agreement") is entered into by the Public Safety Spectrum Trust Corporation ("PSST" or "Lessor"), which is licensed by the Federal Communications Commission ("FCC") to operate on the 700 MHz Band public safety broadband spectrum (Call Sign WQHW226) (the "Leased Spectrum"), and the Alameda County Sheriff's Office on behalf of the San Francisco Bay Area Urban Area Region ("Lessee") (each a "Party," and, collectively, "the Parties"). This Lease is subject to the FCC's May 12, 2010 Order, FCC 10-79 ("FCC Order"). Further, this Lease is a long term *de facto* transfer spectrum lease pursuant to Section 1.9030 of the FCC's rules, 47 C.F.R. § 1.9030, subject to all applicable FCC rules, regulations and policies. Lessee shall comply with the requirements and procedures of the FCC Order concerning notification and coordination with the relevant state authority.

#### 1. Agreement.

- a. Conditioned on first obtaining the consent of the Chief of the Public Safety and Homeland Security Bureau of the FCC (the "Bureau") to the creation of this Lease, Lessor hereby grants to Lessee the exclusive right to use the Leased Spectrum within Lessee's jurisdiction during the term of this Agreement and in accordance with the provisions hereof. It is the intent of the Parties that this Agreement create a long term *de facto* transfer spectrum leasing arrangement within the meaning (and subject to the requirements) of 47 C.F.R. Section 1.9030.
- b. The PSST retains all rights and obligations under its FCC license and as a spectrum lessor, as specified in the Communications Laws (as defined in section 5 of this Agreement), and as subject to the terms of this Agreement. Lessee is subject to the rights and obligations under this Agreement and the Communications Laws. Consistent with FCC rules governing long term *de facto* transfer spectrum leases, Lessee is primarily responsible for complying with the FCC Order and the Communications Laws, including all FCC filing requirements related to the Leased Spectrum, and Lessor retains de jure control of its spectrum license.
- c. Lessee shall be responsible to relocate, at its own expense, the operations of any incumbent 700 MHz narrowband licensee in the Lessee's area of operation, from the Leased Spectrum to the appropriate public safety narrowband spectrum. Alternatively, Lessee agrees to protect such incumbent narrowband operations, either through appropriate engineering measures or geographic exclusion of the narrowband system's footprint, and to obtain the consent of the incumbent as to its proposed method of protection. Lessee shall also account for narrowband operations in adjacent regions that occur outside of the consolidated narrowband channels, and take all measures necessary to protect such operations from interference.
- d. Lessee's network shall be fully interoperable with any other regional public safety deployments permitted by a waiver granted by the FCC pursuant to the FCC Order, and with any future nationwide or regional public safety broadband networks, including adherence to any technical requirements adopted by the FCC's Emergency Response Interoperability Center ("ERIC"), the Bureau, or the FCC, and shall be consistent with other nationally coordinated technical standards and operating requirements that the ERIC, Bureau, or FCC may impose from time to time.
  - i. Lessee must make its network available to all public safety entities eligible under Section 337 of the Communications Act within its jurisdiction.

ii. Lessee must adhere to all other technical conditions specified in the FCC Order or FCC rule or imposed by ERIC, the Bureau or the FCC.

iii. Lessor may not require a bond, letter of credit or other instrument by way of security in connection with the execution of this Agreement for the use of the spectrum; Lessee's sole consideration for use of the Leased Spectrum will be its remittance of the Administrative Fee to the Lessor and compliance with the terms of this Agreement, and any and all FCC, Bureau and ERIC requirements. The Administrative Fee is the fee to be remitted by Lessee to Lessor, as defined and ultimately approved by the Chief of the Bureau, in accordance with the procedures outlined in the FCC Order.

iv. Lessor shall maintain *de jure* control over its spectrum license, in accordance with FCC rules.

v. Lessor shall submit the monthly reports as required by the FCC Order providing an accounting of the Administrative Fee remitted by Lessee, based upon generally accepted accounting procedures.

vi. Lessor shall timely comply with any audit as may be requested at the discretion of the Chief of the Bureau with respect to its collection and expenditure of the Administrative Fee.

e. Lessee shall be responsible for: (a) obtaining, paying for, operating and maintaining all equipment necessary to build out its network; (b) acquiring all necessary permits, authorizations or consents required for construction and operation of the network; (c) paying any and all other costs and expenses incident to use of the spectrum; and (d) paying the Administration Fee to the PSST. The Lessee has no other financial obligation to the PSST under this Agreement.

f. Lessee agrees to file, in consultation with the PSST, the quarterly status reports required under the FCC Order on a timely basis. The Lessor and the Lessee jointly and severally agree to timely submit any other filings or information as the FCC, the Bureau, or ERIC may require.

g. The PSST may rely upon Lessee's operations in demonstrating compliance with any construction or substantial service requirements the FCC may adopt in the future.

h. The Parties shall maintain such records as may be necessary to comply with FCC reporting requirements and FCC rules, including the specific FCC obligations pertinent to long term *de facto* transfer spectrum leases, lessors and lessees.

## **2. Scope of Spectrum Usage Rights.**

a. Lessor grants to Lessee the maximum usage rights that Lessor is capable of granting as set forth in the Agreement, including, without limitation, use and operation on the Leased Spectrum in the geographic area of operation within its jurisdiction as permitted under FCC rules and ERIC requirements.

b. The geographic area of operation within the Lessee's jurisdiction shall be the Bay Area Urban Area as defined in the maps included as Appendix A.

## **3. Term and Renewal.**

a. The Agreement shall have an initial term of two years, commencing on the Effective Date. The Parties have an expectation of renewal, for additional two-year terms as long as the PSST holds the nationwide

license, including any renewals or extensions of the PSST's current license term, except as otherwise agreed to by the Parties or required by the FCC.

#### **4. Termination.**

a. Lessee may terminate this Agreement at the Lessee's option, upon 30-days written notice to the PSST and the Bureau. Lessee agrees to remit any remaining or prorated Administration Fee to the PSST no later than 30 days following termination.

b. While Lessee remains in compliance with the Agreement and the Communications Laws (as defined by section 5 of this Agreement), PSST may not terminate the Agreement or otherwise curtail Lessee's use of the spectrum for any reason.

#### **5. Compliance with FCC Rules, Other Applicable Law and Requirements of This Agreement.**

a. The Parties agree to comply with all of the rules, regulations, policies, decisions, and Orders of the FCC, the Bureau, and the ERIC, both currently and as may be adopted in the future, as well as any other applicable laws, including the Communications Act of 1934, 47 U.S.C. Section 151 et seq. (the "Communications Act") (collectively, the Communications Laws).

b. The PSST shall have the right to make scheduled inspections upon reasonable notice to the Lessee to ensure compliance with the Agreement.

c. Each Party must notify the other Party and the Chief of the Bureau within five (5) business days if the Party becomes or expects to become non-compliant with the Communications Laws.

d. If Lessee fails to comply with any of the Communications Laws, this Agreement may be terminated by the FCC, the Bureau, or by the Lessor, but by the Lessor only with the consent of the FCC or the Chief of the Bureau, and only then if such failure of compliance by Lessee is of such a nature that (i) Lessee is causing harmful interference to other spectrum operations protected by FCC Rules, or (ii) if such failure of compliance had been committed by the Lessor in respect of its license, would be reasonably expected to result in the revocation, cancellation or termination of its license by the FCC (either (i) or (ii) constituting a Material Breach).

e. In the event the PSST believes that Lessee has committed a Material Breach, the PSST shall provide written notice to the Chief of the Bureau and the Lessee no later than five (5) days after discovering the Material Breach. The PSST may only terminate this Agreement with the consent of the Bureau or the FCC.

f. In the event the PSST believes that Lessee has committed a non-Material Breach, the PSST shall provide written notice of noncompliance to the Lessee and the Bureau within thirty (30) days after discovering such breach. The Lessee shall have 30 days to cure the breach. If Lessee has failed to cure the breach within 30 days, the PSST shall provide written notice of failure to cure to the Chief of the Bureau. The Chief of the Bureau will then render a decision or finding, which may include an order for the Lessee to cure or such other remedy as the Chief of the Bureau, in his or her discretion, considers reasonable.

## **6. Representations and Warranties.**

Each of the Lessor and the Lessee severally represents and warrants to the other:

- a. that each of them has the requisite corporate power and authority and has taken all corporate action necessary in order to execute and deliver this Agreement.
- b. that each of them is a corporation or other entity duly organized, validly existing and in good standing under the laws of its respective jurisdiction of incorporation or organization.
- c. that the execution and delivery of this Agreement by each of them does not and will not, and the transactions contemplated hereby and thereby will not, with respect to each of the Parties, violate or conflict with any contract or other instrument to which it or he is a party or by which it or he is bound or conflict with any law, regulation, ordinance, judgment, order, writ, injunction or decree or any other requirement of any court or governmental or regulatory body of any jurisdiction.
- d. that the facts stated herein to the extent that they are within such Party's knowledge, are true, complete and accurate.

## **7. Miscellaneous.**

- a. **Successors and Assigns.** This Agreement shall inure to the benefit of and be binding upon the successors and permitted assigns of the Lessor and Lessee. This Agreement may not be assigned without the express written consent of both the Chief of the Bureau and the other Party. Such consent will be given only upon the proposed assignee demonstrating that it will be able to meet all applicable FCC requirements and the terms of this Agreement.
- b. **Governing Law.** This Agreement shall be governed by the law of the District of Columbia.
- c. **Disputes.** The Parties have a duty and obligation to make all reasonable efforts to resolve any disputes that arise under this Agreement. If the Parties are unable to reach a settlement on their own, they agree to submit their dispute to the FCC, which will have sole authority to arbitrate or judge any disputes that would then be binding upon the Parties..
- d. **Specific Performance.** The Parties shall be entitled to specific performance in the event that either Party fails to perform its obligations hereunder.
- e. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which when so executed shall be an original, but all of which together shall constitute one agreement. Facsimile signatures shall be deemed original signatures.
- f. **Amendments.** This Agreement shall not be amended, altered or modified except in accordance with the limitations and procedures specified in the FCC Order.

**8. Effective Date.** The Parties shall submit for approval an executed copy of this Agreement to the Chief of the Bureau. The Effective Date of this Agreement is the date that the Chief of the Bureau consents to the creation of this Agreement (as specified in section 1).

**9. Notices**

Lessor:

Public Safety Spectrum Trust Corporation  
Harlin R. McEwen, Chairman of the Board  
1101 K St., Suite 8100, Washington, DC 20005  
(607) 227-1664  
Email: chiefhm@pubsaf.com

Lessee:

Richard T. Lucia, Undersheriff  
Alameda County Sheriff's Office  
1401 Lakeside Drive, 12<sup>th</sup> Floor  
Oakland, CA 94612  
510-208-9838  
510-272-3796  
Email: rlucia@acgov.org

Bureau:

Federal Communications Commission  
David Furth, Deputy Bureau Chief  
Public Safety and Homeland Security Bureau  
445 12th St. SW  
Washington, DC 20554  
(202) 418-1300  
Email: david.furth@fcc.gov.

In WITNESS WHEREOF, the Parties have executed this Agreement as of the date approval is provided by the Chief of the Bureau.

PUBLIC SAFETY SPECTRUM TRUST CORPORATION

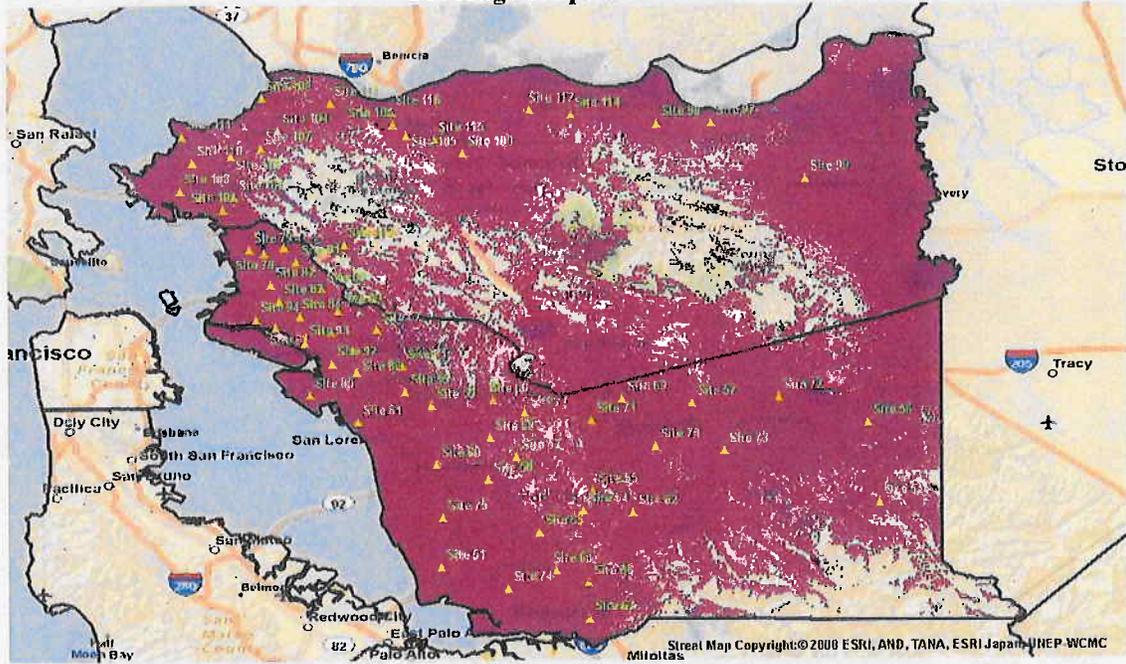
By:   
Name: Harlin R. McEwen  
Title: Chairman  
Dated: 07/28/2010

THE ALAMEDA COUNTY SHERIFF'S OFFICE  
LESSEE

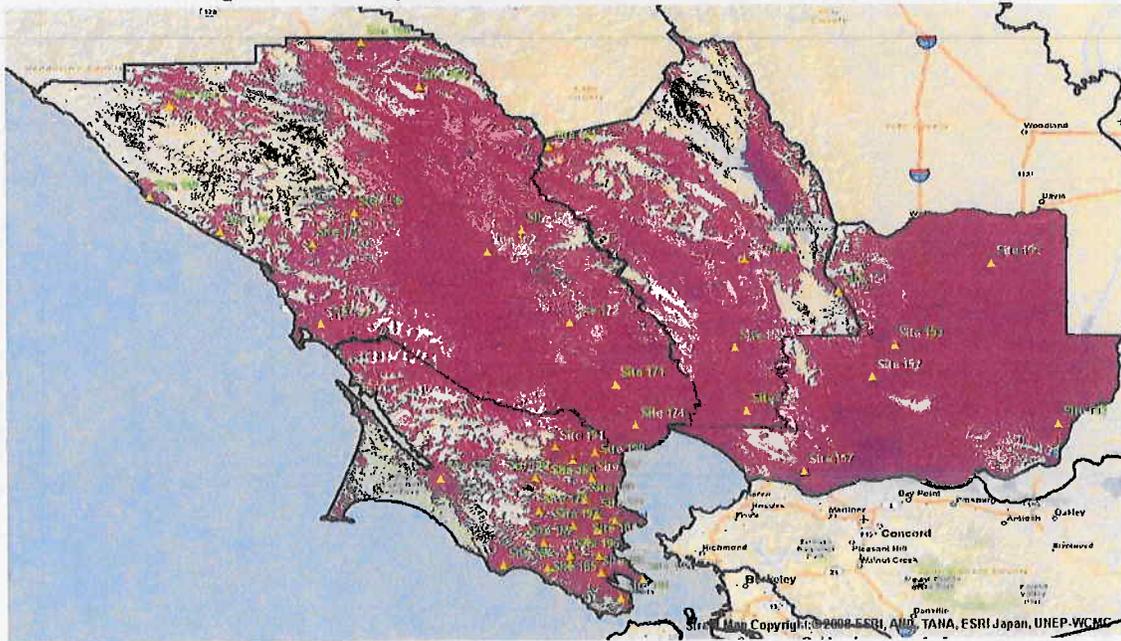
By:   
Name: Gregory J. Altem  
Title: Alameda County Sheriff/Coroner  
Dated: 7/30/10

# Appendix A.

## Coverage Maps & Site List



**Figure 1: East Bay Operational Area (Alameda & Contra Costa Counties)**

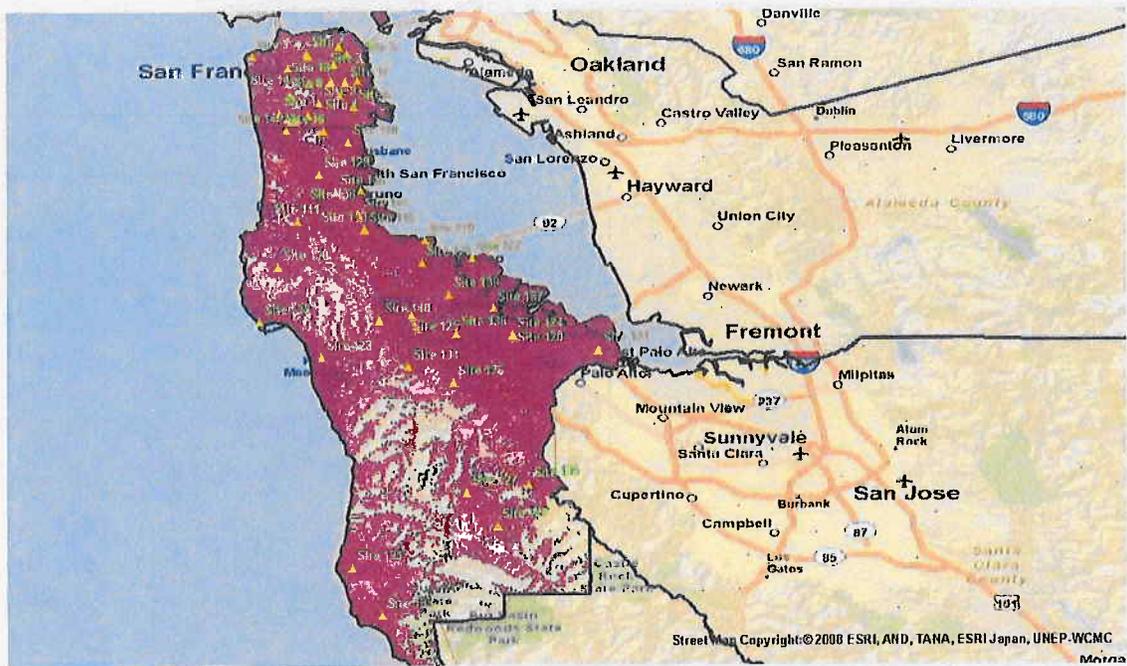


**Figure 2: North Bay Operational Area (Marin, Sonoma, Napa, and Solano Counties)**

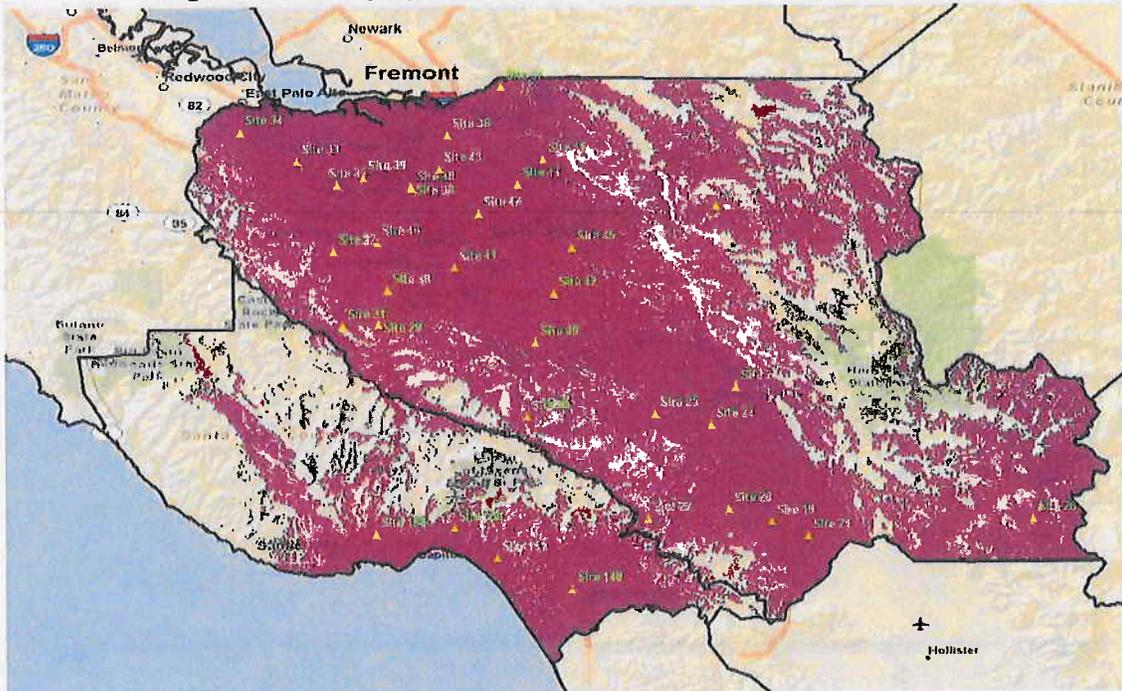
A-1

Bay Area Urban Area

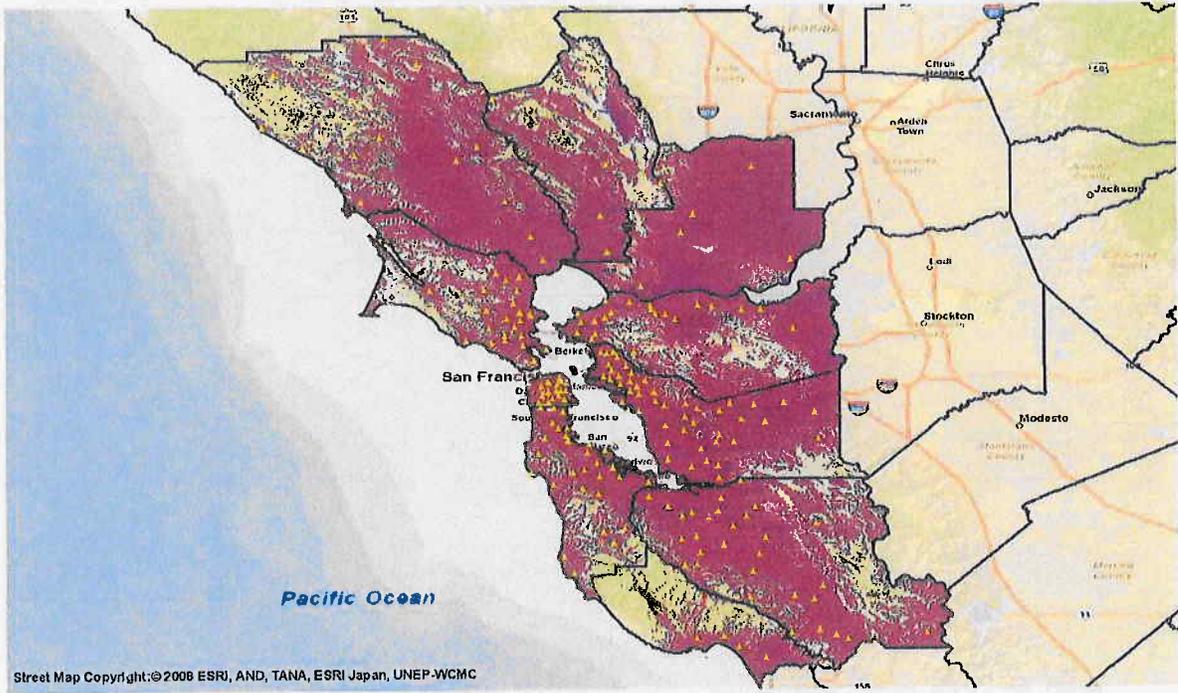
PSST Lease Appendix A



**Figure 3: West Bay Operational Area (San Francisco and San Mateo Counties)**



**Figure 4: South Bay Operational Area (Santa Clara and Santa Cruz Counties)**



**Figure 5: BayWeb Composite Coverage**

# **Exhibit C**

**RESOLUTION OF THE BOARD OF DIRECTORS OF  
THE BAY AREA REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM  
(BayRICS) AUTHORITY**

**In Support of Expedited Waiver Petition**

WHEREAS, the Bay Area Regional Interoperability Communications System Joint Powers Authority (the "BayRICS Authority") was duly established on August 8, 2011, to implement and support the establishment and operation of an interoperable voice and broadband data network in the San Francisco Bay Area known as the Bay Area Wireless Enhanced Broadband ("BayWEB") and such other projects as may be authorized, from time to time;

WHEREAS, the purpose of the BayRICS Authority is for the counties of Alameda, Contra Costa, Marin, San Francisco, Santa Clara, San Mateo, and Sonoma, the core cities of Oakland, San Francisco, and San Jose, and the State of California, but not including the entire geographic area of the State (collectively, the "BayRICS Members") to work cooperatively in developing interoperable communications systems including a wireless broadband system, BayWEB;

WHEREAS, the BayRICS Authority is working in collaboration with the county and city of San Francisco, and the cities of Oakland and San Jose (the "Petitioners") in the BayWEB initiative and with respect to the Federal Communications Commission ("FCC") proceeding in Public Safety Docket Number 06-299 (the "Docket");

WHEREAS, in order to be able to meet its goals, it is necessary for the BayRICS Authority to have ultimate use of the 700 MHz public safety broadband spectrum covering the jurisdictions of the BayRICS Members to be made available through the Expedited Waiver Petition to be filed in the Docket by the Petitioners seeking to obtain a de facto lease for the use of the Spectrum from the Public Safety Spectrum Authority ("PSST");

NOW, THEREFORE, BE IT RESOLVED that the BayRICS Authority hereby authorizes the Petitioners identified herein to apply for the Waiver and to enter into a lease with the PSST, as authorized by the FCC in Docket No. 06-299, for use of the PSST 700 MHz public safety broadband spectrum in the entire geographic regions (excepting the State of California) and jurisdictions encompassed by and on behalf of the BayRICS Authority.

INTRODUCED AND PASSED:

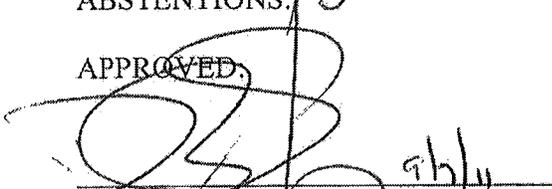
AYES: 10

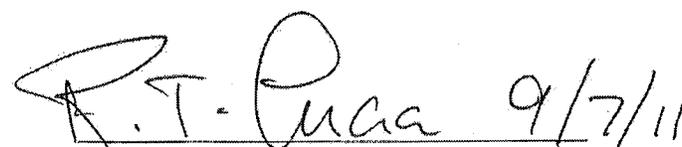
NOES: 0

ABSENT: 3

ABSTENTIONS: 0

APPROVED:

  
Secretary/Date

  
Chairperson/Date

APPROVED:

Richard T. Lucia

Name: Richard Lucia  
Chairperson/Date

Richard T. Lucia

12/01/11

Name: RICHARD T. LUCIA  
For Alameda County

Date

Gayle B. Wilkema

12/1/11

Name: GAYLE B. WILKEMA  
For Contra Costa County

Date

Stewart Focolin

12-01-11

Name: STEWART FOCOLIN  
For Marin County

Date

~~XXXXXXXXXX~~  
~~XXXXXXXXXX County~~

~~XXXX~~

Anne Kaurung

12/1/11

Name:  
For San Francisco County

Date

[Signature]

12/1/11

Name:  
For Santa Clara County

Date

[Signature]

12-1-11

Name:  
For San Mateo County

Date

[Signature]

12/1/11

Name: DENNIS SMITH  
For Sonoma County

Date

NOV -2 2011

FCC Mail Room



## County of Santa Cruz

701 Ocean Street  
Santa Cruz, CA 95060  
(831) 454-2440 FAX: (831) 454-2353

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
Office of the Secretary  
445 12th Street, SW  
Washington, D.C. 20554

October 14, 2011

Re: ***Request for a Waiver of the Commission's Rules to Deploy a 700 MHz Interoperable Public Safety Broadband Network: The City and County of San Francisco, the City of Oakland and the City of San Jose Waiver – Expedited Action Requested PS Docket No. 06-229***

Dear Ms. Dortch:

Santa Cruz County (the "County") provides this letter in support of the Expedited Request for Waiver ("Waiver Request") of the City and County of San Francisco, City of Oakland and City of San Jose ("Petitioners") filed in the above referenced proceeding.

The County is currently considering becoming a member of the Bay Area Regional Interoperability Communications System Joint Powers Authority (the "BayRICS Authority") and participating in the Bay Area Wireless Enhanced Broadband ("BayWEB") project. The County is included within the proposed BayWEB geographic service area and is one of the "BayWEB Jurisdictions" as referenced in the Waiver Request.

