



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Chief William McDonald
Michelle McGurk

SUBJECT: Public Safety Broadband System

DATE: December 2, 2011

APPROVED: 

DATE: 12/5/11

RECOMMENDATION

It is recommended that the City Council:

- 1) Approve a report on the status of site access and use agreement negotiations with Motorola to use four San José radio sites for the public safety component of the regional broadband system called BayWEB.
- 2) Authorize the Mayor to sign and file, together with Oakland and San Francisco, an amended petition with the FCC for a waiver to use the 700 MHz public safety spectrum.
- 3) Approve San José's Comments on the San Francisco Bay Area Regional Interoperable Communications System (BayRICS) Joint Powers Authority System Funding Plan for filing with the BayRICS JPA.
- 4) Provide policy direction regarding San José's position on the Build-Own-Operate-Maintain Agreement (BOOM) between the BayRICS JPA and Motorola.

OUTCOME

To provide an update on interoperability efforts to the Council and authorize actions with relation to the San Francisco Bay Area Regional Interoperable Communications System (BayRICS).

BACKGROUND

San José has a long history of support for improvements to the communications systems for police, fire, and other first responders. Whether it is the possibility of a major earthquake, other natural disaster, or the potential of an attack on Silicon Valley's vital high-technology, defense, and economic infrastructure, our region has long been at risk. Over the past two decades, we

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have learned how critical it is for public safety agencies to be able to communicate in times of emergency. San José knows well that disasters don't stop at the city limits or county line. On December 14, 2010, the Council unanimously adopted four Guiding Principles for the development of a regional communications system for public safety (Attachment A). At that time, the City of San José had been asked by the Alameda County Sheriff, the then-Executive Sponsor of the BayWEB project, to provide a written commitment to participate in the system. BayWEB is a 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 stimulus funds. In September 2010, Motorola received a grant in the amount of \$50,600,000 from the Department of Commerce to implement this project and had committed to provide a match of \$20,000,000 in in-kind services and equipment.

The Council declined to sign a Letter of Intent with the Sheriff, and instead voted unanimously to adopt a position of support for the concept of regional interoperability for public safety communications and to participate fully in BayWEB planning and governance efforts.

The Council also unanimously voted to ask the NTIA to reallocate the funds to the Bay Area cities and counties to conduct a fair and unbiased procurement process, which is the process used in every other region of the country that received BTOP funding for public safety broadband projects. The Council made this request due to serious concerns about the manner in which staff of the Bay Area Urban Area Security Initiative partnered with staff from Motorola Incorporated to craft the corporation's BTOP grant application.

Since last December, Mayor Reed, San José staff, and our Washington, D.C. lobbyists have held numerous discussions with the Department of Commerce, members of Congress, and other federal officials, all with the same result: The NTIA was unable to reallocate the grant funds to the local region. With this understanding, San José staff strived to work with other jurisdictions in the region to create a governance structure for regional public safety communications projects, including the possible BayWEB project. Such a governance structure has long been needed to coordinate operations and maintenance of the BayLOOP public safety microwave system, for example. The Bay Area Regional Interoperable Communications System (BayRICS) Joint Powers Authority was created, and San José's City Council unanimously voted to join the BayRICS JPA on June 14, 2011. Michelle McGurk, Senior Policy Advisor to Mayor Reed, serves as San José's representative, and Christopher Godley, Director of Emergency Services, is the City's alternate.

The BayRICS JPA held its first meeting on August 8, 2011, and has met eight times since inception. Committees were created, including a BOOM Negotiations Team, tasked with negotiating a BayWEB system contract with Motorola. San José's representative was elected Vice Chair of the JPA and has been a member of the negotiations team. Monthly updates on BayRICS have been provided to the Council's Public Safety, Finance, and Strategic Support Committee under the standing agenda item of public safety interoperability.

The BayWEB project has reached critical decision points, and this report places four key issues before the Council for authorization and policy direction.