The Petitioners are seeking a waiver of the Commission's May 2010 Waiver Order to enter into a lease with the Public Safety Spectrum Trust ("PSST") for access to the 700 MHz public safety broadband spectrum covering all of the BayWEB Jurisdictions, including the County. The Petitioners have requested that the Commission permit either the Petitioners or the BayRICS Authority to enter into such lease as lessee.

Although the County has not yet determined whether it will join the BayRICS Authority, it intends to participate in the BayWEB project at some time in the future. As a result, the County supports the Waiver Request and consents to and authorizes the Petitioners or in the alternative

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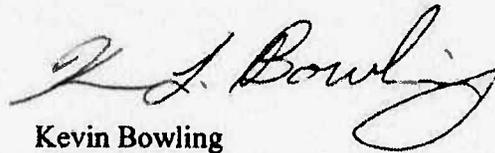
the BayRICS Authority (as determined by the Commission) to enter into the lease with the PSST on the County's behalf with spectrum coverage that includes the entire County. The County furthermore is not opposed to having the BayRICS Authority serve as the single, authorized point of contact for the BayWEB project, including oversight and management of the 700 MHz public safety broadband spectrum on behalf of the County .

In conclusion, the County endorses the Petitioners' Waiver Request and consents to either the Petitioners or the BayRICS Authority serving as lessee on a lease with the PSST, as authorized by the Commission in PS Docket No. 06-229, for use of the public safety broadband spectrum throughout the entire geographic region of the County, including all the jurisdictions within the County.

Sincerely,



Phil Wowak  
Sheriff-Coroner



Kevin Bowling  
Director, Information Services Department



A Tradition of Stewardship  
A Commitment to Service

Board of Supervisors

1195 Third St.  
Suite 310  
Napa, CA 94559  
www.countyofnapa.org

Main: (707) 253-4421  
Fax: (707) 253-4176

Bill Dodd  
Chairman

Received & Inspected

NOV - 9 2011

FCC Mail Room

November 1, 2011

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
Office of the Secretary  
445 12th Street, SW  
Washington, D.C. 20554

Re: ***Request for a Waiver of the Commission's Rules to Deploy a 700 MHz Interoperable Public Safety Broadband Network: The City and County of San Francisco, the City of Oakland and the City of San Jose Waiver - Expedited Action Requested PS Docket No. 06-229***

Dear Ms. Dortch:

The County of Napa (the "County") provides this letter in support of the Expedited Request for Waiver ("Waiver Request") of the City and County of San Francisco, City of Oakland and City of San Jose ("Petitioners") filed in the above referenced proceeding.

The County is currently considering becoming a member of the Bay Area Regional Interoperability Communications System Joint Powers Authority (the "BayRICS Authority") and participating in the Bay Area Wireless Enhanced Broadband ("BayWEB") project. The County is included within the proposed BayWEB geographic service area and is one of the "BayWEB Jurisdictions" as referenced in the Waiver Request.

The Petitioners are seeking a waiver of the Commission's May 2010 Waiver Order to enter into a lease with the Public Safety Spectrum Trust ("PSST") for access to the 700 MHz public safety broadband spectrum covering all of the BayWEB Jurisdictions, including the County. The Petitioners have requested that the Commission permit either the Petitioners or the BayRICS Authority to enter into such lease as lessee.

Although the County has not yet determined whether it will join the BayRICS Authority, it is anticipated that it will participate in the BayWEB project. As a result, the County supports the Waiver Request and consents to and authorizes the Petitioners or in the alternative the BayRICS Authority (as determined by the Commission) to enter into the lease with the PSST on the County's behalf with spectrum coverage that includes the entire County. The County furthermore is not opposed to having the BayRICS Authority serve as the single, authorized

Brad Wagenknecht  
District 1

Mark Luce  
District 2

Diane Dillon  
District 3

Bill Dodd  
District 4

Keith Caldwell  
District 5

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Ms. Marlene H. Dortch, Secretary  
November 1, 2011  
Page 2

point of contact for the BayWEB project, including oversight and management of the 700 MHz public safety broadband spectrum on behalf of the County .

In conclusion, the County endorses the Petitioners' Waiver Request and consents to either the Petitioners or the BayRICS Authority serving as lessee on a lease with the PSST, as authorized by the Commission in PS Docket No. 06-229, for use of the public safety broadband spectrum throughout the entire geographic region of the County, including all the jurisdictions within the County.

Sincerely,



Bill Dodd  
Chairman

Cc: Dorothy Roberts, City of Napa  
Rebekah Barr, City of American Canyon  
Delia Guijosa, City of St. Helena  
Susan Sneddon, City of Calistoga  
Michelle Dahme, Town of Yountville

**CALIFORNIA TECHNOLOGY AGENCY**

Public Safety Communications Office  
601 Sequoia Pacific Boulevard  
Sacramento, CA 95811-0231  
(916) 857-9494 FAX (916) 857-9259

December 1, 2011

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
Office of the Secretary  
445 12th Street, SW  
Washington, D.C. 20554

**SUBJECT: REQUEST FOR A WAIVER OF THE COMMISSION'S RULES TO DEPLOY A 700 MHZ INTEROPERABLE PUBLIC SAFETY BROADBAND NETWORK: THE CITY AND COUNTY OF SAN FRANCISCO, THE CITY OF OAKLAND AND THE CITY OF SAN JOSE WAIVER - EXPEDITED ACTION REQUESTED PS DOCKET NO. 06-229**

The State of California (the "State") provides this letter in support of the Expedited Request for Waiver ("Waiver Request") of the City and County of San Francisco, the City of Oakland and the City of San Jose ("Petitioners") filed in the above referenced proceeding.

The State is a member of the Bay Area Regional Interoperability Communications System Joint Powers Authority (the "BayRICS Authority"), which will operate the Bay Area Wireless Enhanced Broadband ("BayWEB") project. All jurisdictions included within the proposed BayWEB geographic service area (i.e., the "BayWEB Jurisdictions" as referenced in the Waiver Request) are located within the State.

The Petitioners seek a waiver of the Federal Communications Commission's 60-day time limit for entering into a spectrum lease with the Public Safety Spectrum Trust ("PSST") established in the May 2010 *Waiver Order*<sup>1</sup> in order to enter into a lease with the PSST for access to the 700 MHz public safety broadband spectrum covering all of the BayWEB Jurisdictions. The Petitioners have requested that the Commission permit the Petitioners to enter into such lease as lessee and have advised the Commission of their intent to assign the lease to the BayRICS Authority pursuant to the terms of the lease and upon Commission approval.

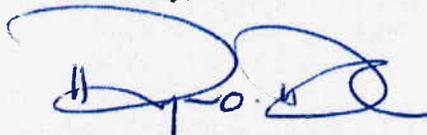
The State fully supports the Waiver Request and further supports the Petitioners' plan to assign the spectrum lease to the BayRICS Authority, to allow the Authority to serve as the single, authorized point of contact for the BayWEB project.

<sup>1</sup> See *Requests for Waiver of Various Petitioners to Allow Establishment of 700 MHz Interoperable Public Safety Wireless Broadband Networks*, Order, PS Docket No. 06-229, FCC 10-79 ¶¶ 26, 27 (rel. May 12, 2010) ("Waiver Order").

In addition, as a member of the BayRICS Authority, and pursuant to the conditions of the *Waiver Order*, the State of California will continue to coordinate with the BayRICS Authority in the planning and deployment of the BayWEB project.<sup>2</sup> Coordination will help ensure the seamless operation of adjacent networks and the development of mutually agreed-upon protocols within the State of California.<sup>3</sup>

In conclusion, the State endorses the Petitioners' Waiver Request and recommends that the BayRICS Authority serve as lessee on a lease with the PSST, as authorized by the Commission, for use of the public safety broadband spectrum throughout the entire geographic region of the BayWEB project.

Sincerely,

 FOR

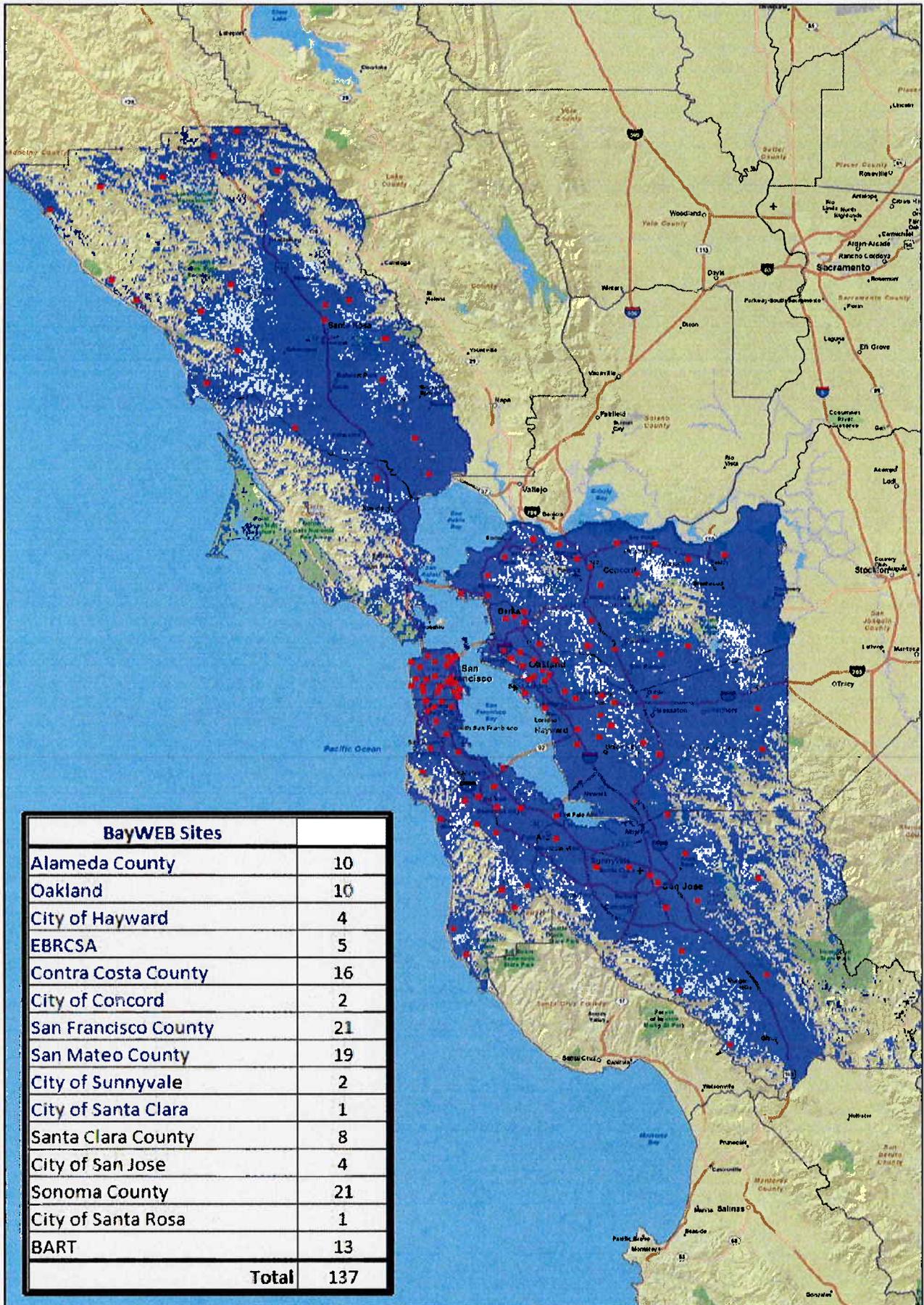
**KAREN WONG**, Director  
Public Safety Communications Office

---

<sup>2</sup> *Waiver Order* at ¶ 51.

<sup>3</sup> *Id.*

# **Exhibit D**



BayWEB Sites	
Alameda County	10
Oakland	10
City of Hayward	4
EBRCSA	5
Contra Costa County	16
City of Concord	2
San Francisco County	21
San Mateo County	19
City of Sunnyvale	2
City of Santa Clara	1
Santa Clara County	8
City of San Jose	4
Sonoma County	21
City of Santa Rosa	1
BART	13
<b>Total</b>	<b>137</b>

0 2.5 5 10 Miles

1 Inch = 12.06 miles

**Inbound Coverage 256k**

Run\_14

# **Exhibit E**



City of San Francisco



City of Oakland



City of San Jose

August 8, 2011

Ms. Jennifer Manner  
Deputy Chief  
Public Safety & Homeland Security Bureau  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, DC 20554

**RE: Submission of San Francisco Bay Area Waiver Cities re BayWEB Timeline  
PS Docket 06-229**

Dear Ms. Manner:

Pursuant to your request during the July 6, 2011, meeting regarding the status of the Bay Area Wireless Enhanced Broadband ("BayWEB") project, the purpose of this letter is to provide information about the critical path construction schedule for the project. Such information is provided here in support of the anticipated submission of an expedited waiver petition to be filed on behalf of jurisdictions involved in the BayWEB project as described herein.

While the original Waiver Petition and Amended Petition were filed by the City and County of San Francisco, City of Oakland, and City of San Jose ("Bay Area Waiver Cities"), it was the intention of such Petitioners to obtain a waiver in the referenced proceeding to encompass all Bay Area jurisdictions involved in the BayWEB project.<sup>1</sup> Accordingly, the Bay Area Waiver Cities or the Bay RICS Authority, as appropriate, now seek the most expeditious route to secure a comprehensive de facto lease with the Public Safety Spectrum Trust ("PSST") to encompass the entire planned BayWEB service area.

The BayWEB project is the result of a Broadband Technology Opportunity Program ("BTOP") grant awarded by the National Telecommunications and Information Administration ("NTIA") to Motorola Solutions Inc. ("Motorola"), for the construction of a middle-mile network that will be comprised of a 700 MHz Public Safety Broadband System, as well as a fixed wireless public broadband system for community anchor institutions, local businesses, and underserved areas. Funded by a \$50.6 million grant from NTIA and a \$21.9 million match by Motorola, the middle-mile network being deployed will consist of approximately 200 sites distributed throughout the ten-county Bay Area region.

---

<sup>1</sup> The Bay Area jurisdictions involved in the BayWEB project are forming a joint powers authority to be called the Bay Regional Interoperable Communications System Authority ("BayRICS Authority"). The jurisdictions included in the BayRICS Authority are listed in Attachment A hereto.

Ms. Jennifer Manner

Re: Submission of San Francisco Bay Area Waiver Cities re BayWEB Timeline PS Docket 06-229

August 8, 2011

Page 2 of 3

The Bay Area Waiver Cities and other Bay Area jurisdictions have worked closely with NTIA and Motorola to understand the grant requirements and operational deadlines. Consistent with the requirements of the American Recovery and Reinvestment Act, the NTIA grant imposes two overriding deadlines that govern the timing of the BayWEB project. First, NTIA's "substantial completion" deadline requires that two-thirds of the network be built and two-thirds of BTOP grant funding be spent by August 13, 2012. Second, NTIA's final deadline for expending or encumbering BTOP funds and completing the BayWEB project is August 13, 2013.<sup>2</sup> We are informed by Motorola that the failure to meet these deadlines risks action by NTIA to suspend Motorola's ability to draw funds necessary to complete the project or, in extreme cases, to terminate the award.<sup>3</sup>

These deadlines drive a series of critical path operational deadlines for the work necessary to construct the project. Set forth below are the critical path operational deadlines which were provided to the BayWEB jurisdictions by Motorola with respect to some of the most significant activities necessary to implement the BayWEB project consistent with the terms of the NTIA award:

- August 16, 2011      Motorola completes vendor selection
- August 17, 2011:      Design completed on core location, eNodeB sites
- August 23, 2011:      Motorola executes vendor contract(s)
- September 13, 2011:      Order core and site equipment as well as public broadband site materials
- October 12, 2011:      Microwave licensing (microwave paths) target completion
- November 1, 2011:      Staging of equipment completed, sent to the field
- November 10, 2011:      Begin site testing of core (*Motorola has advised that this is a time-critical date by which Motorola must have access to the 700 MHz spectrum throughout the BayWEB service area*)
- November 15, 2011:      Power, equipment installation, backhaul completion on core site
- November 29, 2011      Site testing of core completed

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<sup>2</sup> See Department of Commerce, NTIA Financial Assistance Award Number NT10BIX5570089, awarded August 13, 2010.

<sup>3</sup> See Department of Commerce, National Telecommunications and Information Administration, Broadband Technology Opportunities Program, *Notice of Funds Availability and Solicitation of Applications*, 75 Fed. Reg. 3792, 3799 & 3812 (Jan. 22, 2010).

Ms. Jennifer Manner

Re: Submission of San Francisco Bay Area Waiver Cities re BayWEB Timeline PS Docket 06-229

August 8, 2011

Page 3 of 3

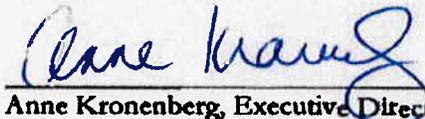
- December 22, 2011: Site system installation completed
- January 4, 2012: Approval for towers (antennas/new tower/upgrades to existing towers) completed
- June 20, 2012: Site permitting completed
- June 20, 2012: Site testing for all counties completed

Motorola informs us that once the network equipment is in place, the milestone dates for Motorola's network testing are tied to (or assume) the availability of the PSST 700 MHz spectrum. Motorola states that any delay in the availability of the 700 MHz spectrum for use by the BayRICS Authority in its full geographic footprint would likely delay these milestone dates and could ultimately impede the ability of Motorola to meet the deadlines under its NTIA award. The Bay Area Waiver Cities share Motorola's concern that there be adequate time in advance of project completion for the Bay Area local governments to conduct comprehensive system testing, which will necessitate use of the 700 MHz spectrum. A significant delay in resolving the BayRICS Authority's access to the spectrum could have the unfortunate effect of squeezing the time for robust testing in order to meet the fixed NTIA deadlines.

In light of the conditions that the Commission has prescribed for waiver recipients, the Bay Area Waiver Cities believe that the timing needs of the BayWEB project require resolution of the de facto lease matter at the earliest possible date and that, in all events, such spectrum be available before the November 10, 2011 core testing commencement date.

Thank you in advance for your consideration of the attached information. On behalf of the Bay Area, we look forward to working with you and Bureau staff on this matter.

Sincerely,



Anne Kronenberg, Executive Director  
Department of Emergency Management  
City and County of San Francisco



Deanna J. Santana  
City Administrator  
City of Oakland



Ed Shikada  
Assistant City Manager  
City of San Jose

ATTACHMENT A

Bay Area Regional Interoperable Communication Systems Joint Powers Authority

Membership – As of July 28, 2011

Jurisdiction	Date Joined
Alameda County	5/24/2011
California, State of	6/14/2011
Contra Costa County	6/28/2011
East Bay Hub <sup>1</sup>	5/20/2011
Marin County	7/26/2011
Napa County	Under consideration
North Bay Hub <sup>2</sup>	Under consideration
Oakland, City of	7/19/2011
San Francisco County	5/24/2011
San Francisco City	5/24/2011
San Jose, City of	6/14/2011
San Mateo County	6/7/2011
Santa Clara County	5/24/2011
Santa Cruz County	Under consideration
Solano County	Under consideration
Sonoma County	5/24/2011
South Bay Hub <sup>3</sup>	5/24/2011
West Bay Hub <sup>4</sup>	Under Consideration

<sup>1</sup> The Hub consists of a representative group of cities from Contra Costa and Alameda Counties.

<sup>2</sup> The Hub consists of a representative group of cities from Napa, Marin, Solano, and Sonoma Counties

<sup>3</sup> The Hub consists of a representative group of cities from Santa Clara and Santa Cruz Counties.

<sup>4</sup> The Hub consists of a representative group from San Mateo County.

# **Exhibit F**



**VIA ELECTRONIC DELIVERY**

December 19, 2011

Admiral James Arden Barnett, Jr.  
Chief, Public Safety & Homeland Security Bureau  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

**Re: Long-Term *De Facto* Transfer Spectrum Lease, PS Docket No. 06-229  
The City and County of San Francisco, the City of Oakland and the City of San Jose Waiver  
- Expedited Action Requested**

Dear Admiral Barnett:

The Public Safety Spectrum Trust Corporation ("PSST") supports the above-referenced Request for Waiver filed by the City and County of San Francisco, the City of Oakland and the City of San Jose – the "Bay Area Cities" – to enter into a new long-term *de facto* transfer spectrum lease with the PSST.

The Bay Area Cities seek a waiver of the Federal Communications Commission's 60-day time limit for entering into a spectrum lease with the PSST established in the May 2010 Waiver Order to enter into a *de facto* transfer spectrum lease with the PSST for access to the 700 MHz public safety broadband spectrum covering the jurisdictions taking part in the Bay Area Wireless Enhanced Broadband ("BayWEB") project.<sup>1</sup> The Bay Area Cities have requested that the Commission permit them to enter into the lease as lessee and have advised the Commission of their intent to assign the lease to the Bay Area Regional Interoperability Communications System Joint Powers Authority (the "BayRICS Authority") pursuant to the terms of the lease and upon Commission and PSST approval.

The PSST fully supports the Waiver Request and the Petitioners' plan to have the BayRICS Authority serve as the single, authorized point of contact with the PSST for the BayWEB project. The PSST also supports either the Bay Area Cities or the BayRICS Authority serving as lessee for this lease. Please contact me directly with any questions.

Respectfully submitted,

Chief Harlin R. McEwen, Chairman  
Public Safety Spectrum Trust Corporation  
(607) 227-1664 chiefhrm@pubsaf.com

<sup>1</sup> The PSST notes that there is an existing *de facto* transfer spectrum lease between the PSST and the San Francisco Bay Area Urban Area Region covering the same geographic area, and this existing lease will need to be addressed as part of any decision to grant the Bay Area Cities' Request for Waiver.

**Build, Own, Operate & Maintain  
Public Safety Communications System Agreement**

Motorola Solutions, Inc. ("Motorola") and the Bay Area Regional Interoperable Communications System Authority, a joint powers authority formed under California Government Code Sections 6500 et seq. (the "Authority"), enter into this "Agreement," pursuant to which Motorola will build, own, operate, and maintain the System (as described below), and the Authority and other "Eligible Users" (as defined below) will use the System and pay "User Fees" for such use, and will provide Sites, and Facilities, and Licensed Frequencies (all as defined below) to Motorola for the proper operation and use of the System. Motorola and the Authority may be referred to individually as a "Party" and collectively as the "Parties."

The Parties desire to enter into this Agreement with reference to the following factual recitals.

**Recitals**

**A.** This Agreement reflects a unique public-private collaboration, pursuant to which the Authority, other governmental bodies who are Eligible User Entities, and Motorola will contribute significant investments in terms of human, financial and other resources, as well as expertise, time and effort to this important and cutting edge project. For example, the Authority and other governmental bodies will provide Sites, Facilities, Licensed Frequencies, and technical and legal staff and expertise. Motorola will provide BTOP Grant funding and its own significant financial resources, as well as its technical, engineering, design, procurement, project management, and operational staff and expertise.

**B.** The Public Safety System project described in this Agreement will provide critical communications network infrastructure for public safety users in the San Francisco Bay Area region, representing many different counties, cities and agencies. The System will provide interoperable data communications among authorized users especially during emergencies. The Parties intend the System to provide a level of System performance and reliability which is superior to commercial broadband systems for use by the general public.

**C.** As described below, the Parties intend full ownership of and responsibility for this System to be transferred to the Authority at the end of the term of this Agreement. Therefore, it is both important and necessary for the Authority to understand the System design, functionality and performance of the System, and each of its components. Finally, the Parties intend that all Federal Communications Commission ("FCC"), FCC Emergency Response Interoperability Center ("ERIC"), Public Safety Spectrum Trust Corporation ("PSST"), National Public Safety Telecommunications Council ("NPSTC"), and other Public Safety Broadband System or frequency use requirements, including all 3rd Generation Partnership Project ("3GPP") open standard requirements, are adhered to and included in the responsibilities described in this Agreement.

**Main Agreement**

For good and valuable consideration, the Parties agree as follows:

**SECTION 1. EXHIBITS**

The exhibits listed below are incorporated into and made a part of this Agreement. In interpreting this Agreement and resolving any ambiguities, the language in the Agreement takes precedence over language in the exhibits; any inconsistency between the exhibits will be resolved in their listed order. The System Description (Exhibit A) and Specifications (Exhibit B) are based on the current understanding of the Parties and are subject to modification by the Parties in good faith in accordance with Section 3.3 of this Agreement.

Exhibit A	System Description dated January 5, 2012.
Exhibit B	Specifications (including List of Sites, List of Licensed Frequencies, and Facilities) dated January 5, 2012.
Exhibit C	Statement of Work (Deployment Stage (including the Description of the Phases, if any, and the Performance Schedule) dated January 5, 2012.
Exhibit D	[Intentionally omitted]
Exhibit E	Options [Exhibit E will be developed in the future and upon mutual agreement will be added to this Agreement.]
Exhibit F	[Intentionally omitted]
Exhibit G	[Intentionally omitted]
Exhibit H	System Readiness Certificate by Phase
Exhibit I	Service Levels dated January 5, 2012
Exhibit J	Customer Support Plan [Exhibit J will be developed in the future and upon mutual agreement will be added to this Agreement.]
Exhibit K	[Intentionally omitted]
Exhibit L	Motorola "Software License Agreement"
Exhibit M	Operation Stage and Maintenance Service Statement of Work, including Service Terms and Conditions, dated January 5, 2012
Exhibit N	List of Eligible User Entities dated January 5, 2012
Exhibit O	[Intentionally omitted]
Exhibit P	List of Motorola and Authority Key Personnel dated January 5, 2012
Exhibit Q	Motorola's Insurance Requirements
Exhibit R	[Intentionally omitted]
Exhibit S	The Authority's Insurance Requirements
Exhibit T	BTOP Grant Award Requirements and related documents
Exhibit U	Training
Exhibit V	Site Access and Use Agreement template

## **SECTION 2. DEFINITIONS**

Capitalized terms used in this Agreement have the following meanings:

- 2.1 "BTOP Grant" means Motorola's Award Number NT10BIX5570089 under the Broadband Technology Opportunities Program of the Department of Commerce.
- 2.2 "Central Backhaul Transport Network" means the backhaul network provided by the Authority. The backhaul network includes BayLoop Microwave and BART fiber as described in Exhibit A, and may include other networks owned by the third party providers such as CENIC fiber, VTA fiber, or other providers that provide connectivity for eNodeB sites and CEN networks to connect to the Evolved Packet Core.
- 2.3 "Confidential Information" means any information that is disclosed in written, graphic, verbal, or machine-recognizable form, and is marked, designated, or identified at the time of disclosure as being confidential or its equivalent; or if the information is in verbal form, it is identified as confidential at the time of disclosure and is confirmed in writing within thirty (30) days of the disclosure. Confidential Information does not include any information that: is or becomes publicly known through no wrongful act of the receiving Party; is already known to the receiving Party without restriction when it is disclosed; is or becomes, rightfully and without breach of this Agreement, in the receiving Party's possession without any obligation restricting disclosure; is independently developed by the receiving Party without breach of this Agreement; or is explicitly approved for release by written authorization of the disclosing Party.
- 2.4 "Demarcation Point" means a physical point on the System where Motorola's responsibilities for equipment and services end and the Authority's or individual Eligible User Entity's responsibilities

begin. There are several Demarcation Points within the System, including the Customer Enterprise Network interface to the System and the LTE device interface to the eNodeB. In general terms, the Demarcation Points are located in accordance with the following principles: (i) Motorola is responsible for all equipment and services necessary for wireless communication between Devices and each Site; (ii) Authority is responsible for all equipment (except for the termination equipment provided by Motorola) and services in the Central Backhaul Transport Network; and (iii) Motorola is responsible for all equipment and services to operate the LTE Core Facility and the Network Operating Center. The actual locations of the Demarcation Points are described in the System Description (Exhibit A).

- 2.5 "Deployment Stage" means the time period from the Effective Date until Final Project Readiness.
- 2.6 "Device" means a communications, computing or other fixed, portable or mobile device that conforms to National Institute of Standards and Technology ("NIST") requirements and 3GPP standards and that are used by Eligible Users on the System.
- 2.7 "Effective Date" means that date upon which the last Party executes this Agreement.
- 2.8 "Eligible User" means the Authority and its governmental members (e.g., State of California, and the counties and cities within the region that are members of the BayRICS Authority), as well as any public entities and private enterprises that perform a public safety function for a public entity (such as emergency response/ambulance services) that are not members of the BayRICS Authority but who are permitted to be users on the System as a result of the mutual agreement by the Authority and Motorola (collectively referred to as "Eligible User Entities"), and all of their public safety employees and agents they permit to use the System consistent with applicable FCC requirements and for which they pay User Fees.
- 2.9 "eNodeB" shall have the meaning as set forth in the Specifications.
- 2.10 "EPC" or "evolved packet core" shall have the meaning as set forth in the Specifications.
- 2.11 "Equipment" means the hardware for the System and portions of the backhaul system that are provided by Motorola under this Agreement.
- 2.12 "Facilities" means the following existing hardware and infrastructure that is being contributed for the System by the Authority and/or the Eligible User Entities, all as described in the Specifications attached hereto as Exhibit "B": (i) the Bay Loop system; (ii) certain microwave communication sites; (iii) the fiber and other backhaul subsystems and aggregation sites at backhaul locations (including the Central Backhaul Transport Network), whether owned or leased by the Authority, Eligible Users, or others; (iv) the LTE Core Facility; and (v) staging and warehousing space (if applicable) as described in the Specifications; and (vi) such other assets to be provided by the Authority or other Eligible User Entities for the proper deployment and operation of the System as described in the Specifications. The term "Facilities" does not include the Sites, the Licensed Frequencies and those microwave links between the BTOP Grant funded eNodeB's and the Central Backhaul Transport Network.
- 2.13 "Final Project Readiness" means when System Readiness of the last Phase occurs.
- 2.14 "Force Majeure" means an event, circumstance, or act of a third party that makes performance impracticable and is beyond the responsible Party's reasonable control (e.g., an act of God, an act of the public enemy, strikes or other labor disturbances, hurricanes, earthquakes, fires, floods, epidemics, embargoes, war, and riots).