ANALYSIS

Site Access and Use Agreements

The BayWEB system is designed to leverage existing public safety resources by co-locating broadband equipment on 193 sites that Bay Area public safety agencies already use for their emergency communications and land-mobile radio systems. Motorola's BTOP grant proposal also envisioned placing the equipment 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.

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. This is anticipated to cover all costs of site remediation. If new or additional sites are desired after May 31, 2012, the Authority may be required to pay remediation for those sites. Site owners are expected to provide sites for the BayWEB project rent free and assume costs for utilities, environmental clearance, permitting, and leasing privately owned sites as well as any indirect costs such as the value of staff time to escort Motorola staff onto the sites.

To date, one Bay Area county - Solano - has stated that they will not participate in the BayWEB project, primarily due to cost concerns.

Motorola seeks to use four sites in San José for BayWEB: City Hall, Eagle Rock, Fire Station 28, and Cadwallader Reservoir.

On November 15, 2011, City Manager Debra Figone wrote to Motorola outlining three key conditions that needed to be met prior to asking Council for approval to enter into a site access and use agreement:

- Site access and use will be limited to the BayWEB public safety broadband system only. The public access system equipment cannot be accommodated on our sites.
- San José will retain all rights to lease or enter into partnerships on our property, with the understanding that any equipment installed won't interfere technologically with Motorola's equipment.
- San José recognizes that Motorola owns the BayWEB equipment until it is transferred to the BayRICS Authority or its designee, however any improvements made on San José sites that are concurrently used for San José or regional public safety purposes (such as tower replacement or dish substitution) will be owned by San José and remain in San José's ownership after the lease terminates.

Motorola has agreed to the first two terms in principle. However, after reviewing the subject sites with Planning, Building and Code Enforcement and Public Works, and the City Attorney 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.

Policy Alternative #1. Direct staff to continue to work with Motorola to use San José's four sites for BayWEB.

RESULT. Staff would conduct environmental review and community outreach and then bring an agreement forward to the Council for approval. BayWEB would provide coverage for public safety personnel, including police officers, firefighters, and paramedics, within the city limits. (Note: San José could choose to join the system at a later date depending on coverage and performance quality.) San José will have to pay electrical costs for the equipment on these sites for the life of the contract, estimated at \$5,000 to \$20,000 per year based on numbers provided in the BayRICS System Funding Plan.

Policy Alternative #2. Direct staff to decline providing sites to BayWEB.

RESULT. BayWEB coverage would be minimal in San José. This could impact other public agencies or contract service providers (i.e. ambulance services).

In the spirit of regional cooperation, staff recommends Policy Alternative 1. Should the BayWEB project go forward, San José would not be hindering system performance or coverage by keeping our sites from the system. The final site access and use agreement would return to Council for approval after environmental review and outreach is conducted.

FCC Waiver

In 2007, the Federal Communications System reallocated spectrum in the 700 MHz band class for public safety and commercial uses. 10 MHz of spectrum was made available for early deployments of public safety 4G LTE broadband projects, through the Public Safety Spectrum Trust (PSST). (Note: Congress is currently debating allocating additional spectrum called the D-block to public safety for a nationwide wireless broadband network. The early systems like BayWEB would need to integrate with the nationwide network.)

In the Bay Area, the three largest cities (San José, San Francisco, and Oakland) 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 Authority 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 systems nationwide. The Bay Area waiver was one of 21 granted nationwide in May 2010.

Subsequently, the lease document approved by the PSST was with a lessee named the "San Francisco Bay Area Urban Region," and signed by the Alameda County Sheriff, with the staff contact listed as the UASI General Manager. According to documents filed with the FCC, Motorola's outside counsel provided assistance with the execution of this lease.

The FCC has since determined this lease is not valid, and the three cities have expended significant time and legal resources in an effort to correct the problems with the waiver and lease. The FCC had advised the three cities that the most expeditious and prudent option is to file an amended waiver petition allowing the PSST to enter into a new lease with the original Petitioners (San Francisco, Oakland and San José). The draft petition (Attachment B) states that

the cities will then promptly seek approval to assign the lease to the BayRICS Authority, as expressly permitted by the form spectrum lease.