- 2.15 “Infringement Claim” means a third party claim alleging that the Equipment or the Motorola Software directly infringes a United States patent or copyright.
- 2.16 “Licensed Frequencies” means all of the necessary FCC licensed frequencies, including those leased from the PSST, and the microwave frequencies as described in the Specifications (Exhibit B)
- 2.17 “LTE Core Facility” means the secure location for the primary LTE Network core equipment for the System, as described in the Specifications, which is anticipated by the Parties to be located at the Twin Peaks facility in San Francisco.
- 2.18 “Motorola Software” means Software that Motorola or its affiliate owns.
- 2.19 “Network Operations Center” means the Motorola facility for managing network operations which is located in Illinois, as described in Exhibit M.
- 2.20 “Non-Motorola Software” means Software Motorola does not own.
- 2.21 “Open Source Software” (also called “freeware” or “shareware”) means software that has its underlying source code freely available in the public domain and is available for evaluation, copying, and modification and use.
- 2.22 “Operation Stage” means the time period beginning on the date of Final Project Readiness and ending on the termination date of this Agreement. The Parties acknowledge that the operation and use of the early Phase(s) of the System will occur before Final Project Readiness, i.e., during the Deployment Stage and before the Operation Stage.
- 2.23 “Phase” means a distinct portion of Motorola’s activities required by this Agreement, with each Phase having its own commencement date and System Readiness event initiating the relevant Phase. Upon System Readiness of each Phase, that portion of the System will be available for use by Eligible Users.
- 2.24 “Pilot System” (also referred to as “Project Cornerstone”) means the Regional 700 MHz Wireless Broadband Network that Motorola sold and provided to East Bay Regional Communications System Authority (“Pilot System Customer”) under a separate sales contract.
- 2.25 “Proprietary Rights” means a Party’s ownership interest in tangible and intangible property, including the patents, patent applications, inventions, copyrights, trade secrets, trademarks, trade names, mask works, know-how, and other intellectual property rights in and to the Equipment and Software, including those created or produced by Motorola under this Agreement, and any corrections, bug fixes, enhancements, updates or modifications to or derivative works from the Software whether made by Motorola or for Motorola by a third party.
- 2.26 “Public Access System” [intentionally omitted].
- 2.27 “Regulatory Change” means a change in any federal or state law or regulation that regulates the ownership and use of the System or the Licensed Frequencies necessary for the System to operate.
- 2.28 “Service Level” means a measure of the performance of the System including availability, capacity, performance, coverage requirements of the FCC in effect for the as-built System on

April 30, 2013, or as otherwise agreed to by the Parties, and other criteria as more fully described in Service Levels (Exhibit I).

- 2.29 “Site” means a physical structure at a particular geographic location, such as a tower or building, at, on or in which Motorola will install Equipment or Software as part of the System. A complete list of the Sites to be included in the System is attached to Exhibit “B”.
- 2.30 “Site Access and Use Agreement” means an agreement generally in the form of Exhibit V between Motorola and another party by which Motorola acquires the right to enter onto, access, and use one or more Sites.
- 2.31 “Site Remediation Costs” means the costs that are not reimbursable under the BTOP Grant and are reasonable and necessary to perform the Site Remediation Work as determined by Motorola in coordination with the party with whom Motorola has a Site Access and Use Agreement for it to perform the Site Remediation Work as described in the Statement of Work (Deployment Stage) (Exhibit C). Site Remediation Costs do not include government assessments, costs related to local regulatory requirements or on-going Site operating expenses but do include construction and construction-related costs.
- 2.32 “Site Remediation Work” means the work that is reasonable and necessary as determined by Motorola in coordination with the party with whom Motorola has a Site Access and Use Agreement for it to perform as described in the Statement of Work (Deployment Stage) (Exhibit C) for the Sites to be made into “installation ready” condition as defined in Section 6.
- 2.33 “Software” means the Motorola Software and Non-Motorola Software, in object code format that is furnished with the System or Equipment.
- 2.34 “Specifications” means the functionality and performance requirements for the System, Equipment, Software, Sites, Licensed Frequencies and Facilities that are described Exhibit “B”.
- 2.35 “System” means an interoperable data communications system for public safety use which includes the Equipment, Software, and incidental hardware and materials that are provided by Motorola under this Agreement and combined together into an integrated system as generally described in the System Description attached as Exhibit “A”. The term System excludes the Pilot System.
- 2.36 “System Readiness” has the meaning set forth in Section 8.2.
- 2.37 “System Refresh” means an update to the System Software and System hardware (such as routers, switches, servers), the scope of which is not included within the operational and maintenance obligations of Motorola under Exhibit M.
- 2.38 “User Fees” means the fees to be paid to Motorola by the Authority related to the use of the System by Eligible Users as described in Section 5.2.

### **SECTION 3. SCOPE OF AGREEMENT AND TERM**

- 3.1 **SCOPE OF WORK.** Motorola will build a stable and fully operational 4G LTE system as described in Exhibits A and B, subject to the requirements otherwise set forth in this Agreement, including the BTOP Grant (as amended), subject further to the performance by the Authority of its obligations. The Parties will provide all of the necessary personnel and other resources to perform all of their duties as agreed in this Agreement. The Parties acknowledge that the deployment of the System will be funded by Motorola, relying in large part on funds provided

through the American Recovery and Reinvestment Act, specifically a grant from the Department of Commerce (“DOC”) under its Broadband Technology Opportunities Program (“BTOP”), Award Number NT10BIX5570089 (“BTOP Grant”). The BTOP Grant is administered by the National Telecommunications and Information Administration (“NTIA”). The Parties acknowledge further that Motorola has certain obligations under the BTOP Grant and that Motorola shall be responsible for compliance with such obligations except as otherwise expressly set forth in this Agreement. Notwithstanding any provision to the contrary, the Parties agree that they will each perform their duties under this Agreement in a manner that promotes and ensures initial and continuing compliance with all applicable requirements of the BTOP Grant, including the Special Award Conditions. All BTOP Grant Award Document terms and Motorola obligations under the BTOP Grant Award which are relevant to the performance of this Agreement by the Parties are stated in Exhibit T. Motorola’s BTOP Grant obligations and requirements as disclosed to the Authority in Exhibit T shall supersede and take precedence over any conflicting terms in this Agreement. Notwithstanding any provision to the contrary, Motorola has no duty to provide the full BTOP Grant application to the Authority or any Eligible User Entity. Motorola will monitor System performance at all times from the Network Operations Center.

3.2 SINGLE POINT OF CONTACT BETWEEN THE PARTIES. During the Deployment Stage, each Party will designate a single point of contact, who will be the Party’s primary team leader for deployment of the System (“Project Manager”). Motorola’s Project Manager is Coyle Schwab. The Authority’s Project Manager is \_\_\_\_\_. On or before the commencement of the Operation Stage, Motorola will designate a system operating manager (“System Manager”), who will be Motorola’s primary point of contact and who will have oversight responsibility for operation and maintenance of the System; and the Authority will appoint a \_\_\_\_\_ [insert title], who will be the Authority’s primary point of contact during the Operation Stage.

3.3 SITE ACCESS AND USE AGREEMENTS. The Authority requested that Motorola shall use its best efforts to enter into Site Access and Use Agreements with the parties who own or control the Sites, the majority of which are Eligible User Entities who are members of the Authority. A Site Access and Use Agreement template is attached as Exhibit V. The Authority agrees to use its best efforts to assist Motorola in this regard. Once executed, Motorola is responsible for the administration of the Site Access and Use Agreements during the term of this Agreement, and for Site Remediation Work and Site Remediation Costs as described below in Section 3.4 and Section 3.5.1(i). Except for Motorola’s responsibilities for Site Remediation Costs as described below in Section 3.4 and Motorola’s responsibilities in the Site Access and Use Agreements, Motorola has not accepted the risks or other costs associated with delayed availability of Sites or unavailability of Sites, or Site substitutions, replacements or additions. If at any time it appears to the Authority that a party who contracts with Motorola in a Site Access and Use Agreement has breached that agreement in a manner that will render a Site unavailable when needed for the System, the Authority may recommend to Motorola enforcement actions that Motorola could take. Motorola is not obligated to accept those recommendations or to initiate litigation against the party, provided, however, that Motorola will not be excused from its Service Level commitments as to other Sites as a result of such failure to enforce.

3.3.1 PREPARATION OF LIST OF SITES. On January 5, 2012, Motorola and the Authority met to review the best information available on Site suitability and availability for inclusion in the System. Based upon that meeting, the Parties created a List of Sites which is included in the Specifications (Exhibit B). As additional information becomes known, the List of Sites will be updated and amended. Motorola shall be responsible for evaluating potential Sites and making the determination that Sites can be “qualified” as described in Section 6.1.2 and should be included on the List of Sites. Motorola’s performance obligations under this Agreement (including any Service Level commitments) will be based upon the effective List of Sites as amended concerning additional, deleted, and replacement or substitute Sites.

3.3.2 Once the Parties agree on the List of Sites by the date specified in paragraph 3.3.1, Motorola will provide a copy to the NTIA for its approval and a corresponding change request to the BTOP Grant contract. If the NTIA does not approve this List of Sites or the corresponding change request to the BTOP Grant contract, then Motorola may upon written notice to the Authority terminate this Agreement without cause or further obligation.

### 3.4 AMENDMENTS TO LIST OF SITES AND RESPONSIBILITY FOR SITE REMEDIATION WORK AND COSTS

3.4.1 A Site may be determined by Motorola or the Authority to be ineligible. For example, a Site might no longer be available or might no longer meet the qualification process as described in Section 6.1.2. If a Site is determined to be ineligible prior to the List of Sites being finalized pursuant to paragraph 3.3.1, the Parties will use good faith efforts to replace it with an alternative Site as a substitute and Motorola shall retain responsibility for Site Remediation Costs. In connection with any modification of the List of Sites, the Parties shall agree to make any adjustments to Exhibits A and B that are necessary as a result of the modification.

3.4.2 If Motorola in consultation with the Authority determines that a Site is ineligible after the List of Sites is finalized pursuant to paragraph 3.3.1 but before May 31, 2012, then the Parties will amend Exhibit B to delete the ineligible Site and the Authority and Motorola may jointly agree upon an alternative available Site as a substitute provided the NTIA approves the substitution and agrees the BTOP Grant funds may be used for applicable work and Equipment for the substitute Site. If so approved and agreed, the substitute Site agreement will provide that Motorola is responsible to pay for Site Remediation Costs for all substitute Sites agreed on before May 31, 2012. Motorola will be excused from any obligations to add the substitute Site and from any performance obligations under this Agreement related to the ineligible deleted Site.

3.4.3 If Motorola in consultation with the Authority determines that a Site is ineligible after May 31, 2012, then the Parties will amend this Agreement to delete the ineligible Site and the Authority and Motorola may jointly agree upon an alternative available Site as a substitute. Unless this substitute Site agreement expressly provides to the contrary, the Authority and not Motorola will pay for (i) any additional Site Remediation Costs concerning the substitute Site, and (ii) any applicable work and Equipment for the substitute Site. Notwithstanding clause (ii) of the preceding sentence, the substitute Site agreement will not obligate the Authority to pay for the applicable work and Equipment for the substitute Site if and to the extent the NTIA approves the use of BTOP Grant funds, if available, for this purpose. If the Parties do not agree on the substitution, then Motorola will be excused from any performance obligations under this Agreement related to the ineligible deleted Site.

### 3.5 ENUMERATION OF OTHER DUTIES.

3.5.1 Motorola will:

- (i) During the Deployment Stage, subject to Section 3.4 above, perform its Site Remediation Work and pay 100% of the Site Remediation Costs;
- (ii) provide, install, test, accept, own, operate and maintain the System, including the LTE Equipment and Software comprising the System;
- (iii) make the System (starting with the first Phase and continuing with successive Phases) available for use by Eligible Users in accordance with Section 3.7;

- (iv) perform its other contractual responsibilities all in accordance with this Agreement, including the exhibits;
- (v) market and promote the use of the System;
- (vi) cooperate with the Authority in the performance of all of the Authority's contractual responsibilities under this Agreement;
- (vii) cooperate with the Authority in all elements of the relationship of the Parties as anticipated by this Agreement; consistent with and subject to Section 3.9.4, and subject further to any excused non-performance by Motorola due to a Force Majeure, non-performance by any Site Owner of its duties under a Site Access and Use Agreement, or non-performance by the Authority under this Agreement, Motorola will operate the System in compliance with applicable FCC requirements that exist on April 30, 2013.
- (viii) assist in preparing the Authority's interoperability showing to the FCC as scheduled and provide to the Authority the non-confidential technical documentation as reasonably requested by the FCC; and
- (ix) cooperate with the Authority in all elements of the relationship of the Parties as anticipated by this Agreement.
- (x) Motorola will develop with the Authority a Customer Support Plan, which will include the names and contact information of the representatives designated by the Authority and Eligible User Entities who are authorized to call the Motorola System Support Center and which will provide a comprehensive description of customer support, network troubleshooting and repair and the allocation of responsibilities between Motorola and the Authority. The Parties will negotiate the Customer Support Plan in good faith.

#### 3.5.2 The Authority will:

- (i) During the Deployment Stage, not be required, subject to Section 3.4 above, to perform Site Remediation Work or pay Site Remediation Costs;
- (ii) provide, maintain, and make available (or cause to be provided, maintained, and made available) to Motorola as scheduled and during the term of the Agreement, the Facilities (whether owned or controlled by the Authority or Eligible Users or other third party entities) and continuous access to and use of those Facilities in accordance with Section 6 and the Specifications (Exhibit B), and with Motorola's assistance, enter into one or more agreement(s) with the various owners, providers or licensees/lessees of the Facilities to support the Authority's commitments;
- (iii) provide maintain in effect, and make available (or cause to be provided, maintained in effect, and made available) to Motorola as scheduled and during the term of the Agreement, the Licensed Frequencies and continuous access to and use of the Licensed Frequencies in compliance with all FCC and PSST requirements and in accordance with Section 3.5.3 and the Specifications so that Motorola may deploy the System as scheduled and consistent with the BTOP Grant requirements, and lawfully operate the System during the term of this Agreement;
- (iv) perform its contractual responsibilities in accordance with this Agreement, including the exhibits;

- (v) coordinate with Motorola and the Eligible User Entities concerning the operation of the System in accordance with this Agreement, provided that such obligation shall be to facilitate communication and not to enforce obligations of the Eligible User Entities under the Site Access and Use Agreements;
- (vi) concerning the Authority's interoperability showing to the FCC, provide to the FCC as scheduled the documentation as reasonably requested by the FCC.

3.5.3 During the entire term of this Agreement (including any extensions of the term), the Authority at its cost and expense will obtain, maintain, and provide the Licensed Frequencies, and will comply with all (i) Federal Communications Commission ("FCC") licenses and authorizations required for Motorola's deployment, installation, testing, operation, maintenance, and continuous use of the System (and each Phase of it) in accordance with the Specifications (Exhibit B) and (ii) lease or other requirements of the Public Safety Spectrum Trust Corporation, which was designated as the nationwide Public Safety Broadband Licensee ("PSBL") concerning some or all of the Licensed Frequencies. The Authority's obligations at its cost and expense to obtain, maintain, and provide the Licensed Frequencies for the System and its proper use and operation and to comply with all FCC and PSST requirements are material covenants by the Authority. Although Motorola might assist the Authority in the preparation of its FCC license applications or similar matters, neither Motorola nor any of its employees or representatives is an agent or representative of the Authority or any other Eligible User in FCC, PSST, or other matters; and neither Motorola nor any of its employees or representatives has any liability concerning FCC or PSST matters. If the Licensed Frequencies which are required for Motorola to lawfully operate the System are leased by the PSST to and in the name of a party other than the Authority, then the Authority will provide written documentation reasonably acceptable to Motorola of the Authority's right to use such Licensed Frequencies for the System during the Term.

3.6 **LOADING AND USE.** The Authority makes no commitment concerning the number of Devices to be loaded and used on the System or when such loading and use will commence. The Authority, other Eligible User Entities, and other Eligible Users may begin loading and using the System, commencing when System Readiness for the first Phase occurs and Motorola has executed the System Readiness Certificate (Exhibit H) for the first Phase. The Authority agrees to pay for the applicable User Fees (and all other charges payable to Motorola under Section 5.3 below) for all Eligible Users during the term of the Agreement.

3.6.1 The Authority will develop and maintain the List of Eligible User Entities (Exhibit N) that are eligible to have access to the System current at all times and provide that list to Motorola if and when it changes. The Authority will further provide to Motorola semi-annually a list of the total potential number of Eligible Users associated with each Eligible User Entity. Motorola and the Authority will reconcile their respective lists of actual Eligible Users at least monthly.

3.6.2 Eligible Users other than the Authority are not Parties to this Agreement and are not third party beneficiaries under it, but have the rights to use the System in accordance with this Agreement.

3.6.3 Motorola and the Authority will actively promote and encourage the use of the System among the Eligible User Entities and among other public safety governmental entities within the San Francisco Bay Area Region who might be interested in becoming an Eligible User Entity.

3.6.4 During the term of this Agreement, Motorola may expand the System only with prior approval of the Authority's Board in its sole discretion.

- 3.7 RESTRICTIONS AND LIMITATIONS ON USE. The Authority will cooperate with Motorola in imposing and enforcing the following restrictions and limitations on use which apply to all Eligible Users.
- 3.7.1 Eligible Users may use the System for any reasonable public safety purpose permitted under FCC rules for the System and which is consistent with the mission and legal authority of the Eligible User Entity. Eligible Users may not use the System in a manner that causes the Authority or Motorola to breach this Agreement; infringes upon Motorola's or another's intellectual property rights; or violates applicable law, including FCC requirements concerning the Licensed Frequencies or otherwise. Each Eligible User Entity (and not Motorola nor the Authority) shall be responsible for any claims associated with the content of data that is transmitted by such Eligible User Entity over the System, including any claims with respect to the privacy rights of a third party. Eligible Users shall cooperate with Motorola to avoid the use of the System in a manner that harms or unduly interferes with the System or related monitoring or management systems.
- 3.7.2 Eligible Users may not resell any right to use the System provided by Motorola under this Agreement to a third party, except to the extent authorized in writing by Motorola and the Authority. Nothing contained herein shall prevent the Authority from enforcing any agreements with Eligible User Entities concerning repayment, reimbursement or contribution of administrative services or User or Service Fees, other fees, and the like.
- 3.7.3 Eligible Users may not use the System in a manner that unreasonably disrupts, degrades signal quality, interferes with or harms the use by other Eligible Users. For example, Eligible Users may not use the System, unless authorized in writing by Motorola: (i) to generate excessive amounts of data traffic through the continuous, unattended streaming, downloading or uploading of videos or other files or to operate hosting services of any kind; (ii) to maintain continuous active network connections that do not involve active participation by a person; (iii) to disrupt or unreasonably interfere with the use of the System by other Eligible Users; (iv) to transmit or facilitate advertising or other commercial communications; or (v) for gaming or other recreational uses. Motorola reserves the right to take appropriate measures to protect the System from harm, compromised capacity, or degradation in System performance.
- 3.7.4 With the approval of the Authority, Motorola may institute terms of service governing the use of the System. Motorola reserves the right, consistent with the needs of public safety, without notice or limitation and without violating its Service Level commitments, to limit data throughput speeds or quantities or to suspend service if Motorola, in its reasonable discretion, determines action is necessary to protect the System from serious harm or degradation. Before suspending service of an Eligible User, Motorola shall notify the Authority of the need for suspension and will suspend the Eligible User only at the direction of the Authority; the Authority will promptly provide its direction to Motorola. Motorola shall restore service at the direction of the Authority once the issue has been resolved. Motorola may take reasonable actions to comply with applicable laws and governmental or court orders. In the event that an Eligible User violates the terms of service contained herein, but there is no imminent threat of serious harm or degradation, then Motorola shall give the Authority written notice of such violation and the Authority will determine and advise Motorola of the remedial action to take.
- 3.7.5 The term "roaming" typically refers to coverage and use on another's network. If roaming services are available to Eligible Users from a commercial carrier, those services are subject to roaming agreements between Eligible Users and the commercial carrier, and those agreements may change from time to time. Motorola is not responsible for roaming activities, including services, billing or coverage, all of which are dependent upon various factors

outside the control of Motorola. At the request of the Authority, Motorola will provide reasonable technical assistance to the Authority concerning roaming services from that commercial carrier.

- 3.8 SYSTEM INFORMATION. Motorola shall create an electronic form which will be accessible at a website and will be accompanied by instructions for submission to Motorola's Network Operations Center. The Authority will make Eligible Users aware of the form's existence and its location such that System deficiencies (performance and coverage) can be identified and tracked by both the Authority and Motorola. Motorola will periodically accumulate the reported data at intervals and in a format to be jointly determined by the Parties. The Parties will jointly analyze whether the apparent System deficiencies are the result of operational problems that are the responsibility of Motorola, such as defects in the LTE Equipment or Software, or the result of devices, inadequate backhaul or other issues with the Facilities, or the System coverage. If the problem is not the responsibility of Motorola and If requested by the Authority, Motorola will propose possible solutions to resolve these issues as Options under Section 3.14 below (other than the suggestion to enter into a roaming contract which is not covered as an Option). Examples of possible solutions are additional sites, additional or enhanced backhaul, additional equipment such as bi-directional amplification, replacement of the device, or roaming as described above.
- 3.9 CHANGES. Either Party may request changes to the work within the general scope of this Agreement. Each Party upon receipt of a change request from the other Party will promptly evaluate and negotiate in good faith the change request. However, neither Party is obligated to perform a requested change unless both Parties agree to the requested change and execute a written change order. Certain provisions below indicate under what circumstances a Party must agree to a requested change.
- 3.9.1 If a requested change during the Deployment Stage causes an increase or decrease in the time required to perform an obligation under this Agreement and the requested change can reasonably be performed within the BTOP Grant period, the change order will reflect an equitable adjustment of the Performance Schedule or other time commitment under this Agreement. If a requested change during the Operation Stage causes an increase or decrease in the time required to perform this Agreement, the change order will reflect an equitable adjustment of the Performance Schedule or other time commitment under this Agreement.
- 3.9.2 If Motorola requests a change to improve the System within the defined project scope that in its reasonable opinion is: (i) necessary for Motorola to satisfy one or more of its Service Level commitments or the BTOP Grant requirements; or (ii) appropriate to deploy, operate, manage, maintain or improve the System (e.g., coverage, capacity, stability, equipment standardization, user accessibility, functionality, security, software refresh or upgrade, and the like), then Motorola will consult with the Authority's Project Manager to reach agreement on the requested change and will make the change at no additional cost to the Authority. All changes described in this Section 3.9.2 require Authority approval, which will not be unreasonably withheld or delayed. In such cases, the Authority's Project Manager will decide whether the proposed change is major or minor. If minor, the Authority's Project Manager will decide whether to authorize the change. If major, the Authority's Project Manager will calendar the requested change for review and vote at the next scheduled Authority meeting, and will notify Motorola of the date and time of the meeting. If the Authority does not approve the change, then Motorola will be excused from any performance obligations under this Agreement which cannot be fulfilled without the requested change. The Options under Section 3.14 are not subject to this paragraph. The Authority's exercise of an Option under Section 3.14 below will not be treated as a change covered by this Section 3.9.2.

- 3.9.3 If the Authority requests a change within the defined project scope that will cause Motorola to incur additional costs, then Motorola will consult with the Authority's Project Manager to determine whether the requested change is necessary to be made for Motorola to satisfy its Service Level commitments or the BTOP Grant requirements; and if so, then Motorola must agree to the requested change. If after review, the Parties conclude the requested change is not necessary to satisfy Motorola's Service Level commitments or the BTOP Grant requirements, then Motorola (i) may agree to the requested change, (ii) may reject the requested change, or (iii) may conditionally agree to the requested change if the Authority agrees to pay a quoted price for the changed work. Concerning this last choice, the Authority will either agree to pay the quoted price, in which case the Parties will execute the change order which will include the Authority's agreement to pay the quoted price, or the Authority will reject the quoted price, in which case the change request from the Authority is deemed withdrawn. In such cases the Authority's Project Manager will calendar any proposed major decision for review and vote at the next scheduled Authority meeting, and will notify Motorola of the date and time of the meeting. With respect to a requested change that has been accepted by the Authority, unless the change order provides to the contrary, payment of the quoted price will be due within thirty (30) days of the Authority's receipt of an accurate and complete invoice which will be sent promptly after the execution of the change order. Depending on the nature and scope of the requested change, the Parties may agree to payment milestones rather than a single invoice.
- 3.9.4 In addition to the more general language of Section 10.2 concerning Regulatory Changes, if the Authority requests a change within the defined project scope that is due to a Regulatory Change that becomes effective after April 30, 2013, then Motorola will consult with the Authority (through its Project Manager) to determine what specific changes must be made to comply with the Regulatory Changes. Once those specific changes are determined, Motorola will provide to the Authority a binding proposal that describes the equipment, software or statement of work that will be needed as a result of the changes; the performance schedule to perform the work; the Contract Price (as defined in Section 5.1); the payment and other terms of sale for the proposed equipment, software or statement of work; and any other factors that are relevant to the proposal. If necessary, the Authority's Project Manager will calendar the proposal for review and vote at the next scheduled Authority meeting, and will notify Motorola of the date and time of the meeting. If the Authority agrees to the proposal, then Motorola must agree to the requested changes and this Agreement will be formally amended to reflect the Authority's agreement to the proposal. If the Authority does not agree to the proposal, then the more general provisions of Section 10.2 will apply.
- 3.9.5 On January 5, 2012, the Authority provided to Motorola a preliminary plan and status report on the Central Backhaul Transport System(s) to be included in Exhibits A and B. This information will be the basis for the System design. Subject to the change order process in Section 3.9, the Authority may also provide additional backhaul to the Facilities to enhance the capabilities of the System. If agreed, any change or enhancement to the backhaul after equipment orders have been placed, including any System redesign (including engineering) or reconfiguration (including equipment changes), will be at no cost to Motorola and any cost will be paid by the Authority.
- 3.10 SOFTWARE. While Motorola is the owner of the System, it is not necessary for Motorola and the Authority (or other Eligible Users) to enter into a Software License Agreement concerning the System. However, if at any time and for any reason the Authority acquires ownership or operation of the System, Motorola promises to license use of its Software to the Authority in accordance with the following provisions.
- 3.10.1 In the event of a transfer of the System to the Authority, any Motorola Software, including subsequent releases, shall be licensed in accordance with a Software License Agreement

which is substantially in the form attached hereto as Exhibit L, with such modifications as may be necessary to conform the Agreement to the actual terms of the transfer or that are existing at the time,. There shall be no license fees payable for the use of the existing version of the Software at the time of transfer, it being understood that the value of the Software is included in the consideration for this Agreement. The Authority shall abide by all of the terms and restrictions of the Software License Agreement, as modified in accordance with this section.

3.10.2 Any Non-Motorola Software is licensed in accordance with the standard license, terms, and restrictions of the copyright owner on the effective date that the Authority acquires ownership or operation of the System unless the copyright owner has granted to Motorola the right to sublicense the Non-Motorola Software pursuant to the Software License Agreement, in which case it applies and the copyright owner will have all of Licensor's rights and protections under the Software License Agreement concerning its Non-Motorola Software. Motorola makes no representations or warranties of any kind regarding Non-Motorola Software but agrees to use reasonable efforts to obtain for the Authority the applicable license agreement for Non-Motorola Software. Non-Motorola Software may include Open Source Software. All Open Source Software is licensed in accordance with the provisions of the standard license of the copyright owner and not the Software License Agreement. The Authority hereby accepts and agrees to abide by all of the terms and restrictions of the software license agreement applicable to Non-Motorola Software. There shall be no license fee payable for the use of the existing version of any Non-Motorola Software in connection with the operation of the System following a transfer.

3.11 TERM. Unless terminated by mutual agreement of the Parties or in accordance with other provisions of this Agreement, or extended by mutual agreement of the Parties, the term of this Agreement begins on the Effective Date and continues until, the date which is ten (10) full calendar years after the System Readiness date. The Parties by mutual agreement may extend the term.

3.12 OPERATION AND MAINTENANCE SERVICE. During the term of this Agreement, Motorola will provide at its expense the mandatory operation, maintenance and support services for the System in accordance with the Operation Stage and Maintenance Services Statement of Work (Exhibit M). Unless otherwise agreed by the Parties in writing, the terms and conditions applicable to all maintenance and support services will be Motorola's standard Service Terms and Conditions included as part of Exhibit M, subject to Motorola's duty to satisfy its Service Level commitments while it is the owner and operator of the System. Motorola shall further be responsible for all costs associated with its Network Operations Center. So long as Motorola is the owner and operator of the System, it will maintain at its expense an inventory of spare parts and spare equipment that in Motorola's reasonable judgment is sufficient for it to satisfy its Service Level commitments. Motorola has no duty to provide a System Refresh. If a minimum of 35,000 Subscriber Devices use the System, the Parties will discuss the need, appropriateness, effects, FCC compliance issues, price and timing of a possible System Refresh.

3.12.1 Unless the Operation Stage and Maintenance Services Statement of Work (Exhibit M) explicitly states to the contrary or there has been a change in the scope of work pursuant to Section 3.9.3, Motorola's operation, maintenance and support duties extend only to the System that Motorola delivers and installs under this Agreement and does not extend to: (i) any other equipment, software, subsystem, or system (including other equipment, software, subsystems, or systems installed at a shared Site, or (ii) maintenance and support of the Sites or Facilities (whether or not Motorola provides or finances Site or Facility improvements such as the Site Remediation Work or pays for the Site Remediation Costs), provided, however, that Motorola shall be responsible for repairs to any improvements to the Sites or the Facilities that are the result of defective workmanship or materials by Motorola or its sub-contractors if a claim is presented to Motorola within ninety (90) days from the date of the

improvement or if the defect is latent, then within ninety (90) days from the date of discovery or within one (1) year from the date of the improvement, whichever first occurs. If the Authority purchases from Motorola additional equipment to be installed at additional sites, the Authority must maintain those assets on the same platform and software version level as the System. Maintenance and support of those assets are not covered by this Agreement unless there has been a change in scope pursuant to Section 3.9.3.

3.12.2 The Authority may request a quote for and purchase from Motorola spare parts; spare or additional equipment or software; or installation, maintenance and support, or other services for equipment or software that is not part of the System, by means of a separate agreement that is mutually executed by Motorola and the Eligible User Entity. Any separate agreement under this paragraph may not contain a credit or other discount on the User Fees payable by the Authority to Motorola.

3.13 SUBSTITUTIONS. At no additional cost to the Authority, Motorola may substitute any Equipment, Software, or services to be provided by Motorola under this Agreement, if the substitute meets or exceeds the Specifications, is of equivalent or better quality to what is being substituted, and does not degrade the Service Levels in any material respect. Motorola will document and give advance notice of any such substitution to the Authority.

### 3.14 OPTIONS.

3.14.1 Motorola has identified in Exhibit E, Options, the products and pricing that applies if the Authority wishes to purchase at its cost additional LTE equipment to be installed by Motorola at additional sites in order to enlarge the System. Further, the Authority may request and Motorola may propose from time to time additional equipment and software or services to be added later to this Agreement which are or become foreseeable changes to the System but are not presently under contract. (All of these identified or future added options are referred to as "Options".) If the Authority wishes to purchase any Option, the Parties will amend this Agreement to reflect the specific details of the purchase and sale.

If the Parties so desire, they can mutually develop and agree upon an Equipment List, Statement of Work, performance schedule, payment milestone schedule and invoicing procedures, or other related documents that more specifically describe the equipment, work and deliverables covered by an Option.

Because of the BTOP Grant requirement that the System must be completed within three (3) years of the August 1, 2010 BTOP Grant date, Final Project Readiness may not be delayed due to exercised Options.

Because the equipment, work and deliverables to be provided by Motorola under an exercised Option are to be owned by the Authority and paid for by the Authority with its own funds rather than with BTOP Grant funds, these items will be treated as outside the purview of the BTOP Grant even though they may relate to the System. Further, if this equipment, work and deliverables are to be integrated into and operated as part of the System that is owned, operated, and maintained by Motorola, the Authority will enter into a separate contract with Motorola to maintain this equipment on the same platform and software version level and in the same manner as the similar System equipment is maintained; Motorola's standard pricing and terms of service will apply.

3.14.2 If the Authority wishes to purchase from Motorola optional services that do not become part of the System, like user training, consulting or advisory services, it will request Motorola to provide a quote. In response, Motorola will develop and provide to the Authority a quote that includes a preliminary statement of work for these requested services, pricing and payment

terms, a performance schedule, and other pertinent information. Motorola and the Authority will negotiate in good faith these optional services. The Authority may use this Agreement to purchase optional services and payment will be in accordance with Section 5.1 below. If other Eligible User Entities wish to purchase optional services, the purchase and sale agreement for these optional services will be by means of a separate agreement that is mutually executed by Motorola and the purchasing Eligible User Entity.

- 3.15 **KEY PERSONNEL.** From the Effective Date until the date of Final Project Readiness, a Party will not re-assign any of its Key Personnel enumerated in the Deployment Stage portion of the List of Motorola and Authority Key Personnel (Exhibit P) without the prior written consent of the other Party, which will not be unreasonably withheld or delayed. On and after the date of Final Project Readiness and so long as Motorola is the owner and operator of the System, a Party will not re-assign any of its Key Personnel enumerated in the Operation Stage portion of the List of Motorola and Authority Key Personnel (Exhibit P) without the prior written consent of the other Party, which will not be unreasonably withheld or delayed. The Parties acknowledge that Key Personnel changes are likely to occur during the term of this Agreement. If any of its Key Personnel become unable or unavailable to perform his or her assigned duties (e.g., job change, retirement, or relocation), the applicable Party will assign a replacement Key Person having similar qualifications and skills as the replaced Key Person, and such assignment is subject to the other Party's prior review and approval of the replacement Key Person's resume (and interview if so desired). The preceding sentence does not apply to a Key Person who temporarily is unavailable to perform his or her duties because of vacation, holidays, training, illness, short term leave, etc.
- 3.16 **DEVICES.** This Agreement does not cover the purchase of any Devices. Motorola's pricing for Devices will be independent from its pricing of User Fees.
- 3.17 **PILOT SYSTEM.** The Parties acknowledge that Motorola sold and provided to Pilot System Customer under a different contract the Pilot System, comprised of LTE RAN equipment (Motorola manufactured) at four (4) sites and a Motorola manufactured LTE core that was loaned to Pilot System Customer. The Pilot System equipment will not be used in connection with this System, but the sites at which the Pilot System LTE RAN equipment was installed are intended to be Sites for this System once the Pilot System equipment is removed. The Pilot System is not a Phase under this Agreement.

#### **SECTION 4. PERFORMANCE SCHEDULE**

The Parties will perform their respective responsibilities in accordance with the dates set forth herein and the Performance Schedule that is included in the Statement of Work, with time being of the essence. The Performance Schedule will show the target date for System Readiness of each Phase and of Final Project Readiness. By executing this Agreement, the Authority authorizes Motorola to proceed with contract performance beginning on the Effective Date. Each Party will take all reasonable actions that are consistent with its duties under this Agreement to deploy the System and each Phase of it on schedule, and neither Party may unilaterally suspend deployment of the System. Delays are covered under Section 10 below.

#### **SECTION 5. CONTRACT PRICE, USER FEES, PAYMENT AND INVOICING**

- 5.1 **CONTRACT PRICE.** The compensation to be paid by the Authority to Motorola for the Equipment, Software and services to be provided pursuant to this Agreement consists of User Fees described in Section 5.2 below. However, this Agreement provides for or may be amended to provide for Options under Section 3.14 and Exhibit E which the Authority may elect to purchase or for other goods and services (including changes under Section 3.9). In these situations, the Authority will pay to Motorola the applicable contract price ("Contract Price"), and the invoicing

and payment terms will be set forth in or with the description of the goods and services being purchased if they are different from those set forth in Section 5.3 below.

5.2 FEES. The User Fees are fixed at \$38 per month for each Device that is being used on the System until July 1, 2014 or the date which is one (1) year from Final Project Readiness, whichever occurs later. On and after the later of July 1, 2014 or the date which is one (1) year from Final Project Readiness, Motorola may change the amount of the User Fees and such changes shall be driven by changes in the commercial competitive market. Any price change will be valid for the remainder of the period ending June 30<sup>th</sup>. The Parties intend for changes in the User Fees amount to be effective on a July 1 through June 30 cycle, with Motorola providing at least ninety (90) days prior written notice to the Authority before the effective date of any change in the User Fees amount so that the Authority and Eligible User Entities may coordinate the change with their normal budgeting cycle. Commencing with January or February 2014 and January or February of each year thereafter, the Authority may request one or more meetings with Motorola so that the Parties may discuss the possible change to the User Fees amount, which might include reinstatement charges for Eligible Users who were suspended and seek reinstatement. From time to time, Motorola may offer enhanced System features for public safety which offering may include fees in addition to the User Fees ("Additional Fees"). Motorola will provide these enhanced features, only if the Authority approves and this Agreement will be amended accordingly. In addition to the Contract Price (if any) described in Section 5.1 above, the Authority will pay to Motorola all of the User Fees and Additional Fees due from all Eligible Users. User Fees for a Device type will be the same to all Eligible Users. All discounts and enhanced services will be offered on a non-discriminatory basis to all Eligible Users. Motorola is not precluded from setting User Fees on a usage basis or from setting User Fees for certain Device types differently than for other Device types. Motorola may not tie User Fees to User Device pricing.

5.3 INVOICING AND PAYMENT. Motorola will submit invoices for User Fees and, if applicable, Additional Fees, to the Authority in accordance with this Agreement, and payment is due within sixty (60) days for invoices submitted before the date which is twelve (12) months after Final Project Readiness, within forty-five (45) days of the invoice date thereafter for the next twelve (12) months, and thereafter within thirty (30) days of the invoice date. If pursuant to Section 5.2 Motorola changes the User Fees so that they are calculated on a usage, extra services, or other basis that is significantly more complicated than a fixed monthly fee, and if the Authority reasonably needs additional time to process invoices as a result of that more complicated User Fees methodology, then the Parties will negotiate in good faith an additional number of days not to exceed fifteen (15). Motorola shall cooperate with Authority to pursue collection of the overdue User Fees and other charges. With respect to Eligible Users who have not paid User Fees or any other fees and charges when due to the Authority, upon receipt of written notice of account suspension, Motorola shall suspend the access of such Eligible User to the System as of the date set forth in the notice. Motorola shall further reinstate the access of such Eligible User upon written notice of account reinstatement from the Authority. Motorola and the Authority shall agree on a standard format for all invoices which provides sufficient detail to confirm the proper calculation of all User Fees and other charges.

5.3.1 The Authority will make payments to Motorola when due in the form of a wire transfer, check, or cashier's check from a U.S. financial institution. Overdue invoices will bear simple interest at the maximum allowable rate.

5.3.2 For reference, the Federal Tax Identification Number for Motorola Solutions, Inc. is 36-1115800.

- 5.3.3 Invoices for User Fees, will be sent to the Authority at the following address: 4985 Broder Rd., Dublin CA, 94568. The Authority may change this invoice address upon thirty (30) days prior written notice to Motorola.
- 5.3.4 For sales or use tax purposes, the Authority and Motorola will jointly develop an accurate list of cities which are the ultimate destinations where the Equipment will be delivered to the Sites, their applicable sales or use tax rates, and the allocation of Equipment to each city.
- 5.3.5 The Authority acknowledges that sales or use tax, federal excise tax, federal universal service tax, and other governmental taxes, charges, assessments or fees may apply to the Contract Price, User Fees, Additional Fees, and any other charges paid to Motorola, and the Authority will collect and remit taxes applicable to such charges. The Authority will identify, claim, and provide to Motorola proper documentation for any applicable tax exemption that the Authority believes may apply. (See Section 16.1 regarding taxes.)
- 5.4 FREIGHT, TITLE, AND RISK OF LOSS.
- 5.4.1 Motorola will pay for all freight charges to ship Equipment to Sites.
- 5.4.2 Until the transfer described in Section 5.5 occurs, as between Motorola and the Authority, Motorola owns and retains title to the System and any improvements to Sites or Facilities that are funded with BTOP Grant funds or that result from Site Remediation Work which is paid by Motorola. Except as provided in the preceding sentence, as between Motorola and the Authority, the Authority will retain ownership of the Facilities and any improvements to those Facilities funded by the Authority or an Eligible User.
- 5.4.3 Motorola will retain risk of loss concerning the Equipment comprising the System unless such loss is caused by an Authority default under this Agreement, or by the negligence or intentional misconduct of the Authority, its employees or agents; in these latter instances, the Authority has risk of loss concerning the Equipment. If loss of Equipment is caused by a Site Owner, or their employees or agents, the Authority will cooperate with Motorola in holding the Site Owner responsible. The Authority has risk of loss concerning improvements to Sites or Facilities, regardless of whether those improvements are funded as a Site Remediation Cost. Concerning any Options, title and risk of loss to equipment sold by Motorola to the Authority will pass on delivery.
- 5.5 TRANSFER OF TITLE. Ten full calendar years after the System Readiness date, or at such earlier time as agreed to by the Parties, Motorola will transfer without warranty by Motorola to the Authority, or an entity designated by the Authority, all right, title and interest in the System and all System Equipment which Motorola owns, including any improvements to Sites (subject to any rights of Site Owners or their lessors under a Site Access and Use Agreement, which rights will be superior to those of the Authority under this Section 5.5) or Facilities, whether or not funded with BTOP Grant funds. Software will be licensed to the transferee. The transfer shall occur, at no charge to transferee (other than the transferee will pay any applicable taxes on the transfer of the transferred assets). The transfer is subject to the following conditions: (i) the BTOP Grant period has expired; (ii) Motorola receives the full benefit of depreciation of all System assets; (iii) the transferee expressly agrees to fulfill the terms and conditions of the BTOP Grant relating to the System which are still applicable at the time of transfer and which are fully disclosed to the transferee; (iv) the NTIA gives its written approval of and contemporaneously with the transfer; (v) the transferee and the Authority expressly agree to assume all of Motorola's obligations concerning the transferred assets and agrees to indemnify, defend and hold harmless Motorola, its subcontractors, and their employees, agents, and officers from any and all liability, expense, judgment, suit, cause of action, or demand concerning or related to the transferred assets, the

Sites or Facilities, or the operation and maintenance of the System which arises following the transfer (Motorola shall remain liable for all pre-transfer liabilities); and (vi) Motorola and the Authority must each in good faith make representations and warranties to the other that there are no material and adverse liabilities, known defects related to the Systems, or any material financial, tax, risk, or operational effects that would be caused by the transfer. The Parties agree to negotiate the specific details of the transfer agreement to fully comply with any applicable terms and conditions of the BTOP Grant.

## **SECTION 6. SITES, FACILITIES, AND SITE CONDITIONS**

6.1 ACCESS TO AND USE OF SITES AND FACILITIES. The Specifications (Exhibit B) identify the Sites and Facilities that Motorola intends to access and use in the Deployment Stage and continuously throughout the term of this Agreement. Sections 3.3, 3.4, and 3.5 above describes the Parties' respective responsibilities for obtaining access to Sites and for Site Remediation Work and Site Remediation Costs necessary to make Sites in "installation ready" condition. In addition, the Authority at its cost and expense will provide or procure during the term of this Agreement, and will maintain and support or cause to be maintained and supported in "installation ready" condition the Facilities specified in Exhibit B. All Facilities will be available for Motorola's continuous, uninterrupted use at no cost in connection with the System, including all proper and necessary operation, management, use and maintenance.

6.1.1 The term "installation ready" means (i) the Site is accessible, available, ready and suitable for Motorola to install the intended Equipment or Software at the Site consistent with Motorola's design requirements, and (ii) the Facilities are accessible, available, ready and suitable for Motorola to use as part of or in connection with the System consistent with the System's design requirements.

For Sites, such design requirements are addressed in the Specifications and include but are not limited to: (i) Site access by authorized personnel of Motorola and its subcontractors; (ii) the Site is accessible by vehicle; (iii) the Site has available tower or other space to install the Equipment or Software, and for Motorola to perform its related installation, operation, maintenance and other services; (iv) the Site has available, adequate and accessible electrical power (including electrical outlets, distribution, equipment and connections); (v) if applicable, the Site has adequate telephone or other communication lines (including modem access and adequate interfacing and networking capabilities); (vi) the Site has, if applicable, adequate wind and ice loading capabilities; (vii) the Site has adequate air conditioning if the Site is inside a building requiring air conditioning for the proper operation, use and maintenance of the Equipment or Software; (viii) the Site is in full compliance with all necessary construction and building permits, zoning requirements or variances, licenses, and any other governmental (including FCC and FAA) approvals, and with all environmental laws and regulations; (ix) the Site has structural integrity and is in full compliance with all applicable and reasonable safety and security requirements, including grounding and applicable industry and OSHA standards; and (x) the Site has other physical characteristics as may be reasonably requested by Motorola, including compliant with R-56 standards.

In interpreting clause (viii) above, the Parties acknowledge Special Award Condition number 12 of the BTOP Grant Award Documents (Exhibit T), which in pertinent part requires demonstrated compliance with the National Historic Preservation Act of 1966 and with all other applicable federal, state, and local environmental laws and regulations, and agree that a Site must be in demonstrable compliance with Special Award Condition number 12 to be installation ready. Further, Special Award Condition number 12 requires Motorola to complete any required consultations with the State Historic Preservation Office ("SHPO") and the appropriate federally recognized Native American tribes and to comply with all conditions placed on the project as the result of the consultation processes. Further, Special Award

Condition number 12 requires Motorola to notify the NTIA within 24 hours of receipt of any notices of foreclosure; notices for continuing consultation received from the SHPO, Tribal Historic Preservation Officer, USFWS, or other consulting party; or notices of noncompliance received from consulting authorities or regulatory agencies. The Authority agrees to provide promptly to Motorola any such notices that it receives.

For Facilities, such design requirements are addressed in the Specifications.

- 6.1.2 Sites for which Motorola has or intends to enter into a Site Access and Use Agreement and Facilities designated for use by Motorola under this Agreement will be “qualified” by the process described as follows. Throughout the term of this Agreement, the Authority, with respect to Facilities, or the owner or controller of the Site (“Site Owner”) with respect to a particular Site(s), will provide to Motorola all available records, structural, environmental or other analytical reports (including R56 compliance reports), photographs, drawings, certifications, and other information in the Site Owner’s or the Authority’s possession concerning each Site or Facility, and concerning the issue of whether the Site or Facility is in installation ready condition. If the Site or Facility is not owned or leased by the Authority but is being provided by some other third party with whom the Authority has a relationship, then the Authority will provide such information to Motorola if it is available to the Authority.

Before installing the Equipment or Software at a Site, Motorola will inspect the Site and conduct analysis, testing, and other due diligence activities concerning the Site as Motorola deems necessary or proper, and will provide a written report that advises the Site Owner and Authority of any apparent deficiencies or non-conformities with the requirements of this Section. Before using with or connecting the System to any Facility, Motorola will conduct analysis and other due diligence activities concerning the Facility as Motorola deems necessary or proper, and will provide a written report that advises the Authority of any apparent deficiencies or non-conformities with the requirements of this Section. Because the Authority is responsible for Facilities and access to them, the reports and advice given by Motorola to the Authority concerning the Sites and Facilities will be without any warranty from Motorola or any liability except as otherwise provided in Section 3.5.1(i) on the part of Motorola. The Authority may at its expense employ other consultants, contractors or experts to advise it on any Site or Facility.

- 6.1.3 A Site or Facility that has no uncorrected deficiencies or non-conformances is “qualified” for Motorola’s use in connection with the System. After a Site or Facility is qualified, the Authority will not modify and will not authorize another party to modify that Site or Facility (including adding to or changing equipment installed at or connected to the Site or Facility) that would negatively affect the System without first receiving Motorola’s prior written consent which will not be unreasonably withheld or delayed.

- 6.2 Motorola reserves the right, but has no duty, to provide at its own cost, Sites or Facilities or substitute Sites or Facilities, if in its reasonable judgment such action: (i) will enable it to satisfy one or more of its Service Level commitments, or (ii) is appropriate to deploy, operate, manage, maintain or improve the System (e.g. coverage, capacity, stability, user accessibility, functionality, security, and the like).

- 6.3 ACCESS TO AND INSPECTION OF SITES. To the extent permitted by the Site Owners, the Authority shall have access to Sites as may be reasonable or necessary (i) for the performance of its duties under this Agreement and the PSST Lease, or (ii) for it to observe and inspect Motorola’s operation, management and maintenance of the System. The Authority’s access rights will be subject to Motorola’s or the Site Owner’s reasonable rights, restrictions or rules concerning Site security and access, including the provisions of the applicable Site Access and Use Agreement. Motorola shall cooperate with the Authority to provide regulatory authorities and

parties with contractual rights (such as the PSST) access and inspection rights to Sites on the same terms as the Authority.

## **SECTION 7. TRAINING**

No training to be provided by Motorola has been identified or offered at this time other than as described in Training (Exhibit U). If the Authority desires other training, then it will be addressed as an Option under Section 3.14.2.

## **SECTION 8. SYSTEM READINESS**

- 8.1 **COMMENCEMENT OF TESTING.** Motorola, in consultation with the Authority, will determine what tests are appropriate for the System (by Phase) and when those tests are to be performed. Motorola agrees the System testing will conform to industry standards or standards then defined by the FCC and the results of the testing must confirm the System operates in compliance with the Specifications, including in compliance with applicable FCC requirements that exist as of April 30, 2013. The Authority may observe all testing and have access to all testing results pertaining to then applicable FCC requirements, subject to the protections of Section 15. The Parties will consult upon a test plan which will be followed by Motorola to demonstrate to the Authority (and its Technical Advisory Committee) that the applicable Phase of the System is ready for use. Motorola will provide the Authority with its test plan at least sixty (60) days prior to any testing date. The Authority will provide Motorola any comments on the proposed test plan not more than thirty (30) days after receipt. If Motorola and the Authority do not concur that the test plan conforms to the standards described in this paragraph, the Authority reserves its rights to dispute the test results and does not waive any claim to the contrary. Motorola will provide to the Authority prior notice before the demonstration of readiness is to occur. The prior notice will be at least ten (10) days for the first Phase and at least five (5) days for subsequent Phases.
- 8.2 **SYSTEM READINESS.** System Readiness will occur on a Phase-by-Phase basis when Motorola, in concurrence with the Authority, demonstrates to the Authority's reasonable satisfaction that the applicable Phase of the System is ready for use in compliance with the terms of this Agreement. Although FCC licensing matters and compliance with FCC requirements are the responsibility of the Authority, System Readiness will include evidence that the System complies with FCC requirements as they exist when testing described in Section 8.1 commences. Upon that demonstration, Motorola will memorialize this event by promptly executing a System Readiness Certificate by Phase (Exhibit H) and delivering a copy to the Authority. Minor omissions or variances in the Phase of the System that do not materially impair the operation of the Phase of the System will not postpone System Readiness for that particular Phase, but will be corrected according to a punch list schedule developed by Motorola which is mutually agreed upon by the Authority and Motorola. The concurrence by the Authority on a System Readiness Certificate (as evidenced by execution) will not be unreasonably delayed or withheld. In the event that the Authority does not concur that System Readiness has occurred, the Authority shall provide a notice of deficiency in writing to Motorola setting forth the deficiency in reasonable detail. The Parties will negotiate in good faith regarding the steps necessary and timelines for the correction of a deficiency or any dispute as to whether a deficiency exists. In the event that the Parties cannot agree, then either Party may exercise the Dispute resolution process described in Section 11 below.
- 8.3 **FINAL PROJECT READINESS.** When Final Project Readiness occurs, Motorola will promptly memorialize this final Deployment Stage event by so indicating on the appropriate Readiness certificate. Final Project Readiness for the Deployment Phase shall include the correction of all minor omissions or variances from prior Phases and shall not be subject to a punch list schedule. Any dispute regarding the Final Project Readiness shall be handled in the same manner as Section 8.2.

## **SECTION 9. REPRESENTATIONS AND WARRANTIES**

- 9.1 **RELATION TO SERVICE LEVELS.** During the term of this Agreement, Motorola promises to meet or exceed the Service Levels as defined in Section 2.28 and as set forth in Exhibit I, subject to: (i) Motorola's excused non-performance due to Force Majeure events; (ii) Motorola's excused non-performance due to the Authority's failure to perform its contractual duties, including the failure to provide the Facilities and Licensed Frequencies, if that failure causes or materially contributes to Motorola's non-performance; or (iii) Motorola's excused non-performance at any individual Site due to the failure by a Site Owner to provide a Site, or to perform its contractual duties under any Site Access and Use Agreement if its failure causes or materially contributes to Motorola's non-performance, provided, however, that Motorola will not be excused from its Service Level commitments as to other Sites. Because Motorola is the owner of the System and has made Service Level commitments as set forth in Exhibit I, Motorola makes no representation or warranty concerning the System, Equipment or Software except as expressly set forth below.
- 9.2 **SYSTEM FUNCTIONALITY.** Motorola represents that, when System Readiness for a Phase occurs, that Phase of the System will comply with the Specifications applicable to Motorola's obligations in all material respects other than punch list items, which punch list items will be remedied in accordance with the schedule (If punch list items exist). Upon the date which is thirty (30) days after System Readiness of the Phase, this System functionality representation is fulfilled. Motorola is not responsible for System performance deficiencies that are caused by ancillary equipment (other than the Equipment) or Devices which are not furnished by Motorola.
- 9.3 **DISCLAIMER OF WARRANTIES.** THE SYSTEM SHALL COMPLY IN ALL RESPECTS TO THE SERVICE LEVEL COMMITMENTS MADE BY MOTOROLA AS PROVIDED IN SECTION 9.1. OTHER THAN THE SERVICE LEVEL COMMITMENTS MADE BY MOTOROLA IN SECTION 9.1 AND THE COMPLETION OF THE SYSTEM IN ACCORDANCE WITH SECTION 9.2, MOTOROLA MAKES NO WARRANTY CONCERNING THE SYSTEM OR ITS PERFORMANCE AND MOTOROLA DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

## **SECTION 10. DELAYS AND REGULATORY CHANGES**

- 10.1 **FORCE MAJEURE.** Except as otherwise expressed in this Agreement, neither Party will be liable for its non-performance or delayed performance if caused by a Force Majeure. During the Deployment Stage, a Party that becomes aware of a Force Majeure that will significantly delay performance will notify the other Party promptly (but in no event later than ten (10) days) after it discovers the Force Majeure. If a Force Majeure occurs, the Parties will act in good faith to mitigate the effects of the Force Majeure. If a Force Majeure occurs that prevents or delays either Party's performance for more than ninety (90) days during the Deployment Stage, then the Parties shall meet and confer to find an appropriate work-around. In addition, if Motorola becomes aware that a Force Majeure will cause it to fail to satisfy its Service Level commitments as set forth in Exhibit I, then it will notify the Authority promptly after it discovers the Force Majeure and Motorola will be excused from any penalties or liabilities otherwise owed to the Authority for failing to meet or exceed its Service Level commitments for as long as the Force Majeure remains in effect. Notwithstanding the foregoing, Motorola acknowledges that one of the primary functions of the System is to be available for public safety purposes during crisis events and Motorola shall take all reasonable steps, in consultation with the Authority, to restore full operation of the System.
- 10.2 **REGULATORY CHANGES.** This Agreement and the operation of the System are subject to the possibility of Regulatory Changes. Upon the occurrence of a Regulatory Change that would result in a material change in the operation of the System as currently contemplated, the Authority

and Motorola, at the request of either Party, shall meet and confer to discuss available options or changes necessary for the continued operation of the System upon such Regulatory Change becoming effective. If the operation of the System can be reasonably modified to comply with the Regulatory Change, then the Authority and Motorola shall agree upon an equitable adjustment in the obligations of the Parties to take into account any increase in capital expenditures or operating cost as a result of such Regulatory Change. Such equitable adjustment may take the form of (i) an allocation of cost for new or upgraded equipment, software or Site infrastructure, (ii) an increase in the User Fees, (iii) an extension of the Term (to the extent permitted by the NTIA under the BTOP Grant requirements) or time to perform, or (iv) the Parties may agree mutually to terminate the Agreement.

## **SECTION 11. DISPUTES**

The Parties will use the following procedure to address any dispute arising under this Agreement (a "Dispute").