Policy Alternative #1. BayRICS Authority Petitions the FCC Directly for a Regional Waiver

RESULT. The Council could recommend that the BayRICS Authority directly petition the FCC for a regional waiver and lease. While this approach would be more direct, the FCC has indicated it would require a lengthy notice and comment proceeding. In recent months, the FCC has not taken action on new waivers due to the pending Congressional action around building a nationwide system. The NTIA has stated that without certainty that the spectrum will be available to the BayWEB system, Motorola's BTOP grant could be in jeopardy.

Policy Alternative #2. San José Signs the Waiver Petition

RESULT. The Council authorizes the Mayor to sign the draft waiver petition and lease documents on behalf of the City of San José. Should the FCC award the waiver and lease to the three cities, staff would then negotiate lease terms and conditions with the BayRICS Authority. It is important to note that the petition makes commitments to the FCC that the petitioners intend to build a public safety 4G LTE system that is compliant with FCC standards. It outlines the way in which Motorola's BayWEB system will serve this purpose. 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 on April 30, 2013. According to the BOOM Agreement, the company has not committed to meeting future regulatory requirements. Should regulations change or new standards be implemented, the waiver-holders are ultimately responsible for compliance. For those reasons, the lease with the BayRICS Authority must assume risk for compliance. Given fiscal realities for San José, funds are unlikely to be available to invest in upgrades during the 10-year life of BayWEB.

While staff's preferred policy alternative is #1, the timing issues are such that staff recommends Policy Alternative #2 and will work with the cities of San Francisco and Oakland to ensure that when the spectrum lease is assigned to the BayRICS Authority, the lease contains ample protection for future regulatory requirements.

BayRICS Authority System Funding Plan

To ensure transparency and fiscal responsibility, the drafters of the BayRICS Joint Powers Agreement included the following requirement: Before entering into any contracts for the system, the Authority must first approve a System Funding Plan. The Systems Funding Plan is considered pivotal to the establishment of the JPA. 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.

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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 authority regarding the plan, its financial commitments, and other obligations on their jurisdictions.

The draft Systems Funding Plan is provided in Attachment C. The 90-day comment period concludes on January 16, 2012, and the BayRICS Authority is expected to review and vote on the System Funding Plan later that week. If approved, the Authority will consider the BOOM Agreement with Motorola.

Significant elements of the System Funding Plan are missing or inconclusive based on items still to be negotiated with Motorola and other entities, as well as yet-to-be-determined costs for staffing, backhaul, and future system improvements. San José's comments capture those concerns and are provided in Attachment D.

Staff recommends that Council approve San José's comments on the BayRICS Joint Powers Authority System Funding Plan for filing with the BayRICS JPA.

BayWEB Build-Own-Operate-Maintain (BOOM) Agreement with Motorola

Once it adopts a System Funding Plan, the BayRICS Authority will consider approval of the draft BOOM Agreement with Motorola (Attachment E) to build, own, operate, and maintain the BayWEB 4G LTE Public Safety network (Note: Several Exhibits to the BOOM Agreement are not expected to be completed until December 15, 2011 or later). 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 land-mobile radio systems that our police officers and firefighters currently use. It 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 on technology's bleeding edge, including the following:

1. Limited availability of devices: 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-loaded modems for police cars, handheld PDA devices, and tablets. Commercially available devices like iPads and smartphones do not currently have the chipsets or other infrastructure to operate on the public safety band.
2. Future development and future technology standards: 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 at risk of 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 borne by the BayRICS Authority.

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 and withheld the actual grant application from the region. The UASI staff turned a valid Request For Information that would have had vendors conducting three small pilot projects in Oakland, San Francisco, and San José, into a questionable procurement for a sole source private sector partner. 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 a partner who controlled the grant funding.

Notwithstanding these challenges, the BayWEB BOOM Agreement before the Council today is a significantly better product than that originally presented to the Alameda County Sheriff when that office planned to serve as the project's Executive Sponsor. This final draft should be viewed as a compromise. Each party has tentatively agreed to assume more risk and costs than it would prefer.