- 11.1 **GOVERNING LAW.** This Agreement will be governed by and construed in accordance with the laws of the State of California.
- 11.2 **NEGOTIATION AND ESCALATION.** Either Party may initiate the Dispute resolution procedures by sending a notice of Dispute ("Notice of Dispute") to the other Party. The Parties will attempt to resolve the Dispute promptly through good faith negotiations initially by the Parties' respective project managers. If the Dispute has not been resolved within fifteen (15) days from the Notice of Dispute, the Parties will escalate the Dispute to the senior managers identified in Section 16.8. If the Dispute has not been resolved within thirty (30) days from the Notice of Dispute, either Party may escalate the dispute to executive officers of the Parties. If the Dispute has not been resolved within forty-five (45) days from the Notice of Dispute, then either Party may give written notice to commence mediation pursuant to Section 11.3 ("Notice of Mediation").
- 11.3 **MEDIATION.** Within thirty (30) days of receiving a Notice of Mediation, the Parties will choose an independent mediator through Judicial Arbitration and Mediation Services ("JAMS"). Neither Party may unreasonably withhold consent to the selection of a mediator. If the Parties are unable to agree upon a mediator, either Party may request that JAMS select the mediator. Each Party will bear its own costs of mediation, but the Parties will share the cost of the mediator equally. Each Party will participate in the mediation in good faith and will be represented at the mediation by a business executive with authority to settle the Dispute.
- 11.4 **LITIGATION, VENUE AND JURISDICTION.** If a Dispute remains unresolved for sixty (60) days after receipt of the Notice of Mediation, either Party may then submit the Dispute to a court of competent jurisdiction in the State of California. Each Party irrevocably agrees to submit to the exclusive jurisdiction of the courts in such state over any claim or matter arising under or in connection with this Agreement.
- 11.5 **CONFIDENTIALITY.** All communications whether written or verbal pursuant to subsections 11.2 and 11.3 will be treated as compromise and settlement negotiations for purposes of applicable rules of evidence and any additional confidentiality protections provided by applicable law, and are not admissible in any litigation. The use of these Dispute resolution procedures will not be construed under the doctrines of laches, waiver or estoppel to affect adversely the rights of either Party.

## **SECTION 12. DEFAULT AND TERMINATION**

- 12.1 **DEFAULT BY A PARTY.** If either Party fails to perform a material obligation under this Agreement, the other Party may consider the non-performing Party to be in default unless the

default is excused by an event of Force Majeure. The non-defaulting Party may assert a default claim by giving the defaulting Party a written and detailed notice of default (“Notice of Default”). In the event that the Authority fails to pay any amount when due, such as the Contract Price for any change in the scope of work under the Agreement or any Option or User Fees due and payable to Motorola, and such action is not in connection with a good faith dispute, then the Authority shall cure such non-payment within ten (10) business days of the Notice of Default, provided, however, that the Authority shall only have the benefit of such cure period twice in any given twelve month period. Concerning all other defaults, the defaulting Party will have thirty (30) days after receipt of the Notice of Default to either cure the default or, if the default is not curable within thirty (30) days, provide a written cure plan that is acceptable to the non-defaulting Party. The non-defaulting Party must act reasonably in determining whether a cure plan is acceptable and must make good faith and collaborative efforts to agree upon a mutually acceptable cure plan. The defaulting Party will begin implementing the cure plan immediately after receipt of notice by the other Party that it approves the cure plan.

- 12.2 REMEDIES FOR FAILURE TO CURE. If a defaulting Party fails to cure the default as provided above in Section 12.1, unless otherwise provided in this Agreement or unless otherwise agreed in writing, the non-defaulting Party may resort to any available legal or equitable remedy, to enforce the terms of this Agreement, including termination of any unfulfilled portion of this Agreement and recover from the defaulting Party damages recoverable under applicable law but subject to Section 14 below. Notwithstanding the preceding sentence, the Authority acknowledges that termination of the Agreement would result in undue financial hardship to Motorola because Motorola has incurred substantial costs before this Agreement was formed (including paying its Site Remediation Costs) as well as during the early part of the contract performance and Motorola will need the User Fees to be paid for the full term of the Agreement to achieve its financial objectives concerning this Agreement. Furthermore, during the Operation Stage, Motorola acknowledges that termination of the Agreement would result in financial hardship to both the Authority and the Eligible Users because of the substantial resources in terms of Sites and Facilities that have been committed to the System and would potentially create a danger to public safety as a result of the loss of the System. Based on the foregoing acknowledgements, the Parties agree that Motorola during the Operation Stage and the Authority at any time may not terminate this Agreement for an uncured default if monetary damages are an adequate remedy, provided, however, that the failure of a Party to pay a final monetary judgment for damages that has been obtained by the other Party within sixty (60) days shall be grounds for termination. The Parties further agree that even if monetary damages are not an adequate remedy, Motorola during the Operation Stage and the Authority at any time will not terminate this Agreement for the other Party’s uncured default without completing a “meet and confer” process with senior managers of both Parties for an additional time period to be mutually agreed but not less than thirty (30) days. The purpose of this meet and confer process is for the Parties to try in good faith to resolve the claimed default without terminating the Agreement so as to avoid the undue financial hardship and loss of the System described above. In the event of termination for default, the defaulting Party will promptly return to the non-defaulting Party any of its Confidential Information and the non-defaulting Party will mitigate damages.
- 12.3 POST TERMINATION COVENANT. Following a termination of this Agreement by either Party pursuant to this Section 12, the Parties shall cooperate on a plan to provide for the orderly transition of the various components of the System to their respective owners, including the Equipment, the Sites and the Facilities. The Parties will invite the Site Owners to participate in the transition planning.
- 12.4 TERMINATION. Except as expressly provided in this Agreement, by mutual agreement executed by an authorized senior officer of both Parties, or by operation of law, this Agreement may not be terminated before the expiration of the term of this Agreement. Notwithstanding the preceding sentence, the performance obligations of Motorola under this Agreement during the Deployment

Stage are contingent upon the continuing approval of the NTIA. If, during the Deployment Stage, the BTOP Grant is terminated for any reason, either Party shall have the right to terminate this Agreement by giving written notice of termination to the Authority within forty five (45) days from BTOP Grant termination. Before exercising this right, the Parties will meet and confer to discuss the Grant termination and whether there are any reasonable financing alternatives.

## **SECTION 13. INDEMNIFICATION AND INSURANCE**

- 13.1 **GENERAL INDEMNITY BY MOTOROLA.** Motorola will indemnify, defend, and hold harmless the Authority, its members who are acting in their capacity as a member of the Authority and not in their capacity as a Site Owner or in any other capacity, and their respective elected officials, directors, officers, employees, and agents from any and all Damages (as defined in Section 13.3) which may accrue against an Indemnified Party (as defined in Section 13.4) to the extent it is caused by the default, negligence or intentional misconduct of Motorola, its subcontractors, or their employees or agents, while performing their duties under this Agreement. This section sets forth the full extent of Motorola's general indemnification of the Authority from liabilities that are in any way related to Motorola's performance under this Agreement. The indemnification obligations in this section shall survive the termination or expiration of this Agreement.
- 13.2 **GENERAL INDEMNITY BY THE AUTHORITY.** The Authority will indemnify, defend, and hold harmless Motorola, its subcontractors, and their respective shareholders, directors, officers, employees, and agents from any and all Damages (as defined in Section 13.3) which may accrue against an Indemnified Party (as defined in Section 13.4) to the extent it is caused by the default, negligence or intentional misconduct of the Authority, its members who are acting in their capacity as a member of the Authority and not in their capacity as a Site Owner or in any other capacity its other contractors, or their employees or agents, while performing their duties under this Agreement. This section sets forth the full extent of the Authority's general indemnification of Motorola from liabilities that are in any way related to the Authority's performance under this Agreement. The indemnification obligations in this section shall survive the termination or expiration of this Agreement.
- 13.3 **DEFINITION OF DAMAGES.** As used herein, "Damages" shall mean all liabilities, demands, claims, actions or causes of action, judicial proceedings, assessments, levies, losses, damages, costs and expenses, in each case as awarded by a court or arbitrator, including without limitation, reasonable attorneys', accountants', investigators', and experts' fees and expenses sustained or incurred in connection with the defense of any such liability.
- 13.4 **DEFENSE OF THIRD PARTY CLAIMS.** Promptly following receipt of any written claim or legal proceeding asserted by a person or entity which is not a party to this Agreement (a "Third Party Claim"), the Party which is indemnified pursuant to this Section 13 ("Indemnified Party") shall promptly notify the Party who has an obligation to indemnify pursuant to this Section 13 ("Indemnifying Party") of such claim in writing. The Indemnifying Party shall have a period of 30 days (or such lesser period as may be required to timely respond to a Third Party Claim) following the receipt of such notice to assume the defense thereof and the Indemnifying Party shall thereafter undertake and diligently pursue the defense of the Third Party Claim. The Indemnifying Party shall reimburse the Indemnified Party for any legal expense reasonably incurred by the Indemnified Party to timely respond to a Third Party Claim prior to the Indemnifying Party assuming the defense thereof. The Indemnifying Party shall not consent to entry of judgment or enter into any settlement agreement, without the consent of the Indemnified Party, which does not include a complete and unconditional release of the Indemnified Party or which imposes injunctive or other equitable relief against the Indemnified Party. The Indemnified Party shall be entitled to participate in, but not control, the defense thereof, with counsel of their choice and at their own expense. If the Indemnifying Party fails to assume and diligently pursue the defense of such Third Party Claim, the Indemnified Party may defend against such Third Party Claim in such

manner as they may deem appropriate, including without limitation settlement thereof on such terms as the Indemnified Party may deem appropriate, and to pursue such remedies as may be available to the Indemnified Party against the Indemnifying Party.

### 13.5 PATENT AND COPYRIGHT INFRINGEMENT.

13.5.1 Motorola will defend at its expense any suit brought against the Authority to the extent it is based on a third-party claim alleging that (i) the Equipment that is manufactured by Motorola or (ii) the Motorola Software (collectively referred to in this Section 13.5. as "Product") directly infringes a United States patent or copyright ("Infringement Claim"). Motorola's duties to defend and indemnify are conditioned upon: the Authority promptly notifying Motorola in writing of the Infringement Claim; Motorola having sole control of the defense of the suit and all negotiations for its settlement or compromise; and the Authority providing to Motorola cooperation and, if requested by Motorola, reasonable assistance in the defense of the Infringement Claim. In addition to Motorola's obligation to defend, and subject to the same conditions, Motorola will pay all damages finally awarded against the Authority by a court of competent jurisdiction for an Infringement Claim or agreed to, in writing, by Motorola in settlement of an Infringement Claim.

13.5.2 If an Infringement Claim occurs, or in Motorola's opinion is likely to occur, Motorola may at its option and expense: (a) procure for the Authority the right to continue using the Product; (b) replace or modify the Product so that it becomes non-infringing while providing functionally equivalent performance; or (c) if title to the Product has transferred to the Authority, accept the return of the Product and grant the Authority a credit for the Product, less a reasonable charge for depreciation. The depreciation amount will be calculated based upon generally accepted accounting standards.

13.5.3 Motorola will have no duty to defend or indemnify for any Infringement Claim that is based upon: (a) the combination of the Product with any software, apparatus or device not furnished by Motorola; (b) the use of ancillary equipment or software not furnished by Motorola and that is attached to or used in connection with the Product; (c) the Product is designed or manufactured in accordance with the Authority's designs, specifications, guidelines or instructions, if the alleged infringement would not have occurred without such designs, specifications, guidelines or instructions, if applicable; (d) a modification of the Product by a party other than Motorola; (e) use of the Product in a manner for which the Product was not designed or that is inconsistent with the terms of this Agreement; or (f) the failure by the Authority to install an enhancement release to the Motorola Software that Motorola recommends and is intended to correct the claimed infringement. In no event will Motorola's liability resulting from its indemnity obligation to the Authority extend in any way to the Authority's revenues, and any surcharge the Authority charges Eligible Users to recover the Authority's operating costs shall not be treated as revenue.

13.5.4 This Section 13.5 provides the Authority's sole and exclusive remedies and Motorola's entire liability in the event of an Infringement Claim. The Authority has no right to recover and Motorola has no obligation to provide any other or further remedies, whether under another provision of this Agreement or any other legal theory or principle, in connection with an Infringement Claim. In addition, the rights and remedies provided in this Section 13.5 are subject to and limited by the restrictions set forth in Section 14. However, the rights and remedies provided under this Section 13.5 do not affect the rights and duties of the Parties under other provisions of this Agreement, such as Service Level or System Loading commitments.

13.6 **MOTOROLA'S INSURANCE REQUIREMENTS.** During the term of this Agreement, Motorola will obtain and maintain at its expense such insurance as it (through its Insurance Department

or insurance brokers or advisors) deems to be reasonable and appropriate, subject to the minimum requirements contained in this Section 13.6. During the Deployment Stage, Motorola will obtain and maintain at its expense the insurance as provided in Motorola's Insurance Requirements attached hereto as Exhibit Q. During the Operation Stage, Motorola will maintain at its expense the insurance as provided in Motorola's Insurance Requirements attached hereto as Exhibit R. Promptly after the execution of this Agreement, Motorola will provide to the Authority a Certificate of Insurance (standard Accord form) evidencing this insurance and the renewal of such insurance on an annual basis. The Commercial General Liability policy will include as additional insureds, "The BayRICS Authority and each State and local government within the State of California that provides Sites for the BayWEB project." Insurance afforded by the additional insured blanket endorsement shall apply as primary insurance to any other insurance available to the Additional Insureds with respect to any claims arising out of this Agreement, and such insurance shall apply separately to each insured against whom claim is made or suit is brought. The insurance provided by Motorola under this Agreement is not intended to and does not limit or qualify Motorola's other obligations under this Agreement. All coverages shall be issued by companies which hold a current policy holder's alphabetic and financial size category rating of not less than A- V, according to the current Best's Key Rating Guide or a company of equal financial stability that is approved by the Authority's Insurance Manager. Motorola will cause its subcontractor(s) to comply with similar insurance requirements as reasonably determined by Motorola's Insurance Department in coordination with its insurance brokers and advisors.

- 13.7 THE AUTHORITY'S INSURANCE REQUIREMENTS. During the term of this Agreement and primarily to protect the Sites and Facilities from damage and lost use, the Authority will obtain and maintain at its expense insurance as provided in the Authority's Insurance Requirements (Exhibit S). Promptly after the execution of this Agreement, the Authority will provide to Motorola a Certificate of Insurance (standard Accord form) evidencing this insurance. The Commercial General Liability policy will include Motorola as an additional insured. Insurance afforded by the additional insured (blanket) endorsement shall apply as primary insurance to any other insurance available to the Additional Insureds with respect to any claims arising out of this Agreement, and such insurance shall apply separately to each insured against whom claim is made or suit is brought. The insurance provided by the Authority under this Agreement is not intended to and does not limit or qualify the Authority's other obligations under this Agreement. All coverages shall be issued by companies which hold a current policy holder's alphabetic and financial size category rating of not less than A- V, according to the current Best's Key Rating Guide or a company of equal financial stability that is approved by the Motorola's Insurance Manager. Notwithstanding the foregoing, the Authority may participate in a public agency risk pool, in which case the insurance coverage shall be issued by such entity. The Authority will cause its subcontractor(s) to comply with similar insurance requirements as reasonably determined by its insurance brokers and advisors.

#### **SECTION 14. LIMITATION OF LIABILITY**

- 14.1 Motorola's total liability, whether for breach of contract, warranty, negligence, strict liability in tort, indemnification, or otherwise will be limited to the direct damages recoverable under law, but not to exceed the "Cap Amount." Until Final Project Readiness occurs, the "Cap Amount" means \$10,000,000, except for any damages for personal injury, death, damage to tangible property, or liability caused by Motorola's intentional torts or gross negligence, which are exclusive of the Cap Amount. After Final Project Readiness occurs the term "Cap Amount" means the sum of the User Fees plus the Additional Fees, if any, that the Authority actually paid to Motorola during the entire calendar year that precedes the year in which the claim arose, or \$10,000,000, whichever is greater, except for any damages for personal injury, death, damage to tangible property, or liability caused by Motorola's intentional torts or gross negligence, which are exclusive of the Cap Amount. Motorola will not be liable for any loss or damage to the extent caused by a Device or

software application not provided by Motorola. With respect to any damages in connection with Section 13.5, the Cap Amount shall be increased by \$5,000,000.

- 14.2 The Authority's total liability, whether for breach of contract, warranty, negligence, strict liability in tort, indemnification, or otherwise will be limited to the damages recoverable under law, but not to exceed the "Cap Amount." Until Final Project Readiness occurs, the "Cap Amount" means \$10,000,000, except for any damages for personal injury, death, damage to tangible property, or liability caused by the Authority's intentional torts or gross negligence, which are exclusive of the Cap Amount. After Final Project Readiness occurs the term "Cap Amount" means the sum of the User Fees plus the Additional Fees, if any, that the Authority actually paid to Motorola during the entire calendar year that precedes the year in which the claim arose, or \$10,000,000, whichever is greater, except for any damages for personal injury, death, damage to tangible property, or liability caused by the Authority's intentional torts or gross negligence, which are exclusive of the Cap Amount.
- 14.3 ALTHOUGH THE PARTIES ACKNOWLEDGE THE POSSIBILITY OF SUCH LOSSES OR DAMAGES, THEY AGREE THAT MOTOROLA WILL NOT BE LIABLE FOR ANY COMMERCIAL LOSS; INCONVENIENCE; LOSS OF USE, TIME, DATA, GOOD WILL, REVENUES, PROFITS OR SAVINGS; OR OTHER SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO OR ARISING FROM THIS AGREEMENT. This limitation of liability provision survives the expiration or termination of the Agreement and applies notwithstanding any contrary provision, but it is not intended to diminish any insurance protection or benefits obtained by Motorola pursuant to Section 13.6 above or by the Authority pursuant to Section 13.7 above.

## **SECTION 15. CONFIDENTIALITY, REPORTING AND PROPRIETARY RIGHTS**

- 15.1 **CONFIDENTIAL INFORMATION.** The Parties will use reasonable efforts to avoid sharing Confidential Information with each other. However, during the term of this Agreement, the Parties may provide each other with Confidential Information. Each Party will: (i) maintain the confidentiality of the other Party's Confidential Information and not disclose it to any third party, except as authorized by the disclosing Party in writing or as required by a court of competent jurisdiction; (ii) restrict disclosure of the Confidential Information to its employees who have a "need to know" and not copy or reproduce the Confidential Information; (iii) take necessary and appropriate precautions to guard the confidentiality of the Confidential Information, including informing its employees who handle the Confidential Information that it is confidential and is not to be disclosed to others, but these precautions will be at least the same degree of care that the receiving Party applies to its own confidential information and will not be less than reasonable care; and (iv) use the Confidential Information only in furtherance of the performance of this Agreement. Confidential Information is and will at all times remain the property of the disclosing Party, and no grant of any proprietary rights in the Confidential Information is given or intended, including any express or implied license, other than the limited right of the recipient to use the Confidential Information in the manner and to the extent permitted by this Agreement. Motorola acknowledges that Authority is a public agency that is subject to document requests pursuant to the California Public Records Act and Freedom of Information Act, if applicable ("Acts"). Authority shall notify Motorola within five (5) business days of receiving a request under the Acts for any records which would constitute Motorola's Confidential Information and to the extent allowed by law, Authority shall apply exceptions to disclosure of the Motorola's Confidential Information that are applicable under the Acts. If a suit is filed with respect to any such request, Authority will cooperate in any action to intervene filed by Motorola. Notwithstanding any provision in this Agreement to the contrary, Motorola will indemnify and hold harmless Authority for any and all costs and attorney fees awarded to a prevailing plaintiff arising out of a suit brought by the prevailing plaintiff which result from Authority's actions, taken at Motorola's request, in

compliance with this provision in protecting Motorola's Confidential Information from public disclosure.

- 15.1.1 The Authority acknowledges that the BTOP Grant requires Motorola to report on various matters concerning the System and the grant funded project, and agrees that any disclosures that Motorola reasonably makes in support of its reporting or other BTOP Grant compliance responsibilities shall not be a breach of this Agreement. The Authority further acknowledges that the BTOP Grant application contains Motorola's confidential and trade secret information. Notwithstanding any provision suggesting the contrary, Motorola has no duty to provide the full BTOP Grant application to the Authority or any Eligible User Entity.
- 15.1.2 After the project kickoff but before System Readiness of the first Phase occurs, Motorola will develop the formats of reports that are intended to verify whether Motorola is satisfying its Service Level commitments (if applicable). Motorola will provide a draft of these report formats to the Authority, and the Authority will have at least three (3) weeks to provide to Motorola comments about and suggested revisions to the report formats. Motorola and the Authority will mutually agree on the final formats of the reports. After System Readiness of the first Phase and during the remainder of the term of this Agreement, Motorola will prepare and provide to the Authority actual reports using the applicable final format. Motorola will prepare and provide these reports on a quarterly basis. The Parties may, from time to time, add to or amend the report formats or the frequency with which they are provided. All of these reports and their report formats will be treated as Motorola's Confidential Information, but the Authority may use them in a manner that is consistent with the provisions of Section 15.1 and to enforce the terms of this Agreement in any mediation or court of law.
- 15.1.3 At any time(s) prior to Final Project Readiness, Motorola will notify the Authority of any known significant issues of its non-compliance with the Specifications, the reasons for the non-compliance, and the intended remediation efforts to establish or restore compliance with the Specifications. At any time(s) prior to Final Project Readiness, the Authority will notify Motorola of any known significant issues of its non-compliance with the Specifications (e.g., the Sites, Licensed Frequencies, or Facilities) or its duties concerning the Sites, Licensed Frequencies, or Facilities, the reasons for the non-compliance, and the intended remediation efforts to establish or restore compliance with the Specifications. In all cases, such notifications provided under this Section 15.1.3 are to be given within ten (10) days of discovery and are intended solely to identify System-related issues as early as possible so that they may be resolved effectively and with minimal disruption to the System, its operations, or its users; and such notifications are to be treated as the Confidential Information of the disclosing Party subject to disclosure to enforce the terms of this Agreement in any mediation or court of law. Written notifications and discussions shall be treated as settlement discussions and are not subject to admission for evidentiary purposes, provided, however, that this exclusion does not apply to underlying technical data or reports that would otherwise be discoverable.
- 15.1.4 The Authority at its expense may conduct criminal and driver history background checks of Motorola's officers, employees or agents, or those of its subcontractors, who would directly supervise or physically perform Motorola's contractual duties under this Agreement at the Authority's facilities or who would be given access to unencrypted data that is transmitted over the System or Confidential Information belonging to the Authority or another Eligible User Entity. If the Authority reasonably concludes that any such officer, employee or agent is unsuitable for working on this project as a result of the background check, it will so notify Motorola and Motorola will re-assign and remove that person from working on this project and will replace him or her promptly with another qualified person. Notwithstanding any such investigation conducted (or not conducted) by the Authority, Motorola and its subcontractors shall remain responsible for the actions of their respective agents and employees.

- 15.2 MUTUAL DEVELOPMENT OF NON-CONFIDENTIAL INFORMATION. The Parties will mutually develop, and each Party may disclose to third parties a general description of the System, the Deployment Phases, and other non-Confidential Information.
- 15.3 PRESERVATION OF MOTOROLA'S PROPRIETARY RIGHTS. Motorola, the third party manufacturer of any Equipment or Device, and the copyright owner of any Non-Motorola Software own and retain all of their respective Proprietary Rights in the Equipment, Device and Software, and nothing in this Agreement is intended to restrict their Proprietary Rights. All intellectual property developed, originated, or prepared by Motorola in connection with providing to the Authority or any other Eligible User the Equipment, Device, Software; use of those products; or related services remain vested exclusively in Motorola, and this Agreement does not grant to the Authority or any other Eligible User any shared development rights of intellectual property. Except as explicitly provided in the Software License Agreement, Motorola does not grant to the Authority or any other Eligible User, either directly or by implication, estoppel, or otherwise, any right, title or interest in Motorola's Proprietary Rights. The Authority and any other Eligible User will not modify, disassemble, peel components, decompile, otherwise reverse engineer or attempt to reverse engineer, derive source code or create derivative works from, adapt, translate, merge with other software, reproduce, distribute, sublicense, sell or export the Software, or permit or encourage any third party to do so. The preceding sentence does not apply to Open Source Software which is governed by the standard license of the copyright owner.
- 15.4 PRESERVATION OF AUTHORITY'S AND ELIGIBLE USER'S PROPRIETARY RIGHTS. The Authority and other Eligible Users own and retain all of their respective intellectual property rights including in and to any data that is transmitted over the System, but Motorola may reasonably access and use such data to perform its responsibilities under this Agreement.

## **SECTION 16. GENERAL**

- 16.1 TAXES. The Contract Price (and any transfer of ownership consideration under Section 5.5), User Fees, Additional Fees, and other fees to be paid to Motorola does not include any excise, sales, lease, use, property, or other governmental taxes, charges, assessments, fees or duties (collectively as used in this Section 16.1, "tax"), all of which will be paid by the Authority except as exempt by law. If Motorola is required to remit any of these taxes (including any taxes as a result of a tax audit), Motorola will send an invoice to the Authority. The Authority will pay to Motorola the amount of the taxes (including any interest and penalties) within sixty (60) days after the date of the invoice, or if the taxes are payable in connection with the User Fees, the applicable due date of the invoice. Each Party, to the extent of their respective ownership, will be solely responsible for reporting the Equipment, Software and (and Devices) for sales tax or personal property tax purposes, and Motorola will be solely responsible for reporting taxes on its income or net worth. Notwithstanding the preceding sentence, Motorola may seek to recover from parties other than the Authority (e.g., the U.S. federal government) the amount of corporate income taxes on the sale or transfer of ownership of the System or part thereof. Notwithstanding anything contained herein, to the extent Motorola is the owner of Equipment, software, devices or improvements at the Sites, Motorola shall be responsible for the payment of all taxes involved therewith.
- 16.2 ASSIGNABILITY AND SUBCONTRACTING. Except as otherwise provided herein, neither Party may assign this Agreement or any of its rights or obligations hereunder without the prior written consent of the other Party, which consent will not be unreasonably withheld or delayed. Any attempted assignment, delegation, or transfer without the necessary consent will be void. Notwithstanding the foregoing, Motorola may assign this Agreement to any of its affiliates or its right to receive payment without the prior consent of the Authority. In addition, in the event Motorola separates one or more of its businesses (each a "Separated Business"), whether by way of a sale, establishment of a joint venture, spin-off or otherwise (each a "Separation Event"),

Motorola may, without the prior written consent of the other Party and at no additional cost to Motorola, assign this Agreement such that it will continue to benefit the Separated Business and its affiliates (and Motorola and its affiliates, to the extent applicable) following the Separation Event. If there is a Separation Event, the obligations of Motorola under this Agreement will not be divided among multiple affiliates. Motorola may subcontract any of the work, but the use of any subcontractors shall not relieve Motorola of its obligations under this Agreement and Motorola shall notify the Authority of the identity of any subcontractors in advance and consult with the Authority if the Authority has concerns with respect to a particular subcontractor.

- 16.3 **WAIVER.** Failure or delay by either Party to exercise a right or power under this Agreement will not be a waiver of the right or power. For a waiver of a right or power to be effective, it must be in a writing signed by the waiving Party. An effective waiver of a right or power will not be construed as either a future or continuing waiver of that same right or power, or the waiver of any other right or power.
- 16.4 **SEVERABILITY.** If a court of competent jurisdiction renders any part of this Agreement invalid or unenforceable, that part will be severed and the remainder of this Agreement will continue in full force and effect.
- 16.5 **INDEPENDENT CONTRACTORS.** Each Party will perform its duties under this Agreement as an independent contractor. The Parties and their personnel will not be considered to be employees or agents of the other Party. Nothing in this Agreement will be interpreted as granting either Party the right or authority to make commitments of any kind for the other. This Agreement will not constitute, create, or be interpreted as a joint venture, partnership or formal business organization of any kind and does not create a formal cooperative or partnership legal entity.
- 16.6 **HEADINGS AND SECTION REFERENCES.** The section headings in this Agreement are inserted only for convenience and are not to be construed as part of this Agreement or as a limitation of the scope of the particular section to which the heading refers. This Agreement will be fairly interpreted in accordance with its terms and conditions and not for or against either Party.
- 16.7 **ENTIRE AGREEMENT.** This Agreement, including all Exhibits, constitutes the entire agreement of the Parties regarding the subject matter of the Agreement and supersedes all previous agreements, proposals, and understandings, whether written or oral, relating to this subject matter. This Agreement and its Exhibits may be amended or modified only by a written instrument signed by authorized representatives of both Parties. The preprinted terms and conditions found on any purchase order, acknowledgment or other form will not be considered an amendment or modification of this Agreement, even if a representative of each Party signs that document.
- 16.8 **NOTICES.** Notices required under this Agreement to be given by one Party to the other must be in writing and either personally delivered or sent to the address shown below by a recognized courier service, such as Federal Express, UPS, or DHL and will be effective upon receipt:

<p><b>Motorola Solutions, Inc.</b>          Attention: <u>Coyle Schwab</u>  <u>1001 Bayhill Drive, #200</u>  <u>San Bruno CA 94066</u>          Cell: <u>(630) 797-0666</u>  <a href="mailto:Coyle.Schwab@motorolasolutions.com">Coyle.Schwab@motorolasolutions.com</a></p>	<p><b>The Authority</b>          Attention: _____          _____          _____          Fax: _____</p>
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In addition to the above, any Notice of Dispute that is unresolved by the respective project managers of the Parties and any Notice of Default must be provided by both hard copy and email to senior management of a Party as follows:

<p><b>Motorola Solutions, Inc.</b>          Attention: _____          _____          _____          Fax: _____</p>	<p><b>The Authority</b>          Attention: _____          _____          _____          Fax: _____</p>
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A Party may change its notice contact person or address by giving the other Party notice of the change.

16.9 COMPLIANCE WITH APPLICABLE LAWS. Each Party will comply with all applicable federal, state, and local laws, regulations and rules concerning the performance of this Agreement or use of the System.

16.10 AUTHORITY TO EXECUTE AGREEMENT. Each Party represents that it has obtained all necessary approvals, consents and authorizations to enter into this Agreement and to perform its duties under this Agreement; the person executing this Agreement on its behalf has the authority to do so; upon execution and delivery of this Agreement by the Parties, it is a valid and binding contract, enforceable in accordance with its terms; and the execution, delivery, and performance of this Agreement does not violate any bylaw, charter, regulation, law or any other governing authority of the Party.

16.11 SURVIVAL OF TERMS. The following provisions will survive the expiration or termination of this Agreement for any reason: Section 3.10 (concerning Software); if any payment obligations exist, Sections 5.1, 5.2 and 5.3 (Contract Price and Invoicing and Payment); Section 5.5 (concerning any unperformed or continuing obligations relating to the transfer); concerning any continuing obligations, Section 10.1 (Force Majeure) Section 11 (concerning Disputes); Sections 13.1, 13.2, 13.3, 13.4, and 13.5 (Indemnification); Section 14 (Limitation of Liability); and Section 15.1, 15.3, and 15.4 (concerning Confidentiality and Proprietary Rights); and all of the General provisions in Section 16.

The Parties hereby enter into this Agreement as of the Effective Date.

<p>Motorola Solutions, Inc.</p> <p>By: _____          Name: _____          Title: _____          Date: _____</p>	<p>Bay Area Regional Interoperable          Communications System Authority</p> <p>By: _____          Name: _____          Title: _____          Date: _____</p> <p>Approved as to form:</p> <p>By: _____          General Counsel</p>
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## Proposed BayRICS Authority System Funding Plan

Revised 12/01/2011

### I. BACKGROUND

Bay Area Wireless Enhanced Broadband (BayWEB) is a public-private partnership to build and operate a next generation, wireless broadband network for the 10-County Bay Area. BayWEB will deploy a state-of-the-art 4G LTE (Long Term Evolution) wireless broadband network utilizing 700MHz spectrum reserved for public safety broadband use, and made available through a Federal Communications Commission (FCC) waiver granted to San Francisco, Oakland and San Jose.

BayWEB is governed by the Bay Area Regional Interoperable Communications System (BayRICS) Authority, a joint powers authority established in August 2011, comprised of representatives of seven Counties and three core cities making up the BayWEB geographic service area. BayWEB will be a public-private partnership between BayRICS, regional public safety agencies and Motorola, funded through a \$50,953,551 ARRA Broadband Technology Opportunities Program (BTOP) grant and \$21,890,086 from Motorola in matching funds. In addition, Motorola has agreed to pay additional costs of radio access network (RAN) site remediation costs, bringing the total project cost to approximately \$97,000,000.

Under its joint powers agreement (JPA), the Authority must adopt a "Systems Funding Plan" prior to entering into any system agreement. Section 2.05(d) also provides that the Systems Funding Plan should specify a means or formula for funding the design, construction, operation, maintenance, expansion, and lifecycle replacement of any systems that further the purposes of this Authority. In addition, Section 5.02(b) provides that the proposed plan shall be accompanied by a description of the Systems, and information to allow Members to determine the Systems' capability, data speeds, functionality, features, cost, financing and the expected impacts on individual Members. The specific requirements of the Systems Funding Plan are addressed in Section II.

At the September 7, 2011 Authority meeting, an ad hoc sub-committee was established to oversee the development of a Systems Funding Plan for BayWEB. This report describes a proposed plan for funding the Authority's participation in BayWEB, including projected costs of participation to Authority Member agencies, and a proposed three-year administrative funding plan. In addition, this report provides a plan for BayLOOP, a point-to-point microwave system that will be used for BayWEB backhaul connectivity. For purposes of this Systems Funding Plan, BayLOOP is treated as a sub-system of the BayWEB system.

#### Plan Highlights

- The funding plan assumes a "pass-through" model, in which all Authority administrative costs that exceed the total amount of annual member fees collected would be passed on to user agencies as a surcharge added to the base user fee paid to Motorola. Moreover, other costs specific to the BayWEB system, such as costs of billing, end user support, enhancing system coverage (roaming) or costs of backhaul are passed on to end-users whenever possible. The plan assumes that the user surcharge be established at \$5/user/month. However, potential backhaul costs may require the Authority to consider increasing the surcharge to cover those costs.
- Most of the costs to Members identified in this report will apply only to agencies that actually load users on the system. The BOOM Agreement with Motorola specifies that the Authority and its Members are not required to make minimum user commitments. Therefore, if a Member

commits no users, it will incur no user or device charges, and will not require back office connectivity or related costs.

- A Member that contributes radio sites to the system will incur site costs. However, the Member may control those costs somewhat through the site use agreement between the Member and Motorola. Only sites approved by the Member and specified in this site use agreement may be used in the system. If, for example, the lease cost for a site is found to be excessive, the agency and Motorola may choose to eliminate that site from consideration.
- Back office connectivity costs, *i.e.* the cost of connecting the dispatch center or public safety answering point (PSAP) to the core, will vary greatly from member to member. Back office costs will depend on the nature of the applications desired, the bandwidth required to operate those applications and the physical location of the facility to be connected. Therefore, this report does not attempt to estimate per-site or per-PSAP costs. Individual Members should estimate the costs to their agencies based on the circumstances of each individual facility.
- This report provides funding projections for the initial one-year period of system deployment and operation. User fees charged by Motorola may change annually after the first year, and roaming costs cannot be calculated with precision until after the coverage evaluation period, which will also occur during the first year of service. Assuming that these costs will remain somewhat consistent in future years, a three-year cost projection is included in Attachment A.

This initial funding plan is designed to meet the requirements of the Authority JPA and provide members with a clear indication of the costs to Members and to the Authority resulting from the deployment of the BayWEB service. The Plan will be updated regularly during year-one, and at least annually thereafter, as more precise system revenue and cost data become available.

## **II. SYSTEMS FUNDING PLAN COMPONENTS**

Section 2.04(d) of the BayRICS JPA Agreement identifies six components of a Systems Funding Plan:

### **1. *The design, construction, operation, maintenance, expansion and lifecycle replacement costs of the Systems.***

Design and construction costs for the BayWEB middle mile network will be funded by Motorola through American Recovery and Reinvestment Act (ARRA) Broadband Technology Opportunities Program (BTOP) grant award of \$50,953,551 and Motorola matching funds of \$21,890,086.

Backhaul costs of the network, if any, will be the responsibility of the Authority. These costs are discussed in section IV(2)(d) below.

Operation and maintenance costs, except for costs related to billing, collection of fees from end users and certain end user support functions will be the responsibility of Motorola. Motorola may recover the costs of operations and maintenance through user fees. User fees are described in detail in section IV(2)(c).

Under the proposed BOOM agreement, any system expansion requests from Motorola require the approval of the Authority, and would presumably be funded by Motorola. System expansion, upgrade or refresh requests from the Authority would be the responsibility of the authority and subject to the prior approval of the Board. No System expansion is anticipated in the initial three years of System deployment and operation.

Lifecycle replacement costs would not be incurred until year 10 or later. Given the unknown technology landscape and user base over that time period, any attempt to estimate replacement costs at this time would be mere guesswork. The Committee recommends that the Systems Funding Plan itself be refreshed at least annually and that a lifecycle replacement plan be phased in as more usage data becomes available and as new technology develops.

2. *Specification as to how site costs and/or site remediation (e.g., electrical, air conditioning, backup generators, and power) of specified antenna sites by jurisdiction shall be paid.*

Motorola has agreed to pay site remediation costs up to a \$24 million ceiling throughout the BTOP grant period (August 2013). This is anticipated to cover all costs of site remediation. If new sites are desired after May 31, 2012, the Authority may be required to pay remediation for those sites. Site owners are responsible for some recurring site costs, such as electrical usage, lease costs and the value of staff time to escort Motorola staff on the sites. Site costs are described in more detail in Section IV(1)(b).

3. *The estimated costs to be borne by the Authority should ownership of the Systems later be transferred to the Authority.*

At the end of the 10-year term, Motorola will transfer the system to the Authority at no cost to the Authority. Therefore, costs of operating and maintaining the system will not be incurred until year 10. Although it is assumed that the Authority would continue to fund system operation through user fees, the speculative nature of the technology landscape and user base 10 years in the future makes any attempt to estimate such costs and revenues mere guesswork. The Committee recommends that the Systems Funding Plan itself be refreshed at least annually and that an ownership transition plan be phased in as more usage data and as new technology develops.

4. *Good faith estimates of costs and types of devices that will be able to operate on the Public Safety System*

Device descriptions and projected costs are described in section IV(2)(a).

5. *Monthly user fees for the Systems*

Monthly user fees for the systems are described in section IV(2)(c).

6. *Identification of additional funding sources, if necessary*

The Authority has identified \$170,000 in funding for a General Manager/Project Management position in year one. It is anticipated that other funding sources may be desired to deploy additional backhaul solutions such as fiber loop redundancy, add additional sites, upgrade the system or adopt enhanced applications. Such potential funding sources should be identified and aggressively pursued throughout the initial years of the BayWEB system operation, and any additional funding sources will be included in annual revisions of the Systems Funding Plan.

In addition to the components set forth in Section 2.05(d), Section 5.02(b) also provides that the Systems Funding Plan shall be accompanied by a *description of the Systems, and information to allow Members to determine the Systems' capability, data speeds, functionality, features, cost, financing and the expected impacts on individual Members.*

The development of a final detail design is recognized to be an iterative process and will continue to be refined as the list of radio sites and backhaul facilities are finalized. A key feature of the Systems Funding Plan is the document's flexibility. The Systems Funding Plan will be updated on a regular basis as design elements are finalized and enhanced. This document reflects the current version of the system description, and is a realistic guide to the expected costs and impacts on Members. Current system description, specifications, functionality are highlighted in Section III. System costs, financing and expected impacts are described in Section IV.

### **III. BAYWEB SYSTEM DESCRIPTION**

#### **1. Business Model Description (Highlights of the BOOM Agreement)**

- Motorola and the Authority will execute a 10-year build, own operate and maintain (BOOM) Agreement, and will then transfer the entire system to the BayRICS Authority at no cost. The BOOM Agreement will govern use of spectrum, rates and service levels, upgrades and final transfer of the system to the Authority.
- Motorola will execute site use agreements directly with site owning jurisdictions; jurisdictions will pay no costs related to site remediation. Jurisdictions must pay for site lease costs and utilities for the sites.
- Agencies have no obligation to purchase a minimum number of user accounts and Motorola assumes all risk of loading users on the system.
- Motorola will offer an introductory rate of \$38/user/month for the first year of operation, and for subsequent years will maintain a rate that is driven from the commercial competitive market and is more affordable than rates for comparable services. BayRICS Authority will review rates annually.
- Year-one basic features (as described in Motorola's "Option 2"):
  - Unlimited Data
  - Enhanced Quality of Service
  - P25 Push-to-Talk interface
  - Customer Enterprise Network Interface Options:
    1. Motorola Hosted Prioritization Service Manager (PSM) interface
    2. Agency Owned PSM interface
- The Authority will be responsible for all billing and collections, with start-up support from Motorola. The Authority will consider adding a service fee to user bills to cover its cost of operation.
- The Authority will be responsible for certain end user support functions. While the specific scope of these functions has not been finalized, continuing discussions with Motorola suggest that the Authority's costs will not be significant. To the extent the Authority does incur costs for end user support, those costs will be passed on to the end user through the service fee.
- The Authority will be responsible for backhaul connectivity to the BayWEB system core through negotiated agreements with BART and other fiber providers. The BayLOOP sub-system will be used for backhaul where other options are not feasible.
- Roaming:

- Motorola will provide reasonable technical assistance to the Authority concerning roaming services from that commercial carrier;
- Users will be responsible for roaming charges outside the BayWEB service area.
- In-system roaming. Users will be provided with a web-based application that will allow them to report system deficiencies on a real-time basis. Such deficiencies would include but not be limited to system performance and coverage. Motorola will accumulate this data in a format to be jointly determined by the JPA and Motorola. Motorola and the JPA will review the data on a regular basis. Such deficiencies may be the result of device functionality, backhaul capacity or system coverage. Solutions to be considered will include but may not be limited to: additional sites, enhanced backhaul, bi-directional amplification, device replacement or remediation, or roaming availability. The JPA and Motorola will jointly agree on the cost-effectiveness of the applied solution. Any in-system roaming charges will be the responsibility of the end user.
- System Design and Acceptance
  - System design:
    - Final System Design Detail will be developed by January 5, 2012. All site agreements will include an “out clause” for jurisdictions to terminate site access commitment if final system design not approved by the BayRICS Authority
  - System design acceptance will require Technical Advisory Committee recommendation and ratification by the BayRICS Authority
  - Service level criteria specifying minimum coverage and bandwidth speeds will be incorporated into the executed BOOM Agreement
- Public Access System: Given the urgency of moving this agreement forward to the approving entities, the public access system BOOM agreement will be negotiated separately.

## 2. Technical and Operational Description

The BayWEB system design is still in development, but will comply with FCC coverage and bandwidth standards for the 4G LTE platform that are in place on April 30, 2013. The following highlights summarize the system description, design and technical features provided in the most current version of the BOOM Agreement.

### Technical Highlights:

- Up to 193 eNodeB radio sites, operating on 700MHz public safety broadband spectrum (763-768 and 793-798 MHz)
- Enhanced Packet Core proposed location at Twin Peaks in San Francisco
- Backhaul: Hybrid 1Gbps microwave loop and BayLOOP with proposed fiber enhancements
- Compliant with FCC operability and interoperability standards, including:
  - LTE technology platform: 3GPP standard, E-UTRA, LTE Release 8 or higher adopted standards, must support QoS and specified LTE interfaces

- Availability: The backhaul and network design will provide 99.99% uptime reliability at each eNodeB.
- Anticipated Available Bandwidth (results of Cornerstone pilot study):
  - Near Cell: 16-19 Mbps Downlink; 6-7 Mbps Uplink
  - Mid-Cell: 11-15 Mbps Downlink; 2 Mbps Uplink
  - Cell Edge: 6-8 Mbps Downlink; .2-.3 Mbps Uplink
  - Current FCC required minimum 768 Kbps downlink and 256 Kbps uplink for a single user at the cell edge
- System must be capable of interconnecting with other regional public safety broadband networks.

#### IV. **SYSTEM FUNDING**

This Section provides specific detail regarding all costs to the Authority and to Members for the BayWEB Project. The following categories of costs have been identified:

1. Costs to All Members:
  - a. Annual membership fee paid by members to the Authority;
  - b. Site costs related to lease payments, access by Motorola and electrical utility charges;
2. Costs to Members with System Users:
  - a. Device costs;
  - b. Member agency back office connectivity costs;
  - c. User Fees, paid directly to the JPA:
    - i. User fees charged by Motorola;
    - ii. BayRICS Authority surcharge, which includes:
      1. Costs of billing user agencies on behalf of Motorola;
      2. Costs related to enhancing system coverage allocated to the Authority, including any roaming charges assessed to user agencies;
      3. Additional Administrative costs not covered by annual member fee
    - iii. Backhaul Costs
3. Costs to JPA not passed on to members (funded from other sources):
  - a. Costs of increasing capacity and performance of the system allocated to the Authority, for example adding additional fiber to the backhaul system

##### **1. Costs to All Members**

###### **a. Annual Membership Fee**

All current Authority Members have paid an annual membership fee, as provided under Section 5.01 of the Authority's joint powers agreement. For the initial year, this fee was set at \$24,500. For subsequent years, each Member shall pay an Annual Fee no later than July 1st of each Fiscal Year to maintain membership in the Authority. The Board shall set this annual fee in an amount not to exceed the initial year membership fee, except that the Board may adjust the Annual Fee each Fiscal Year to reflect changes in the Consumer Price Index.

Public agencies that apply to become a Member after the Initial Membership Period, may be assessed a different membership fee. The Board shall determine the amount of each subsequent member fee, which may be more, but cannot be less, than the initial membership fee paid by current Members.

This report assumes that the annual membership fee will remain at \$24,500 per Member for the first three years of operation.

<b>Sub-total Annual Member Fee per Jurisdiction</b>	<b>\$ 24,500.00</b>
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**b. Site Costs**

Although Motorola has agreed to pay all costs associated with site remediation and equipment installation operation and maintenance, each site owning jurisdiction will be responsible for on-going site costs such as lease costs, cost of electricity consumed by Motorola’s equipment and staff time. Staff time may include one-time costs such as coordination of project implementation, construction permitting, environmental studies, attending community outreach meetings, as well as on-going costs such as security and escorting Motorola maintenance or service providers on site.

Sites will be approved to use for the system through independent site use agreements between the agency and Motorola. Thus, a Member agency may control those costs to some extent, by authorizing only sites that meet specified cost constraints set by the Member agency. For example, if the cost of leasing a site determined to be excessive, the agency and Motorola simply agree to eliminate that site from consideration and choose another.

Electrical usage may range from \$1,200 (current actual cost of some Cornerstone sites) to \$4,800 (estimate provided by a commercial vendor) annually per site. Site costs will also vary greatly depending on whether third-party site owners will require lease payments. Sites owned by the agency, with no additional lease costs, may have no lease costs. Sites leased from third parties may require additional lease costs, which can range from \$2,400 to \$30,000 or more per year. Some jurisdictions have been successful in negotiating significant discounts for lease costs, or in bartering other facilities or services for lease rights.

Likewise, staff time and resources will vary considerably from site to site and agency to agency, therefore only general ranges for these costs are provided.

Therefore, this report provides only general ranges of estimated site costs. Actual costs for each jurisdiction will vary according to the number of sites and the unique characteristics of each site.

<b>One-Time Permitting/Zoning Fees</b>	<b>Varies by Jurisdiction</b>
<b>Annual Electrical Costs per site</b>	<b>\$1,200 - \$4,800</b>
<b>Annual Lease Costs per Site</b>	<b>\$0 - \$30,000+</b>
<b>Annual Agency Staff Time and Resources</b>	<b>\$0 - \$10,000</b>
<b>Total Annual Cost per Site</b>	<b>\$1,200 - \$44,800+</b>

**2. Costs for Members Using the Service**

**a. Device Costs**

End user devices (EU) will be required for each user account. The cost of these devices is not included in the Motorola base fee or Authority surcharge. Member agencies will be responsible for the cost of these devices, which may be procured from Motorola or from any other vendor selling devices certified

as compliant with network open standards requirements. In addition, it is possible that at some time in the future, the Authority may negotiate preferred rates, or identify other discounts or funding sources for devices, and offer them to Members.

Estimating the cost of devices is difficult because these devices are not currently available on the market. Preliminary information suggests that three types of devices may be available:

- “Dongle” type devices that plug into a laptop or similar computer;
- Handheld devices similar to smart phones or tablets (but without voice capability)
- Vehicular modems that would be installed in first responder vehicles

Pricing for these devices is not yet available, but is estimated to range from \$450 - \$1500 per device, with a three year life. Members can expect the dongle devices to be priced at the low end of the range, and vehicular modems priced at the high end. Handheld devices will be priced in the mid-range. Therefore, Members with users on the system should estimate that costs of these devices based on their agency needs within this price range. Unlike today’s land mobile radios, the devices will not require programming; however vehicular modems will require installation and possibly some ongoing maintenance.<sup>1</sup>

<b>End User Devices, per user, three-year refresh cycle</b>	<b>\$450 - \$1,500</b>
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**b. Back Office Connectivity Costs**

According to Motorola’s preliminary system design:

Each agency accessing the LTE network is required to provide a connection to the LTE Core. This connection enables the back office applications like email, internet access, database access such as NCIC, CLETS, etc. Motorola will work with each of the agencies to determine the required size of the backhaul based on the applications a particular agency plans on using on the network. Preliminary evaluations indicate that an agency with 1000 users would need a connection that supplies between 30 Mbps – 50 Mbps, however existing agencies using 3G services today use significantly smaller connections.

Back office connectivity costs for Member agencies using the service will vary greatly from Member to Member. Member’s back office costs will depend on the physical location of the facility that must be connected, the nature of the applications desired and the potential need to increase bandwidth connection at the facility. These costs may be one time or recurring costs.

One Time Connectivity Costs.

Initial integration engineering costs will depend on the Member’s existing ability to support data exchange with 911 core systems, and may include upgrades such database access, E-ticket, Video display monitors, VLPR, VoIP Telephone applications and the Internet. As these costs are incurred only to the extent that a jurisdiction intends to utilize the system or specific applications on the system, such costs are not practical to estimate over the entire Membership. Therefore, each Member must evaluate its current status, plans for use of the system and anticipated hardware and software needs.

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<sup>1</sup> The Authority was recently invited to participate in the development of specifications for a Request for Proposal for end user devices currently proposed by the City of Charlotte, North Carolina and other BTOP public safety grantees. The results of this solicitation and other nationwide incentives to develop competitive pricing may result in significantly lower costs for end user devices.

Ongoing Connectivity Costs. Member agencies will also be responsible for the cost of broadband connections from back room equipment to a designated demarcation point, where Motorola will assume responsibility for completing the connection to the core. The agencies have several choices regarding the connection to the LTE Core including:

- Direct Connection between the Agency’s enterprise network and the Core via microwave or third party fiber
- Connection at a third-party provider’s aggregation point via microwave or third party fiber
- VPN connection through an ISP between the Agency and the LTE Core

Once again, these costs could vary greatly depending on the location of the PSAP, existing connectivity and bandwidth needs of the applications to be supported. Ongoing costs could be very low, in cases where the PSAP is already connected via broadband. In cases where no broadband connection exists, low-cost solutions are available such as cable modem or T1 service. For example, Comcast Cable currently offers 50Mbps managed Ethernet service for \$190.00/month, or 100Mbps for 370.00/month. This service could be used to connect the PSAP to a demarcation point through a private VPN. Alternatively, AT&T will provide 1Gbps connection for approximately \$2,000.00/month (probably more bandwidth than necessary).

The Authority is working with third party fiber and broadband providers to make no- or low-cost broadband access available to Members. As with the one-time costs above, each Member must evaluate its current needs and plans when assessing these costs.

<b>One-time PSAP connectivity cost</b>	<b>Varies according to current status and future needs</b>
<b>Ongoing PSAP connectivity Cost</b>	<b>\$0 – \$4,440.00 or more per year</b>

**c. User Fees Paid by Member Agencies**

**1. Motorola Service Fee**

The BOOM agreement provides that Motorola will charge a flat fee of \$38.00 per month per user for the first year of service, or until July 1, 2014, whichever occurs later. After that date, Motorola may change the fee annually on July 1 of each year. The amount of the fee shall be driven by the competitive “market rate” as determined by Motorola and reviewed by the Authority. It is impractical to predict at this time whether the market rate for comparable services will increase or decrease. Therefore, this report assumes that the rate will remain \$38/user/month for the first three years of the agreement.

**2. Authority Surcharge Fee**

This report assumes a “pass-through” model, in which any Authority administrative costs that exceed the total amount of annual member fees collected would be passed on to user agencies in the form of a surcharge added to the base user fee paid to Motorola. In addition, costs of billing, end user support functions and “roaming” (enhancing system coverage) allocated to the Authority under the BOOM Agreement would be passed on to end users. This means that only Members with users on the system would pay billing, roaming and excess administrative costs.

Motorola has committed to provide support to the Authority for one-time startup costs of establishing a billing process. It is anticipated that the ongoing costs of administering this billing will not be excessive.

The level of end user support and any related cost to the Authority is still being determined in ongoing discussion with Motorola. However, it appears that the Authority’s end user support responsibilities will be manageable, and research suggests that the cost to provide these services will not be excessive. For example, the City and County of San Francisco operates “System Watch” a 7x24 monitoring, troubleshooting and user support center serving approximately 10,000 public safety, transportation and public works land mobile radio users. EBRCSA handles similar support services in the East Bay. San Francisco provides these services for approximately \$5 per user per month.

The Authority should consider a solution in which San Francisco, EBRCSA or another municipal provider “hosts” user support functions for the Authority. This shared or hosted solution would be particularly efficient in the early years when user counts are low and until more data is available on system loading. For this funding plan, the cost of providing billing, collections and end user support functions is estimated at a range of between \$5 and \$8 per user per month.

Roaming costs will consist of “in-system” and “out-of-system” roaming. Out-of-system roaming service and rates will be negotiated with third party providers and will be billed separately and either paid directly by the user entity or paid by the Authority and passed on to the user. These costs will only accrue when the user is operating outside of the BayWEB service area, for instance when providing mutual aid to an outside jurisdiction.<sup>2</sup> When other 700MHz public safety networks are deployed, inter-system roaming arrangements between these networks can be developed at no additional cost.

To address in-system roaming, Motorola and the Authority have agreed to a one-year evaluation period in which coverage and performance are tested, coverage gaps identified and solutions proposed. The parties intend for third party roaming agreements to be the “last resort” after other solutions are applied and found to be lacking. Therefore, roaming costs may not materialize until the second year of service, after other solutions are attempted. Thus, these costs are impractical to estimate until this evaluation process can occur. However, any in-system roaming costs will be the responsibility of the end user, either paid directly by the end user’s agency, or paid by the Authority and passed through to the user.

For these reasons, staff recommends that the Authority set a surcharge for each user at a year-one rate of \$5/user/month. The surcharge will be revised annually based on a review of the actual revenues and expenses for the prior year, and the need to add coverage or roaming enhancements. For example, if, at the end of year one, the Authority’s actual cost per user is found to be only \$4/month and no coverage enhancements or roaming is required, the surcharge for year two would be reduced to reflect actual revenues and costs for the prior year. Any surplus revenues collected by the Authority could be applied to reduce the current year surcharge, or could be held in a reserve fund for future system enhancements. JPA staff would implement cost saving measures to make best efforts to ensure that the surcharge remains affordable.

**Summary of Member User Fees**

<b>Per User Motorola Annual Base Service Fee (Year One \$38x12)</b>	<b>\$456</b>
<b>Per user Authority Surcharge (Year One range of \$5-\$8x12))</b>	<b>\$60 - \$96</b>
<b>Per User Total Annual Service Fees</b>	<b>\$516 - \$552</b>

<sup>2</sup> Similar to device costs, nationwide roaming agreements will be negotiated at some point in the future, which will result in lower rates for roaming in future years.

Authority Administrative Costs: General administrative costs associated with operating a joint powers authority include staffing, bookkeeping and accounting, legal representation, insurance and office/miscellaneous expenses. In addition, the Authority will incur specialized expenses such as cost and legal advice related to the 700MHz spectrum lease, and telecommunications specific technical consulting services. Annual Membership fees are anticipated to cover some, but not all of these expenses. Excess administrative expenses not covered by the annual fee will be passed on to users as part of the Authority surcharge.

This report assumes 15 Authority Members and 2,000 system users at the end of the first year of system operation, 4,000 users at the end of year two and 6,000 users at the end of year three. However, the system will not begin loading users until mid-year (June or July) of 2012. Therefore, user surcharge revenues are expected to be very low for year one. To fill this gap, the BAY Area UASI has agreed to support the Authority with a one-year funding of \$170,000 in 2012. In addition, staff anticipates that an additional \$85,000 may be available for the UASI in 2013, to fund the project through the build out phase.

Attachment B provides a tentative budget for Years One, Two and Three estimated administrative expenses and revenues. Although the Authority will operate on a July – June Fiscal Year, for simplicity's sake, these administrative budgets are based on a calendar year.

### **3. Backhaul Costs**

Under the current version of the BOOM Agreement, the Authority is responsible for backhaul costs. The current design of BayWEB relies on a hybrid backhaul connectivity plan. This configuration incorporates municipal fiber, BART fiber, BayLOOP and point-to-point microwave links to create a viable backhaul network. Each of these backhaul alternatives has been evaluated by Motorola and has been found to meet minimum bandwidth requirements for backhaul usage. The consensus is, however, that fiber backhaul is the preferred solution.

Several backhaul options are being evaluated by the Authority, including:

- Municipal Fiber. One or more Member agencies intend to contribute dark fiber. Dark fiber and other backhaul facilities will be treated similar to sites, so the contribution will not result in a cost to the Authority, but may result in costs to the contributing Member.
- BayLOOP. BayLoop is a Microwave Radio System which circles the Bay Area Region connecting 18 radio sites located in eight counties. BayLoop consists of two OC3's, one which is dedicated to carry BayWEB Broadband Traffic with the throughput of 155 mbps. The second OC3 supports channelized traffic with the capacity of supporting up to 84 T1's. BayLoop is intended to provide the wide area connectivity to support Information Sharing and Voice Systems throughout the Bay Area Region and beyond.