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 Authority. This was significant as Motorola stated in the grant application that it anticipated 50,000 users on the system (a number impossible for the BayRICS Authority 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 Authority to vote on the pricing model and on other key issues when the two sides reached impasse in discussions. The BayRICS Authority also agreed to the following:

- Take on responsibility for billing system users.
- Provide system backhaul.
- 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.) will be the Authority's responsibility to create.

It is important to note that San José's representative voted no on the billing and roaming concessions, and added a requirement that if backhaul is not acquired for free, the issue must return to the Board for a vote. All of these requirements carry significant unknown costs. Backhaul is the fiber or microwave transport network that connects individual base stations to the 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

the BayLOOP public safety microwave system. However, the BayRICS Authority does not have a signed agreement with BART – and according to the BOOM document – if BART falls through, the Authority is 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 Authority is looking for alternative public fiber that can connect in these regions as the BayLOOP microwave backhaul has a significantly smaller bandwidth.

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 “as built” meets certain goals, but any improvements or compliance requirements down the road are the Authority’s responsibility.

The BayRICS Authority received staff reports from its BOOM Negotiations Team (Attachment F) and from its Technical Advisory Committee (Attachment G) at its December 1, 2011, board meeting. 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 report.

The BayRICS Authority is expected to vote on the BOOM Agreement on January 19, 2012. Council is asked to provide policy direction to the San José representative who will be voting on our city’s behalf.

Policy Alternative #1. Vote to approve and enter into the BOOM Agreement.

RESULT. With an affirmative vote, the BayRICS Authority and Motorola would move forward with construction of BayWEB beginning in 2012.

Policy Alternative #2. Vote no on the BOOM Agreement.

RESULT. If a no vote prevailed at the Board, the BayWEB project would not be built, and the \$50,000,000 in ARRA funding would be returned to the Treasury. The BayRICS Authority and waiver holders would have to explore other options for developing a broadband system for public safety – or wait until a nationwide network might be developed.

Given the significant compromises made in developing the BOOM Agreement, the lack of guarantee that the funds invested will result in a system that meets public safety needs throughout the 10-years of the contract, and the fiscal risks to the Authority and its members, staff recommends Policy Alternative #2. Such a vote puts the ARRA funds at risk, but we can all cite projects where free money from federal or state sources have led to exponentially higher downstream costs. Had a different – and transparent – course been taken by UASI staff in the beginning, we would be having a different discussion.

San José staff does not come to this recommendation lightly. Staff has invested thousands of hours in the negotiations and related work to create the BayRICS Authority. This time has been well spent in ensuring that if the project goes forward, it will be governed by an organization created to operate transparently. As a result of San José’s hard work and tenacity, there are

protections and positions retained in the BOOM Agreement that benefit the entire region. This is a vital system for our public safety first responders, and for that reason, we cannot compromise on performance, coverage, and interoperability.

PUBLIC OUTREACH/INTEREST

- Criterion 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- Criterion 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criterion 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

COORDINATION

This memorandum has been coordinated with the Office of the City Attorney.

FISCAL/POLICY ALIGNMENT

This action is consistent with the following General Budget Principles:

1. We must focus on protecting our vital core city services for both the short- and long-term.
2. We must continue to streamline, innovate, and simplify our operations so that we can deliver services at a higher quality level and with better flexibility.

COST SUMMARY/IMPLICATIONS

As noted in this report, this information is incomplete at this time.

CEQA

Not a Project, File No. PP-10-069(a) Staff Reports. Additional environmental clearance would be needed if site access and use agreements would result in a physical change to the environment.