The UASI Interoperability Working Group and TAC are currently studying BayLOOP costs and potential revenues. One proposal indicates that maintenance services (technical support, repair services, onsite corrective maintenance and preventive maintenance) and remote monitoring will cost approximately \$265,000 annually. In addition, some TAC members believe that additional annual support costs would raise this annual estimate to \$500,000. TAC has not provided details for these additional costs.

To date, no consensus solution has been identified to transition the BayLOOP network monitoring and maintenance tasks from the current informal structure, in which each of eight

jurisdictions are responsible for the BayLOOP facilities within their jurisdictions. The Authority should consider extending existing MOUs with the eight counties currently supporting BayLOOP for Year One (2012). Beginning with Year Two (2013), the Authority should begin a transition plan to assume operational responsibility for BayLOOP in phases over the next two years (2013-2014). Jurisdictions should be given the option of continuing its existing maintenance responsibilities, or paying a fee to the Authority to assume these maintenance functions. The goal of the Authority should be to make BayLOOP self-supporting through BayWEB and other agency uses.

- BART Fiber. BART fiber is viewed as an essential element in the success of the BayWEB project. Staff are currently engaged in discussions with BART to develop a MOU that results in no cost to the Authority. Recent discussions suggest that this MOU can be developed using creative terms that will result in \$0 cost to the Authority. If, however, BART fiber results in a significant cost, the Authority must approve the cost and determine the best method of recovering that cost.
- Other Backhaul Alternatives. Other entities may have fiber and other backhaul alternatives that can enhance the current backhaul design. Such entities may include CENIC, commercial fiber providers, cable operators and wireless carriers. The Authority should continue to conduct research aimed at identifying low-cost backhaul solutions and enhancements.

At this time, accurate backhaul costs are uncertain. As Motorola’s system design is finalized, specific backhaul responsibilities are identified and third party providers are secured, these costs, if any, can be estimated with more accuracy. If significant backhaul costs arise, the Authority has limited resources to pay these costs. The proposed administrative funding plan has identified revenues for years one-three that would provide some funding for backhaul:

<b>Year 1</b>	<b>\$78,000</b>
<b>Year 2</b>	<b>\$218,000</b>
<b>Year 3</b>	<b>\$263,495</b>

The Authority should consider aggressively seeking out other funding sources to pay future backhaul costs. Available options include:

- Increasing the surcharge to users. The Authority could, for instance, increase the monthly surcharge from \$5-\$8 to \$10-\$13 per month, to pay backhaul costs. The Authority should, however, carefully consider the effect of this increased surcharge and whether revenues from such increases would be offset by reduced user counts from fewer subscribers willing to pay higher monthly fees. Staff does not recommend increasing the surcharge beyond \$5-\$8 per month without real market data.
- Assessing the additional cost as a supplemental member fee. However, the Board may not increase the annual member fee by more than the Consumer Price Index (CPI) each year without amending the JPA agreement, which requires a unanimous vote of the Board and adoption of the changes by Member agencies.
- Identifying other resources, such as grants or additional partnerships with third party fiber providers.

### **3. Other System Costs, Including Backhaul Enhancements**

After system activation, it may become apparent that backhaul enhancements will be required to increase bandwidth for certain parts of the region, add preferred applications or refresh system components. For example, it may become advisable for the Authority to invest in additional fiber capacity to enhance network capacity or resiliency. In that case, the Authority would need to identify additional funding sources or models to pay for such improvements. The Authority could look to grant funding, or various cost sharing models to address such needs, if and when they occur. At present, such costs remain speculative and therefore are not addressed in detail in this report.

#### **Total Estimated Cost to Members**

Due to the significant variance of costs among sites, user levels, connectivity and system application for individual agencies, a total cost of participation cannot be calculated. This report provides one-year cost projections for those cost categories that may be estimated with a fair degree of certainty, and ranges of possible costs for those categories that are less certain. In some case however, costs are extremely location- or jurisdiction-specific. Members should consult with their staff to properly calculate those costs for their jurisdictions.

Many of the costs identified in this report are projected to remain somewhat consistent in future years. A three-year projection of certain costs is included in Attachment A.

**ATTACHMENT A**  
**Three Year Cost Estimates**

## Attachment A: Administrative Funding Plan

### Estimated Costs for Jurisdictions Participating in BayWEB

#### Years One - Three

ITEM	UNIT COST \$	COST TIMEFRAME	Notes
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#### 1. COSTS TO ALL MEMBERS

##### a. Annual Membership Fee Paid by Members to the Authority

\$24,500	Annual	Assumes that the annual membership fee will remain at \$24,500 per Member for the first three years of operation.
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<b>Sub-total Membership Costs <u>per Jurisdiction</u>, Year One Through Three = \$73,500</b>
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##### b. Site Costs (Motorola will execute site use agreements directly with site owning jurisdictions)

Electrical	\$1,200- \$4,800 / site	Annual	Cost of electricity consumed by Motorola equipment. Monthly usage rate based on equipment specifications.
Site lease	\$0 - \$30,000+ / site	Annual	For sites that jurisdictions don't already own or that face increased lease costs. Costs will vary greatly depending on whether third-party site owners require lease payments. Includes engineering studies or lease application fees.
Staff time	\$0 - \$10,000 / site	One-time and annual	May include one-time costs such as coordination of project implementation, construction permitting, and environmental studies, as well as on-going costs such as security and escorting Motorola maintenance or service providers on site. Costs will vary from site to site and agency to agency.

<b>Sub-total Costs <u>per Site</u>, Year One Through Three = \$3,600 - \$134,400</b>
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**2. COSTS TO MEMBERS WITH USERS**

**a. Device Costs** (*Jurisdictions may purchase devices from Motorola or another compliant vender; jurisdictions incur costs only if and to the extent that agencies elect to purchase devices*)

Dongle and handheld devices and/or vehicular modems	\$450 - \$1,500 per device	One-time, every three years	Devices are not currently available on the market and so costs are hard to estimate. Dongles will be priced at the low end, handhelds in the mid-range, and vehicular modems at the high end.
Vehicular modem installation and maintenance			

<b>Sub-total Costs <u>per Device</u>, Year One Through Three = \$450 - \$1,500</b>
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**b. Member Agency Back Office Connectivity** (*Jurisdictions incur costs only if and to the extent that they utilize the system or specific applications on the system*)

One-time PSAP connectivity	na	One time	Initial integration engineering costs depend on Members' ability to support data exchange with 911 core systems; may include upgrades such as database access, E-ticket, Video display monitors, VLPR, VoIP Telephone systems, and Internet.
Ongoing PSAP connectivity	0 - \$4,400+ / PSAP	Annual	Includes broadband connections from back room equipment to a designated demarcation point. Costs will vary depending on location, existing connectivity, and bandwidth needs of the applications to be supported.

<b>Sub-total Connectivity Costs <u>per PSAP</u>, Year One Through Three = Costs dependent on circumstances of each individual facility</b>
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**c. User Fees** (Motorola will execute service agreements directly with user agencies; jurisdictions incur costs only if and to the extent that agencies elect to use services. Members pay user fees directly to the JPA.)

User fee charged by Motorola	\$38/ user/ month	Annual	User fees charged by Motorola will change annually after the first year. For purposes of this report, an estimate of \$38/ user/ month is used for year one through three.
BayRICS Authority surcharge	\$5-\$8/ user/ month	Annual	Includes costs of billing, roaming, and excess administrative expenses not covered by the annual membership fee (see Attachment B). In-system roaming costs cannot be calculated with precision until after the coverage evaluation period, which will take place during the first year of service. The surcharge will be revised annually based on a review of the actual revenues and expenses for the prior year and the need to add coverage or roaming enhancements.
Backhaul	0 - \$500,000	Annual	The JPA is currently evaluating backhaul options (e.g., municipal fiber, BayLOOP, BART fiber). If significant backhaul costs arise, the JPA has some, but limited, resources to pay these costs. As Motorola's system design is finalized, specific backhaul responsibilities are identified, and third party providers are secured, backhaul costs - if any - can be estimated with more accuracy.

<b>Sub-total Fees <u>per User</u>, Year One Through Three (not including backhaul) =</b> <b>\$1,548-\$1,656</b>
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**ATTACHMENT B**  
**ADMINISTRATIVE FUNDING PLAN**  
**Years One - Three**

**Year One (1/1/2012 – 12/31/2012)**

Expenses			
Administrative Staff:			
1 FTE ED/Project Manager			
.5 FTE Billing Clerk			
.5 FTE Admin. Assist.			\$250,000
Bookkeeping/Accounting			\$7,500
Legal Services			
General Legal (12 months x \$5,000/m)			\$60,000
FCC Waiver			\$100,000
Technical Consulting			\$28,000
Spectrum Lease			\$15,000
Insurance			\$10,000
Miscellaneous Expense			\$17,000
Backhaul Costs			<b>\$78,000</b>
<b>TOTAL Expenses</b>			<b>\$565,500</b>
Revenues			
Memberships	15	\$24,500	
Authority Surcharge	2,000	\$60	
BAUASI Funding			\$170,000
<b>Total Revenues</b>			<b>\$565,500</b>

**System Loading by Month: 2012**

2012	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTAL
Users	0	0	0	0	0	100	200	400	700	1000	1200	2000	
Surcharge \$5/month	\$0	\$0	\$0	\$0	\$0	\$500	\$1,000	\$2,000	\$3,500	\$5,000	\$6,000	\$10,000	\$28,000

**Year Two (1/1/2013 – 12/31/2013)**

Expenses			
Administrative Staff:			
1 FTE ED/Project Manager			
.5 FTE Billing Clerk			
.5 FTE Admin. Assist.			\$250,000
Bookkeeping/Accounting			\$7,500
Legal Services			
General Legal (12 months x \$5,000/m)			\$60,000
FCC Waiver			\$40,000
Technical Consulting			\$28,000
Spectrum Lease			\$15,000
Insurance			\$10,000
Miscellaneous Expense			\$17,000
<b>Backhaul Costs</b>			<b>\$218,000</b>
<b>TOTAL Expenses</b>			<b>\$645,500</b>
Revenues			
Memberships	15	\$24,500	\$367,500
Authority Surcharge	4,000	\$60	\$193,000
BAUASI Funding			\$85,000
<b>Total Revenues</b>			<b>\$645,500</b>

**System Loading by Month: 2013**

2013	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Users	2200	2400	2600	2800	3000	3200	3400	3600	3700	3800	3900	4000	
Surcharge													
\$5/month	\$11,000	\$12,000	\$13,000	\$14,000	\$15,000	\$16,000	\$17,000	\$18,000	\$18,500	\$19,000	\$19,500	\$20,000	\$193,000

**Year Three (1/1/2014 – 12/31/2014)**

Expenses			
Administrative Staff:			
1 FTE ED/Project Manager			
.5 FTE Billing Clerk			
.5 FTE Admin. Assist.			\$250,000
Bookkeeping/Accounting			\$7,500
Legal Services			
General Legal (12 months x \$5,000/m)			\$60,000
FCC Waiver			\$40,000
Technical Consulting			\$28,000
Spectrum Lease			\$15,000
Insurance			\$10,000
Miscellaneous Expense			\$17,000
<b>Backhaul Costs</b>			<b>\$263,495</b>
<b>TOTAL Expenses</b>			<b>\$680,995</b>
Revenues			
Memberships	15	\$24,500	
Authority Surcharge	4,000	\$60	
BAUASI Funding			\$0
<b>Total Revenues</b>			<b>\$680,995</b>

**System Loading by Month: 2014**

2014	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Users	4200	4400	4699	4800	5000	5200	5400	5500	5600	5800	6000	6100	
Surcharge \$5/month	\$21,000	\$22,000	\$23,495	\$24,000	\$25,000	\$26,000	\$27,000	\$27,500	\$28,000	\$29,000	\$30,000	\$30,500	\$313,495



**UNITED STATES DEPARTMENT OF COMMERCE**  
**The Assistant Secretary for Communications**  
**and Information**  
Washington, D.C. 20230

JAN 11 2012

The Honorable Todd J. Zinser  
Inspector General  
United States Department of Commerce  
1401 Constitution Avenue, N.W.  
Washington, DC 20230

Dear Mr. Zinser:

This letter responds to your follow-on review dated January 10, 2012, related to the Broadband Technology Opportunities Program (BTOP), entitled *Misrepresentations Regarding Project Readiness, Governance Structure Put at Risk the Success of the San Francisco Bay Area Wireless Enhanced Broadband (BayWEB) Project*. I provide a point-by-point response below to the concerns the Office of Inspector General (OIG) has raised about statements made two years ago and the due diligence NTIA performed before deciding in July 2010 to award this grant. As you point out, and as I agree, this project has faced challenges from the start. Accordingly, I urge you and all of the parties involved in this project to work with NTIA on solving the issues that face the project today so that it can bring the benefits of a public safety broadband network to the citizens of the Bay Area consistent with prudent management of taxpayer dollars.

***Improving Public Safety Broadband is a Key Statutory and Administration Priority***

Public safety crises, such as the September 11, 2001 attacks and natural disasters like Hurricane Katrina, highlight both the importance – and the unfortunate shortcomings – of interoperable public safety communications. The nation has struggled to overcome challenges to implementing and deploying efficient and effective interoperability solutions for public safety in the voice context for decades.<sup>1</sup> The emergence of wireless broadband technologies and innovative broadband-based applications for public safety use in recent years now provides significant opportunities to move beyond the interoperability shortcomings of public safety voice communications and vastly improve the nation's public safety capabilities.<sup>2</sup>

While the BTOP public safety broadband awards and other Administration and Congressional initiatives since that time have recently spurred new levels of consensus in the public safety

<sup>1</sup> See generally The White House – The Benefits of Transitioning to a Nationwide Wireless Broadband Network for Public Safety (June 2011) available at <http://www.whitehouse.gov/sites/default/files/uploads/publicsafetyreport.pdf>.

<sup>2</sup> See *id.* at 10-11.

broadband community, such cohesion is relatively new.<sup>3</sup> For example, the Project 25 Initiative (P25) began in the late 1980s to develop the then-cutting edge digital voice technology as an interoperable solution for public safety voice communications. Although the program is much improved now, lack of compatible equipment and expensive devices plagued it for over a decade.<sup>4</sup> The autonomous licensing of public safety systems contributed critically to this problem.<sup>5</sup> On 9/11, uncoordinated police and fire command communications structures contributed to the tragic lack of communications at the World Trade Center.<sup>6</sup> And the situation has not significantly improved after ten years.<sup>7</sup> For this reason, public safety agencies have advocated legislation creating a nationwide governance structure for the new broadband technology at 700 MHz, which BayWEB is piloting.<sup>8</sup> NTIA supports this goal, but its realization requires a legislative mandate and nationwide implementation.

The American Recovery and Reinvestment Act (Recovery Act) provided both a funding source and a framework for testing ideas that would allow the Administration to determine the best approach to facilitate a successful nationwide public safety broadband network. One of the express statutory purposes of BTOP was to improve access to, and use of, broadband for public

<sup>3</sup> See, e.g., President Obama Details Plan to Win the Future through Expanded Wireless Access (Feb. 10, 2011) available at <http://www.whitehouse.gov/the-press-office/2011/02/10/president-obama-details-plan-win-future-through-expanded-wireless-access>; S. 911, 112<sup>th</sup> Cong., 1<sup>st</sup> Sess., (2011)(S.911); S. 1323, 112<sup>th</sup> Cong., 1<sup>st</sup> Sess., (2011). Early adopters of public safety broadband technology have advocated joint efforts for common nationwide administration of certain technical requirements key to long-term interoperability. Comments of Early Adopters, FCC Docket No. 06-229 (filed Dec. 20, 2011), available at <http://fjallfoss.fcc.gov/ecfs/document/view?id=7021751387>. However, lack of overarching governance and stable funding remain challenges to these incipient efforts.

<sup>4</sup> U.S. Gov't Accountability Office, *First Responders: Much Work Remains to Improve Communications Interoperability* at 4 (2007), available at <http://www.gao.gov/new.items/d07301.pdf>.

<sup>5</sup> See, e.g., Weiser, P.J. and D. Hatfield. "In Pursuit of a Next Generation Network for Public Safety Communications." *CommLaw Conspecus*, at 111 (2007) available at [http://commlaw.cua.edu/res/docs/06\\_Weiser\\_97-143.pdf](http://commlaw.cua.edu/res/docs/06_Weiser_97-143.pdf). See generally DHS SAFECOM, "Interoperability," available at <http://www.safecomprogram.gov/interoperability/Default.aspx>.

<sup>6</sup> See, e.g., *The 9/11 Commission Report* (July 2004) at 291-92, available at <http://www.gpoaccess.gov/911/pdf/fullreport.pdf>; "9/11, Ten Years Later," APCO International, available at <http://psc.apointl.org/2011/09/06/911-10-years-later/> (major finding of 9/11 Commission Report was that New York City agencies considered themselves autonomous and did not work together effectively). See also "DC Police Decision Jeopardizes Interoperability," Center for Health and Homeland Security, University of Maryland, available at <http://www.mdchhs.com/blog/dc-police-decision-jeopardizes-interoperability> (criticizing District of Columbia Police Department decision to encrypt communications because surrounding jurisdictions cannot afford to mirror); Frost & Sullivan, "Interoperable Communications for First Responders," available at <http://www.corp.att.com/stateandlocal/docs/Interop.pdf> (1982 plane crash into Fourteenth Street bridge revealed inability of Virginia, Maryland and District of Columbia jurisdictions to coordinate); Federal Emergency Management Agency, National Incident Management System, Training Session 18, document available via Google search ("Another thing of the not-too-distant past, and unfortunately sometimes the present, is the infighting between public safety agencies (police, EMS and fire) and traffic management agencies (transportation, public works, public transit) and our differing views on the goals for a traffic accident" (quoting New York State fire official)).

<sup>7</sup> "The State of Interoperability Ten Years After 9/11," Public Safety Communications (Sept. 7, 2011) available at <http://psc.apointl.org/2011/09/07/the-state-of-interoperability-10-years-after-911/> ("So where does communications interoperability stand 10 years after 9/11? Not much further than we were on Sept. 10, 2001.").

<sup>8</sup> See, e.g., Testimony of Jeffrey D. Johnson, Chief Executive Officer, Western Fire Chiefs Association, Before the House Committee on Energy and Commerce, Subcommittee on Communications and Technology (May 25, 2011), available at <http://republicans.energycommerce.house.gov/Media/file/Hearings/Telecom/052511/Johnson.pdf>.

safety agencies.<sup>9</sup> In May 2010, very late in the BTOP pre-award process, the Federal Communications Commission (FCC) granted waiver authority to certain entities to use the 700 MHz public safety broadband spectrum, which provided a timely opportunity for NTIA to fund an initial set of 700 MHz public safety projects.<sup>10</sup> Thus, NTIA was able to award seven 700 MHz public safety grants to allow us to investigate the novel issues and problems that may arise with a nationwide interoperable public safety broadband network and to learn from different approaches to 700 MHz projects through BTOP.

NTIA has realized throughout this process that the cutting-edge 700 MHz interoperable wireless broadband public safety pilot projects are complex and challenging to implement. There is no question that a strong governance model related to 700 MHz public safety broadband networks is key to creating a strong and successful national interoperable network for public safety purposes. The governance framework related to interoperable networks is a risk element. Given public safety communications' history, the least risky approach for NTIA in the grant program would have been to do nothing. But NTIA believes it had a broader responsibility to move these types of projects forward to solve a long-standing and critical national problem and an opportunity to do so responsibly through the Recovery Act.

***Given the Challenges Associated with Implementing BTOP and the History of Public Safety, NTIA Exercised Common Sense in Its Due Diligence***

Both NTIA and grant applicants faced challenges associated with BTOP. The Recovery Act was enacted on February 11, 2009 and required NTIA to create a new grant program consistent with statutory requirements, accept competitive applications, and award over \$4 billion dollars in grant funds within 19 months. This, in turn, required potential awardees to plan and organize project proposals within extremely constrained timeframes. In particular, for the second round of BTOP funding, which included the BayWEB project, NTIA released the Notice of Funds Availability (NOFA) on January 22, 2010, and opened the application window on February 16, 2010 with a filing deadline of March 26, 2010. These timeframes put significant pressure on all involved, but they were necessary to meet the statutory timeframes and objective of spurring the nation's economic recovery.

Given the circumstances, NTIA's challenge was to administer the program under tight deadlines, addressing significant due diligence responsibilities while delivering the program on time. To that end, NTIA developed a broad-ranging and multi-factored application review process.<sup>11</sup> Certainly, NTIA had an important role to exercise due diligence over the applications and, in doing so, devoted resources to evaluating the **material** representations in the applications, including performing detailed assessments of the application's proposed project benefits and service areas; analyzing the project's technical viability; analyzing the project's budget and financial sustainability; reviewing audit findings and credit checks; evaluating potential

<sup>9</sup> American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 Section 6001(b)(4) (2009). (Recovery Act).

<sup>10</sup> Notice of Funds Availability; Reopening of Application Filing Window for Broadband Technology Opportunities Program Comprehensive Community Infrastructure Projects, 75 Fed Reg 27984 (May 19, 2010).

<sup>11</sup> See BTOP Quarterly Status Report (Feb. 2010) at 3 *available at* [http://www.ntia.doc.gov/files/ntia/publications/btop\\_quarterlyreport\\_03032010.pdf](http://www.ntia.doc.gov/files/ntia/publications/btop_quarterlyreport_03032010.pdf) (containing an overview of the application review process.)

environmental and historic preservation impacts of the project; validating the proposal's feasibility, consistency, and accuracy; and reviewing information supplied by existing service providers to evaluate the existing level of broadband service in the project area.

In conducting due diligence, NTIA did not expect applications to be completely mistake-free. It was reasonable to expect some minor level of inaccuracy, to expect applicants to frame their plans in the context of best-case scenarios, and for some claims to be overcome by events or require modification in the light of changing circumstances on the ground. NTIA diligently examined claims that were material to the project's success, but could not possibly have investigated and verified each and every unchallenged assertion and claim during the application review process. To do so would have come at the cost of failing to meet the statutory award deadline of September 30, 2010 and the statutory purposes of the Recovery Act. This is particularly true where, as was the case with BayWEB, NTIA staff interacted with jurisdictions who gave the agency no reason during due diligence to believe anything might have been amiss or might have required further investigation.

Under the circumstances, NTIA created a highly efficient and effective grant program. Indeed, the OIG previously praised BTOP's pre-award application review process as "vigorous."<sup>12</sup> The pre-award review process has been largely validated by time, as seen in the high-quality projects funded, the benefits already being realized by the American people, and the low rate of project failure to date.

***NTIA Did Not Rely on Any of the Statements Questioned by the OIG***

The three categories of statements questioned by the OIG raise no new issues. NTIA fully examined these matters after receiving specific complaints from the County of Santa Clara and the City of San Jose in the fall of 2010, long after NTIA had announced the award to Motorola. NTIA concluded, in a letter dated February 24, 2011, that it had conducted thorough due diligence on the proposed project and had not relied on any of the claimed misrepresentations as a basis for awarding the project.<sup>13</sup> A quick review of each of the categories identified by the OIG demonstrates that none constitutes a material misrepresentation in the context of all that NTIA knew about the project and the challenges it would likely face through implementation.

**Governance Structure.** NTIA agrees with the OIG that challenges related to completing the governance structure experienced by the Bay Area communities may have contributed to an initial delay in the construction of the project. But it is not accurate to suggest that statements made in the application about the status of the governance structure misled NTIA into awarding the grant. Beyond the application's strengths as it went through BTOP's established competitive grants process, the overall application and the unique characteristics of the Bay Area made it a good fit as a 700 MHz pilot project. NTIA knew that a great deal of additional work would be needed to get the governance right and was not led astray by claims or statements made in the

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<sup>12</sup> *NTIA Must Continue to Improve its Program Management and Pre-Award Process for its Broadband Grants Program Final Report No. ARR-19842-1* at 7 (April 2010).

<sup>13</sup> See Letter to Mr. Jeffrey Smith, County Executive, Santa Clara and Hon. Chuck Reed, Mayor of San Jose from NTIA Assistant Secretary Lawrence E. Strickling (Feb. 24, 2011) (NTIA Response Letter).

BayWEB application. Given the timeframes and circumstances surrounding BTOP in general and the ability to fund 700 MHz projects in particular, NTIA did not assume the Bay Area had everything figured out and thus did not rely on the statements that OIG asserts were false or inaccurate.

The standard OIG seems to be imposing on this project – that it should have had an ironclad governance structure put in place during the two-month application window – is not realistic, not appropriate, and does not reflect the decade of struggles that characterized public safety after 9/11. Moreover, the need for additional work to finalize the governance structure, while certainly a management risk, did not pose a significant financial risk for the misuse of taxpayer dollars, particularly given the overall context that the cost of building the needed nationwide network is expected to be upwards of \$6.5 billion.<sup>14</sup> As this was a threshold issue, if the parties could not come together on governance, it was likely that only a small amount of federal dollars would be spent on the project – a conclusion borne out by the fact that, to date, only one percent of the award’s federal funds have been expended on the project. On the other hand, if the public-private partnership model proves successful, significant progress will have been made toward finding solutions and best practices for the much-needed national interoperable public safety wireless broadband network.

**Shovel Ready Sites.** Next, the OIG questions certain statements in the application relating to project sites being “shovel ready.” However, as the OIG concedes, these statements cannot be condemned as an intentional or legal misrepresentation because neither the Recovery Act nor our NOFA required sites to be “shovel ready.” Indeed, NTIA did not even define the term in the operative documents for the program. Moreover, as stated in the February 24, 2011 letter, “we consider site upgrades to be a normal part of the scope of funded projects,” and NTIA did not award the BayWEB project grant “in reliance on every site’s being already fully-equipped for the new network.”<sup>15</sup>

**Authority to Use Broadband Spectrum.** Finally, the OIG questions the application’s claims regarding the BayRICS Policy Group’s authority and involvement with respect to the 700 MHz spectrum to be used in the project. But as NTIA pointed out a year ago, “as it was a matter of public record, we were aware of the identity of the applicants seeking an FCC waiver to use the 700 MHz spectrum” in the Bay Area.<sup>16</sup> In fact, as the OIG points out, NTIA did extensive due diligence on this issue before making the decision to award the grant, so the agency could not possibly have been misled by any unclear statements in the application. Each of the three cities that submitted the FCC spectrum waiver request submitted a separate letter to NTIA committing to authorize the Alameda County Sheriff’s Office to enter into the requisite lease agreement. On June 4, 2010, the City of Oakland wrote:

If the BayWEB application is successful and awarded the BTOP grant, the City of Oakland (the “City”) will participate in the BayWEB project. More specifically, the City will enter into the requisite lease agreement with the Public Safety Spectrum Trust Corporation (“PSST”) so that the 700 MHz spectrum shall be

<sup>14</sup> American Jobs Act of 2011, S. 1549 and H.R. 12 available at <http://thomas.loc.gov/cgi-bin/query/z?c112:H.R.12>.

<sup>15</sup> See NTIA Response Letter at 2.

<sup>16</sup> *Id.*

used for the public safety system described in the BayWEB BTOP application. Alternative, if permitted by the PSST, the City may authorize, pending legal review and Council approval, the Alameda County Sheriff's Office, as executive sponsor and Regional Mutual Aid Coordinator for Region 2, the Northern California Coastal Region, on behalf of the BayRICS ("BayRICS") to enter into the requisite lease agreement.<sup>17</sup>

On June 9, 2010, the City and County of San Francisco wrote:

This letter is to confirm that the City and County of San Francisco will enter into – or, if permitted by the PSST, authorize the Sheriff to enter into – an appropriate lease agreement with the PSST for the 700 MHz public safety spectrum in the San Francisco Bay Area for the use by and benefit of the ten counties that comprise the Bay Area UASI. In addition, if Motorola's BTOP grant is awarded, the City and County of San Francisco will join with the Sheriff to enter into additional agreements with Motorola that will allow Motorola to build, own, operate, and maintain the proposed public safety system, which public safety entities in the ten counties that comprise the Bay Area UASI will utilize to provide services consistent with their lease agreement with the PSST.<sup>18</sup>

Even the City of San Jose, which only after we announced the grant award surfaced the concerns addressed now by the OIG, wrote very specifically on June 7, 2010 as follows:

If this application is successful and Motorola is awarded the BTOP grant funds, the City of San Jose (the "City") plans to participate in the BayWEB project. More specifically, the City will negotiate in good faith to enter into the requisite lease agreement with the Public Safety Spectrum Trust Corporation ("PSST") so that the 700 MHz spectrum may be used for the public safety system described in Motorola's BTOP application.<sup>19</sup>

Given these strong statements of support, and given the urgency felt by communities and federal agencies to make progress on public safety networks across the nation, NTIA felt confident then – and remains confident now – that the BayWEB project will be able to use the 700 MHz spectrum. The OIG now suggests that NTIA should have waited to verify that formal authorization was granted by the cities before moving forward with its award decision. However, as the OIG notes, each of the letters was conditioned on the award of the grant to Motorola, so postponing the award decision would itself have delayed resolution of this issue.