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/s/

WILLIAM MCDONALD

Fire Chief

/s/

MICHELLE MCGURK

Mayor's Senior Policy Advisor

For questions, please contact Christopher Godley, Director of Emergency Services at 277-4595

Attachments:

A – City of San José Guiding Principles for Interoperable Public Safety Broadband (approved by Council Dec. 14, 2010)

B - Draft FCC waiver petition

C - Proposed BayRICS Systems Funding Plan (Dec. 1, 2011)

D - Draft Comments by the City of San José on the BayRICS JPA Systems Funding Plan (TBD)

E - Draft BOOM Agreement between the BayRICS JPA and Motorola Solutions Inc. (Nov. 29, 2011)
(less selected Exhibits to be completed by December 15, 2011 or later)

F - BayRICS JPA Staff report on the Draft BOOM Agreement (meeting of Dec. 1, 2011)

G - BayRICS JPA Technical Advisory Committee report on the Draft BOOM Agreement (meeting of Dec. 1, 2011)

ATTACHMENT A

CITY OF SAN JOSÉ GUIDING PRINCIPLES FOR REGIONAL PUBLIC SAFETY BROADBAND

As approved by the City Council at its regular meeting of December 14, 2010.

Guiding Principles: The San José City Council supports the development of regional interoperable communications options for our public safety first responders. Ensuring the safety of the public we serve is our top priority and duty as a City. Any system that is developed must be done in a way that puts public safety first and takes into account the fiscal realities that California cities and counties face. Those developing the system, both from the public and private sector, must act with commitment to honesty, fiscal responsibility, and open government.

- 1) The decision to enter into public-private partnerships or procure a system will be done through accepted government procurement processes with decisions made through the appropriate governing body. Every aspect of financial benefit to the vendor as well as every cost to each municipality shall be fully disclosed and available.
- 2) Critical details including operational goals, system design, equipment site requirements, site access authority, system coverage, operating costs, expansion plans, governance structure, process for transfer of system to public agencies, and public access will be provided to cities, counties, and special districts prior to decisions being made.
- 3) Governing bodies and program staff will comply with state and local laws about procurement, sunshine, outside employment, conflicts of interest, and public meetings, including the Ralph M. Brown Opening Meetings Act.
- 4) The system will be developed using standards of open source equipment and true interoperability. The system will not require local agencies to purchase equipment with a specified vendor. System specifications will not be written in a way to exclude equipment providers.

Attachment B

To Be Distributed Separately

ATTACHMENT C

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.

Sub-total Annual Member Fee per Jurisdiction	\$ 24,500.00
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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.

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

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.¹

End User Devices, per user, three-year refresh cycle	\$450 - \$1,500
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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.

¹ 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.

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

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.² 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

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

² 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:

Year 1	\$78,000
Year 2	\$218,000
Year 3	\$263,495

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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Sub-total Membership Costs per Jurisdiction, Year One Through Three = \$73,500

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.

Sub-total Costs per Site, Year One Through Three = \$3,600 - \$134,400

2. COSTS TO MEMBERS WITH USERS

a. Device Costs (Jurisdictions may purchase devices from Motorola or another compliant vendor; 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			

Sub-total Costs per Device, Year One Through Three = \$450 - \$1,500

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.

Sub-total Connectivity Costs per PSAP, Year One Through Three = Costs dependent on circumstances of each individual facility

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.

<p>Sub-total Fees <u>per User</u>, Year One Through Three (not including backhaul) = \$1,548-\$1,656</p>

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			\$78,000
TOTAL Expenses			\$565,500
Revenues			
Memberships	15	\$24,500	\$367,500
Authority Surcharge	2,000	\$60	\$28,000
BAUASI Funding			\$170,000
Total Revenues			\$565,500

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
Backhaul Costs			\$218,000
TOTAL Expenses			\$645,500
Revenues			
Memberships	15	\$24,500	\$367,500
Authority Surcharge	4,000	\$60	\$193,000
BAUASI Funding			\$85,000
Total Revenues			\$645,500

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
Backhaul Costs			\$263,495
TOTAL Expenses			\$680,995
Revenues			
Memberships	15	\$24,500	\$367,500
Authority Surcharge	4,000	\$60	\$313,495
BAUASI Funding			\$0
Total Revenues			\$680,995

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

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December 14, 2011

Undersheriff Richard T. Lucia, Chairperson
BayRICS Joint Powers Authority
1401 Lakeside Drive, 12th Floor
Oakland, CA 94612

Dear Chairperson Lucia:

On December 13, 2011 the San José City Council approved the following comments for submittal to the Bay Area Regional Interoperable Communications Joint Powers Authority regarding the Draft System Funding Plan.