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<sup>17</sup> Letter from Oakland City Administrator Dan Lindheim to Joseph Bissonnette of NTIA (June 4, 2010).

<sup>18</sup> Letter from City and County of San Francisco Police Department Assistant Chief/Chief of Staff Morris Tabak to Joseph Bissonnette of NTIA (June 9, 2010).

<sup>19</sup> Letter from San Jose Deputy City Manager Deanna J. Santana to Joseph Bissonnette of NTIA (June 7, 2010).

***Concerns Raised Regarding the February 2010 RFP Process***

OIG's follow-on report addresses concerns raised by Santa Clara and San Jose regarding Motorola's involvement in the BayWEB project.<sup>20</sup> The OIG ultimately determined that the problem was "largely one of perception." This conclusion in essence affirms the investigation conducted over a year ago by the California Emergency Management Agency (CalEMA).<sup>21</sup> Moreover, nothing in BTOP rules required any applicant to submit to any review or selection process by any or all of the Bay Area communities prior to submitting its application.

***NTIA Agrees That Letters of Support of Potential BTOP Projects from Public Officials Must be Put in Context, But Disagrees that Its Reliance on Such Letters Contributed to Deficiencies in the Application Process***

NTIA stands behind its consideration of letters of support from public officials as part of the BTOP application review process. Such expressions of broad support from well-known and trusted public entities were valuable, and NTIA reasonably had confidence that these letters provided strong indications of each community's commitment to a project's success.

NTIA does agree with OIG that such letters must be put in their proper context and, further, believes it did so. As discussed above, the BTOP due diligence process was multi-faceted and determinations to make BTOP awards were based on a variety of factors. Letters of support alone were not determinative of a decision to award a project. That said, we do not agree with the OIG's suggestion now that NTIA should have required letters of support for BTOP applications to contain more specific fiscal and/or political commitments. The outpouring of support shown for the BayWEB project helped give NTIA the necessary confidence to proceed with the project, knowing that governance would be a continuing issue. Also, as previously noted, at the time of the decision to award, NTIA had no indication from Santa Clara and San Jose that they had concerns with the project. In fact, their letters of support, both in the application and provided during due diligence, reflected just the opposite.

***NTIA is Focusing on Post-Award Project Administration and Oversight***

NTIA believes that the most efficient, effective, and best use of program resources at this time is to focus on post-award project administration and oversight. NTIA implemented a rigorous monitoring and oversight plan for BTOP grants to ensure projects are completed on time, stay within budget, and deliver the promised benefits to the communities they serve. NTIA has achieved a substantial level of oversight, awardee education, and technical assistance despite having limited federal staff and budget to perform this work. The agency's oversight plan is both rigorous and cost-effective, with annual administrative expenses representing less than one percent per year of the amount of the total grant portfolio.

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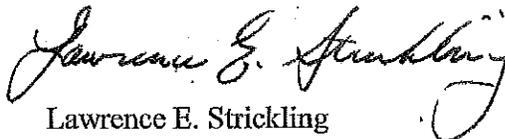
<sup>20</sup> Significantly, although the events, about which Santa Clara and San Jose raised concerns now occurred in early 2010, neither Santa Clara nor San Jose raised this issue with NTIA in the application process or during our due diligence contacts with these communities in the summer of 2010.

<sup>21</sup> See Letter from Brendan A. Murphy, Director of Grants Management, California Emergency Management Agency to Laura Phillips, Executive Director, Bay Area Urban Area Security Initiative (Oct. 14, 2010).

The OIG previously has characterized the BTOP post-award monitoring framework as reasonable.<sup>22</sup> NTIA continually works to improve its project monitoring and oversight and has incorporated all suggestions made to date by OIG to its satisfaction.<sup>23</sup> Indeed, the BayWEB project receives the highest level of monitoring and significant staff attention under the BTOP post-award framework. Additionally, taking NTIA's role as steward of taxpayer funds seriously, the agency has worked to ensure that minimal federal grant funds are expended as Motorola continues to work with the Bay Area jurisdictions to finalize the critical Build, Own, Operate, and Maintain (BOOM) agreement with the local public safety authorities.

In conclusion, it is important to our national agenda to continue to try to solve the challenges of public safety communications using the tools at hand, such as Recovery Act grants. NTIA's approval of the BayWEB grant, made after appropriate due diligence, was based on a full appreciation of all material facts available at the time. Now, NTIA must continue to focus its efforts and resources on the challenges existing today in the post-award context. NTIA will continue to work with you as it carries out this important program to expand broadband capabilities in the United States, create jobs, and lay a new foundation for economic growth in America. If NTIA may be of further assistance, please contact Milton Brown, NTIA's Liaison to the OIG, at (202) 482-1853.

Sincerely,



Lawrence E. Strickling

cc: Ann Eilers, Principal Assistant Inspector General for Audit and Evaluation  
Anthony Wilhelm, Deputy Associate Administrator, Office of Telecommunications and Information Applications, NTIA  
Milton Brown, NTIA Audit Liaison  
Chris Rose, Senior Auditor, Recovery Act Task Force, OIG  
Aimee Meacham, NTIA

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<sup>22</sup> OIG, *NTIA Has an Established Foundation to Oversee BTOP Awards but Better Execution of Monitoring is Needed* at 13 (Nov. 11, 2011).

<sup>23</sup> See *id.* at 16.

**DATE:** December 1, 2011  
**TO:** BayRICS Joint Powers Authority  
**FROM:** Barry Fraser, BOOM Negotiations Team Lead  
**SUBJECT:** Proposed BOOM Agreement and Recommendations

RECOMMENDATIONS:

1. That the BayRICS Authority Board direct the Technical Advisory Committee to complete review and recommendations for all BOOM technical exhibits (Exhibits A, B, C, I, M) no later than December 15, 2011;
2. That the Board begin the process of selecting a Project Manager to perform the designated Single Point of Contact duties under Section 3.2 of the proposed agreement;
3. That the Board establish an *ad hoc* Committee to enter into discussions with BART, CENIC and other fiber providers to secure fiber for BayWEB backhaul.

DISCUSSION:

On November 28, 2011 the BOOM team concluded negotiations with Motorola on a draft agreement (Attached). This report will provide a detailed analysis of the risk and costs assumed by the Authority under this proposed agreement. The BOOM team anticipates that this report will be a working document that will be updated regularly to incorporate comments of Members and others. The BOOM team anticipates that the Board may take action on the BOOM agreement on or after January 16, 2012.

As BOOM lead, I want to thank all BOOM team members for their hard work, dedication and sacrifices in time and energy over the past year. I also wish to express thanks to the Member Agencies that donated staff time, meeting space and other resources to the negotiations team for their significant contribution. I also acknowledge the Motorola negotiating team, for although these negotiations were long, grueling and often emotionally charged, my opinion is that the people negotiating for both parties displayed professional and respectful behavior throughout the process.

Another round of thanks must go to the Best, Best and Krieger attorney team, for their outstanding legal and business advice that serves to make the agreement a generally fair, balanced and equitable contract between the parties.

The BayWEB 4G LTE Public Safety network will be among the first of its kind in the nation. BayWEB will serve as an innovative model for providing broadband data services to our public safety representatives in the field. As such, it is reasonable to expect that some aspects of this business relationship will differ from prior government relationships with private service providers. As with any new innovation, launching the BayWEB broadband network will carry specific risks. At the same time, the Authority and Bay Area public safety agencies stand to gain many demonstrated benefits and efficiencies from the adoption of this new model, including enhanced functionality, security and reliability compared to current data services.

Above all else, the final draft should be viewed as a compromise. Each party has tentatively agreed to assume more risk and costs than it would prefer. This agreement has been structured to be

open and balanced, allowing both sides to understand and mitigate their allocated risks. The BOOM team and its attorney team have attempted to identify and evaluate all significant risks related to the project. Whenever possible, we have minimized the authority's risks under the proposed agreement. In other cases, we have identified specific processes, actions or other measures that the Authority can take to mitigate risks. In addition, the competitive market for public safety broadband services will serve to minimize certain risks by creating strong incentives for Motorola to maintain high quality services and avoid taking any action that would unreasonably increase the risk of negative publicity regarding network deficiencies or substandard service.

Finally, although we concluded negotiations on the agreement itself, several Exhibits to the agreement remain incomplete. These Exhibits involve the design, specifications, statement of work and service level commitments for the BayWEB network. The final versions of following Exhibits will be distributed no later than January 5, 2012:

Exhibit A	System Description
Exhibit B	Specifications (including List of Sites, List of Licensed Frequencies, and Facilities)
Exhibit C	Statement of Work (Deployment Stage (including the Description of the Phases, if any, and the Performance Schedule)
Exhibit E	Options [Exhibit E will be developed in the future and upon mutual agreement will be added to this Agreement.]
Exhibit I	Service Levels
Exhibit M	Operation Stage and Maintenance Service Statement of Work, including Service Terms and Conditions

**For this reason, the BOOM team recommends that the Board direct the Technical Advisory Committee (TAC) continue to work with Motorola to complete review of these Exhibits over the next two weeks, with the goal to provide recommendations to the Board no later than December 15, 2011.**

## **BOOM AGREEMENT: KEY TERMS AND CONDITIONS**

### **Potential Benefits**

1. Motorola and the Authority will execute a 10-year build, own operate and maintain (BOOM) Agreement, and will then transfer the entire system to the BayRICS Authority at no cost. The BOOM Agreement will govern use of spectrum, rates and service levels, upgrades and final transfer of the system to the Authority.
2. Motorola will execute site use agreements directly with site owning jurisdictions; Motorola pays all site remediation costs for the current list of sites [Section 3.3]. Motorola will also pay site remediation costs for substitute sites until May 31, 2012 [Section 3.4.2]. Jurisdictions must pay for site lease costs and utilities for the sites.
3. Agencies have no obligation to purchase a minimum number of user accounts and Motorola assumes all risk of loading users on the system [Section 3.5].
4. Device Neutrality. The network will support any certified 3GPP LTE device regardless of manufacturer. Motorola will provide devices to eligible users through separate agreements and may not offer credits or other discounts on BayWEB user fees as part of a device purchase agreement [Sections 3.15; 5.2].

5. Motorola will offer an introductory rate of \$38/user/month for the first year of operation, and for subsequent years will maintain a rate that is driven from the commercial competitive market. BayRICS Authority will review rates annually [Section 5.2].
6. Public Access System: Given the urgency of moving this agreement forward to the approving entities, the public access system BOOM agreement will be negotiated separately.

#### **Potential Costs to the Authority**

7. The agreement requires that the Authority designate a Single Point of Contact (POC) between the Parties [Section 3.2]. This position is necessary to adequately manage the many tasks that will fall upon the Authority related to the administration of this agreement. **The BOOM Team therefore recommends that the Board begin the process of hiring staff to serve as the designated POC for the BayWEB project.**
8. Assumption of costs for customer service and billing functions. The delineation of customer service functions between Motorola and the JPA remains uncertain, making reliable estimates of costs to the Authority difficult. However, some jurisdictions currently operate successful customer support services, and cost projections based on current service levels can be developed and included in the system funding plan. Alternatively, customer interface functions might be outsourced to one of these agencies for a lower cost than Authority-provided functions. [Sections 3.4.4(vii); 5.3; Exhibit M]
9. Assumption of costs for providing sufficient backhaul. If the Authority cannot develop an acceptable relationship with BART for its fiber and sites, the Authority bears the risk of costs for system redesign and engineering [Section 3.4.4(ii)]. These costs could be substantial. **Therefore, the BOOM team recommends that the Board immediately establish an *ad hoc* Committee to enter into discussions with BART, CENIC and other fiber providers to secure fiber for BayWEB backhaul and to better assess the cost of going forward without BART fiber.**
10. Assumption of costs for future upgrades. The Authority bears the risk of all upgrades to the system. Because the agreement is proposed to run for 10 years from system acceptance, there is a significant risk that the Authority will incur costs of required or desired system upgrades. These costs are more likely to occur in the outlying years of the agreement. There are several scenarios under which these cost may arise:
  - a. FCC standards change, requiring system upgrade to remain compliant with spectrum rules. This risk is mitigated somewhat by FCC practice of “grandfathering” i.e. not imposing significant costs for upgrades to existing systems to comply with newly established rules. The Authority can further mitigate this risk by maintaining a good relationship with FCC staff and making sure the costs of proposed rule changes are in the record of the rulemaking.
  - b. Congressional legislation imposes new costs. This risk has always been present for early builders, because the waivers were granted on condition that the recipient’s projects may be subsumed under a single nationwide system. This risk can be mitigated by working in concert with other early builders to educate Congress and national governance bodies that early builders are performing a service to the network through research and development of the best practices for network build out and operation, and therefore these systems should not be forced to bear the costs of technology changes or upgrades required to comply with a nationwide public safety network.

- c. Barring regulatory changes (or if regulations grandfathers early adopters), the Authority bears the risk of system obsolescence, declining subscriber base, etc. Even if no upgrades occur in during the 10-year agreement, the Authority risks inheriting an out-of-date system if funds are not identified for ongoing upgrades. The Board will need to address these costs no later than the beginning of year three of the agreement.

11. Roaming [Section 3.6.5; 3.7]:

- a. Motorola will provide reasonable technical assistance to the Authority concerning roaming services from that commercial carrier;
- b. Users will be responsible for roaming charges outside the BayWEB service area.
- c. Users will be provided with a web-based application that will allow them to report system deficiencies on a real-time basis. Such deficiencies would include but not be limited to system performance and coverage. Motorola will accumulate this data in a format to be jointly determined by the JPA and Motorola. Motorola and the JPA will review the data on a regular basis. Such deficiencies may be the result of device functionality, backhaul capacity or system coverage. Solutions to be considered will include but may not be limited to: additional sites, enhanced backhaul, bi-directional amplification, device replacement or remediation, or roaming availability. The JPA and Motorola will jointly agree on the cost-effectiveness of the applied solution.

**Potential Legal Risks**

12. Risks of delayed availability or unavailability of sites [section 3.3]. Except for Motorola's responsibilities for Site Remediation Costs and Motorola's responsibilities in the Site Access and Use Agreements, Motorola has not accepted the risks or other costs associated with delayed availability of Sites or unavailability of Sites, or Site substitutions, replacements or additions. If a site becomes unavailable before May 31, 2101, it may be replaced with substitute Site and Motorola will pay site remediation costs. If a site becomes unavailable after May 31, 2012, it may be replaced, but the Authority may be required to pay site remediation costs.

If the Authority wishes to add additional sites after May 31, 2012, it must pay the cost of those sites.

13. Relationship between Motorola and Eligible Users.

- a. Eligible Users other than the Authority are not Parties to this Agreement and are not third party beneficiaries under it, but have the rights to use the System in accordance with this Agreement [3.6.2]. The rights of Eligible Users should be defined in agreements between the user agency and the Authority (End User Agreement).
- b. Restrictions and limitations on use [Section 3.6] have been modified somewhat in the Authority's favor. The remaining restrictions will be incorporated into the End User Agreement.
- c. Motorola has requested the ability to impose a "reinstatement fee" in cases where a user has repeatedly had service suspended or terminated [5.2].
- d. Risks of Late Payments or Non-Payment by the Eligible User agency. Invoices for User Fees are due within sixty (60) days for invoices submitted before the date which is twelve (12) months after Final Project Readiness, within forty-five (45) days of the

invoice date thereafter for the next twelve (12) months, and thereafter within thirty (30) days of the invoice date [section 5.3].

14. Risk of Loss of System Equipment [Section 5.4.3]. Motorola will retain risk of loss concerning the Equipment comprising the System unless the loss is caused by an Authority default under this Agreement, or by the negligence or intentional misconduct of the Authority, its employees or agents; in these latter instances, the Authority has risk of loss concerning the Equipment. If loss of Equipment is caused by a Site Owner, or their employees or agents, the Authority will cooperate with Motorola in holding the Site Owner responsible. The Authority has risk of loss concerning improvements to Sites or Facilities, regardless of whether those improvements are funded as a Site Remediation Cost.
15. An unfair provision designating Force Majeure for regulatory changes has been replaced with a new section: Regulatory Changes [Section 10.2]. Upon the occurrence of a Regulatory Change that would result in a material change in the operation of the System as currently contemplated, the Authority and Motorola shall meet and confer to discuss available options or changes necessary for the continued operation of the System. If the operation of the System can be reasonably modified to comply with the Regulatory Change, then the Authority and Motorola shall agree upon an equitable adjustment in the obligations of the Parties, which may take the form of (i) an allocation of cost for new or upgraded equipment, software or Site infrastructure, (ii) an increase in the User Fees, (iii) an extension of the Term (to the extent permitted by the NTIA under the BTOP Grant requirements) or time to perform, or (iv) the Parties may agree mutually to terminate the Agreement.
16. Confidential Information [Section 15]. Motorola acknowledges that Authority is a public agency that is subject to document requests pursuant to the California Public Records Act and Freedom of Information Act, if applicable.
17. Liability Cap and Consequential Damages [section 14]. Both parties agree to a \$10 million cap on certain damages; Authority has not disclaimed consequential damages including lost profits, however, such damages are subject to the general liability cap.
18. Taxes, including Possessory Interest Taxes [Sections 5.3.5; 16]. Motorola is responsible for payment of any taxes related to ownership of Equipment, software, devices or improvements at the Sites. The Authority agrees to pass through any taxes or fees related to the service. Possessory Interest Taxes, if any, may be the responsibility of Site owners.
19. BBK Attorneys successfully incorporated more favorable language involving Changes [3.8], Transfer of title [5.5], Representation and Warranties [9], Patent and Copyright Infringement [13.5], Indemnification and Insurance [13], Disputes [11] and Termination [12].

#### **Technical Issues**

20. Motorola has rejected the system coverage and performance language specifically requested by the Board, which has been replaced by the following:

Consistent with and subject to Section 3.9.4, and subject further to any excused non-performance by Motorola due to a Force Majeure, non-performance by any Site Owner of its duties under a Site Access and Use Agreement, or non-performance by the Authority under this Agreement, Motorola will operate the System in compliance with applicable FCC requirements that exist on April 30, 2013.

New Section 3.9.4 deals with changes to the system required by regulatory action, including more demanding coverage and performance regulations imposed by the FCC. If authorized by the Authority, Motorola is required to make any changes to the system required by regulatory action; however the Authority may be required to pay any costs for those changes if the regulatory action occurs after April 30, 2013.

21. System readiness and Testing [Section 8]. System testing will conform to industry standards or standards then defined by the FCC as of April 30, 2013, or another date mutually agreeable to both Parties, and the results of the testing must confirm that the System operates in compliance with System Specifications, including compliance with applicable FCC requirements that exist when testing commences.

Although the Authority cannot require that specific test be conducted, Motorola will provide the Authority with its test plan at least sixty (60) days prior to any testing date. The Authority will provide Motorola any comments on the proposed test plan not more than thirty (30) days after receipt. If Motorola and the Authority do not concur that the test plan conforms to the standards described above, the Authority reserves its rights to dispute the test results.

22. The TAC may identify additional technical issues after it completes the ongoing review of exhibits.

**BayRICS**  
**JOINT POWERS AUTHORITY**  
**Technical Advisory Committee (TAC)**  
**STAFF REPORT**

**BOARD OF DIRECTORS MEETING**

**MEETING DATE:** Thursday, January 5, 2012

**AGENDA ITEM:** Report from TAC regarding final assessment of the BayWEB design and BOOM Agreement.

**SUBJECT:** Review and assessment by Technical Advisory Committee (TAC) of the Motorola Design and Final BOOM Agreement and Exhibits.

**DISCUSISON:**

The deadline for the BayRICS JPA to make a decision on whether to enter into the BOOM Agreement with Motorola is rapidly approaching. The TAC anticipates that this may be the last opportunity to provide an assessment of the BayWEB network design and the BOOM agreement prior to the JPA's decision.

BayWEB presents a valuable, one-time opportunity to the regions First Responders in the Bay Area. With that said, the TAC has identified several variables related to BayWEB that remain uncertain or in flux, including certain components of the technical design, backhaul elements, site availability, the cost of future upgrades and compliance with future regulatory standards. These uncertainties present potential financial risk or impact to BayRICS.

The purpose of this report is to provide the BayRICS Authority with an objective assessment of the technical opportunities, gaps and risks that BayWEB presents today, and, when possible, to propose recommendations for mitigation or resolution of these gaps and risks. It is important to recognize that responsibility for many of these variables is shared among site-owning jurisdictions, BayRICS and Motorola. The ultimate resolution of many of the issues identified in this report will require collaboration among all stakeholders.

**Background:**

Over the last 18 months representatives from BayRICS agencies have worked with Motorola to develop a system design and BOOM agreement for BayWEB. There has been significant work and compromise made on both sides to move towards a common goal. Even with the efforts made, there are still gaps in the overall design and unknowns associated in the implementation and operations of the System. Some of these gaps are related to the variables that have yet to be finalized, and some are related to points that could not be agreed upon.

Many of these gaps can be mitigated, but there will be significant costs and resources associated with that mitigation. The costs are difficult to estimate at this time. The TAC

presents this report to describe more clearly the expectations for BayWEB and the areas in which the JPA should be prepared to focus its resources. If the JPA decides to move forward with the BOOM, it should understand that this will not be the end, but the beginning of a regional broadband network build-out, which will require enhancements or expansion over a period of years and spanning multiple phases, with associated costs to the JPA and the Region.

### **BayWEB Opportunities**

- Provides an interoperable broadband wireless 4G Long Term Evolution network using the public safety spectrum allocated by FCC for Public Safety users with new tools, and capabilities to serve the Public.
- Provides a regional infrastructure and platform on which to develop, test and provide future digital and broadband communications services for public safety.
- Provides approximately \$100 million in Federal and vendor funding.
- Provides the region a foothold into the initial effort to develop a nationwide Public Safety Broadband network, with the potential ability to guide the development of the nationwide network.
- The network will allow the region to better understand our Public Safety user data requirements and how best to address and fulfill those needs.
- Ensures that Public Safety users will not have to compete for bandwidth with commercial users in times of a disaster or major event.
- Allows Public Safety Users to control priority and access to the network.

### **BayWEB Gap Analysis**

Basic Design - The BayWEB today is based on a system designed for vehicular coverage. With the limited number of sites committed by site-owning jurisdictions (currently approx. 136), the performance is expected to be uneven across the region. The need to add roaming with commercial providers and/or the addition of a significant number of sites will be required to balance the coverage or to provide coverage to support hand held devices as well as in-building coverage.

Performance (coverage & data rate) - The BOOM Agreement only provides that the network will meet minimum data rate requirements set by the FCC as of April 30, 2013. There will be no coverage testing as part of system acceptance. The lack of a greater commitment to data rates as they relate to the coverage area is directly tied to the number and location of sites and the capacity of the backhaul infrastructure. This uncertainty concerning coverage testing and potential for coverage gaps or slow throughput speeds is a significant concern to some TAC members. Without these things there is no reasonable way to set user performance expectations, confirm that the network is functioning properly (i.e, coverage, throughput, cell hand off, high-traffic loading, etc.), and individual BayRICS agencies may be limited in their ability to resolve related problems.

Technical Compliance – Motorola has committed to the network being compliant with specifications as defined by the FCC as of April 30, 2013. The JPA will be responsible for major upgrades or system refresh if required for regulatory compliance or system enhancements for the life of the agreement (10 years). The JPA should weigh the potential costs of such upgrades and consider a funding plan to address these costs in future years. This is an especially critical factor considering that the LTE standards are currently being developed.

Network Capacity – While it is anticipated that there will be a limited number of users on the initial network, the expectation is that the number of regional users will grow, as well as user traffic. Motorola has designed the network to support a minimum of 6000 concurrent users. But it is unclear whether the network is designed to allow for growth. A specific area of concern is the limited backhaul capacity on various portions of the network to support additional users and various high bandwidth traffic types, like HD Video and high resolution images. As backhaul capacity is the responsibility of the JPA, the TAC recommends that the JPA consider a plan to monitor current backhaul usage and development of future funding sources to enhance backhaul capacity to support future growth.

Network Reliability/Resilience – A key requirement for this network is a highly reliable, robust, and Public Safety hardened design. The TAC has identified the following redundancy/resiliency gaps in the current design:

- Lack of an alternate Core site
- Some key components of the backhaul design lacks resilience in the way of alternate routing, redundancy, loop protection, or Matrix topology
- Backhaul capacity limitations
- Lack of Alternate routing to the SupportServiceCenter
- Overall System reliability is less than that expected of a Public Safety grade system
- Backhaul reliability is unclear due to the lack of a consolidated System Management Plan

Based on the limitations listed above some members of the TAC are concerned that some portions of the network may not be Public Safety grade. The JPA is advised to monitor these concerns as the system is developed and consider working with Motorola and other regional public safety networks to add redundancy or share resources where possible.

Commercial Roaming – The ability to have commercial roaming capabilities is no longer included as part of the BayWEB implementation. The JPA will work with Motorola over the first year of system operation to evaluate the network to determine whether roaming capability is required or if coverage may be enhanced to reduce the need for commercial roaming. The TAC notes that potential solutions to coverage gaps may be costly and will require the Authority to carefully weigh the costs versus the benefits of proposed solutions.

Exhibit Review – TAC has reached a conclusion that technical information in Exhibits A and B is compiled as a proposal, rather than a detailed design document. In these Exhibits, there are many products listed with very high level specifications, and does not provide the sense of an

integrated solution. At the time of preparing this report, TAC was unable to complete their assessment of a number of Exhibits due to a lack of information from Motorola. These Exhibits include; "C" Statement of Work, "I" Service Levels and "M" Operations and Maintenance. TAC provided a number of changes on Exhibits C, I and M to Motorola in November. TAC recently received revised versions of Exhibits "I" and "M". The documents appeared to reject all suggestions made by TAC. There was no explanation or discussion from Motorola on their position. TAC only recently received a revised Exhibit "C". Therefore, TAC considers the assessment of these documents incomplete at this time.

## **BayWEB Risks**

Coverage and Performance – Potential limitations on backhaul and inability to secure sites from site owners, combined with the lack of an explicit and written guarantee on performance and coverage by Motorola creates a potential risk for the JPA. Some members of the TAC feel that this potential risk may prompt some First Responders to forego use of the network because it may not fully meet their needs and expectations. The JPA is urged to monitor system performance and be prepared to develop coverage or backhaul enhancements or explore a commercial roaming solution.

FCC waiver - The FCC has yet to approve the modification to the Bay Area's Waiver. Without this waiver the BayWEB sites outside of three core cities could not be used.

Technology Refresh – TAC feels that at the end of the BOOM Agreement, the network infrastructure would have reached the end of life. The BOOM agreement eliminates the system refresh requirement in return for a guarantee that members pay no site remediation costs and have no minimum user commitments. With no guarantee for technology refresh, the system is at risk of becoming outdated or unusable unless the JPA develops a funding plan to address system refresh in future years.

BART Fiber – The BART fiber is a critical component of the current backhaul design. If an agreement for use of the fiber is not reached, the BayWEB design would be severely impacted.

LTE Standards – The development of LTE standards is currently being established at the national level. As these standards are not finalized there is the risk that BAYWEB "as built" will not be able to meet some eventual standards. Some TAC members are concerned that the system, in future years, may not be capable of interconnecting with newer Public Safety or Commercial networks to allow seamless roaming.

Grant Deadline – There are specific completion dates tied to the NTIA grant dollars. The NTIA has declined requests to extend these timelines. There is a high likelihood that the current dates cannot be met. The impact of not meeting these dates is unknown at this time.

BayRICS Agency Costs – There will be unknown additional costs to both the JPA and specific to the participating agencies. Due to the fact that there are many aspects of the project yet to be finalized the actual costs can only be estimated. Areas of those costs include;

- JPA Fee (administration, network support, back haul, etc.). Note that the JPA fee cannot be increased without a unanimous vote of the Board and amending the JPA Agreement.
- Commercial Roaming (if required)
- Site operations (utilizes, leases, etc.). These costs will vary significantly by site and by jurisdiction.
- Subscriber equipment maintenance (if required)

## **SUMMARY**

The development of a Public Safety grade Broadband Network would be a great asset for our First Responders in the Bay Area. BayRICS members have made their support for that effort clear through their agencies commitment of resources during the JPA development, BOOM negotiations and TAC review over the last 18 months. TAC recognizes that BayWEB presents a valuable opportunity to the region, and that such an opportunity may not occur again. At the same time the BayRICS Authority should understand that the deployment of BayWEB as is it is designed today will likely require additional resources and enhancements, and should be considered as the first phase Regional Interoperable Broadband 4G LTE network. Additional commitment of resources in time and money will be required to add subsequent phases and enhancements to the system to meet Public Safety grade standards and thereby expand the user base.