According to the JPA Memorandum of Understanding, members of the Authority have 90 days to provide comment before the Board of Directors can take action and that systems contracts may not be entered into prior to adoption of a Systems Funding Plan.

The MOU states that the Board shall:

2.05 (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;

The City of San José recognizes the tremendous effort and work invested to date in the start-up of the Authority and the negotiations with Motorola Solutions Inc., the private sector entity that has received federal grant funds to construct a dedicated public safety broadband system in the Bay Area. However, specificity in financial information in the Systems Funding Plan is lacking in critical areas. These gaps are large enough to effectively undermine the entire proposal from a perspective of sound policy and governance.

In addressing each of the six components required for the Systems Funding Plan, San José offers the following comments.

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Design, construction, operation, maintenance, expansion and lifecycle replacement costs of the Systems – MOU Section 2.05 (d) (i)

1) While the majority of design and construction costs are covered by the grants awarded Motorola, and the matching funds and site remediation funds committed by the corporation, it is unclear if there is overlap between the three pots of funding.

BTOP Grant \$50.6

Motorola match \$21.89

Motorola site remediation \$24 million (cap)

San José recommends that the final Systems Funding Plan clarify if there is overlap between the funds.

2) The final Build-Own-Operate-Maintain Agreement requires the Authority to pay redesign costs for the system design should backhaul resources change (i.e. BART fiber becomes unavailable or another source is used) after the date of adoption. The Systems Funding Plan provides no estimate of potential engineering costs should this occur.

San José recommends that Motorola provide cost estimates to the Authority for engineering work related to redesign using a different backhaul source. Further, should the provision of backhaul be unsettled by the date of the Authority's action on the Systems Funding Plan and BOOM Agreement, the Authority shall either take no action on the contract or decline to enter it.

3) With respect to Operations, the Systems Funding Plan is incomplete. The Authority has agreed to provide Billing and Invoicing services for BayWEB. The Systems Funding Plan only envisions a half-time billing clerk and a half-time administrative assistant to provide these services monthly for an estimated 6,000 users in 2014. San José recognizes that the user accounts likely will be bundled onto single bills for each public safety agency, however, there still may be questions about a single user. Based on San José's experience with billing and invoicing for our ###, we believe that the staffing requirements and cost estimate is inadequate.

Additionally, as of the date of San José's Council Meeting (December 13, 2011), the division of responsibilities for end user support had not yet been finalized between the Authority's negotiation team and Motorola. Depending on the outcome of these negotiations, staffing costs for the Authority could increase significantly. The Board must have full information about these potential costs prior to agreeing to terms in the BOOM Agreement that will require the Authority to bear these costs.

4) Maintenance and System Expansion: As a holder of the FCC waiver, San José has concerns that the maintenance provisions of the BOOM Agreement only pertain to a project "as built." The Authority bears the risk of costs for software and system upgrades that may be required to keep the system compliant with FCC requirements under the BOOM Agreement. Under the FCC licensing regulations, the waiver holders bear the

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ultimate risk for compliance. As the Authority and waiver cities have yet to negotiate a contract assigning the spectrum lease to the Authority, these responsibilities and the potential costs are unknown.

The Systems Funding Plan assumes a 10-year lifecycle replacement timeline, and states that “given the unknown technology landscape and user base over that time, any attempt to estimate replacement costs at this time would be mere guesswork.”

San José agrees that 4G LTE is an emerging technology in the public safety field. The City adds that a 10-year lifecycle replacement plan is inadequate and if adhered to, guarantees that Motorola will bequeath an outdated system to the Authority at the end of the agreement. We instead recommend that the Authority include from Day 1 provisions to set aside a portion of user fees to create a sinking fund for future system and software upgrades.

Specification as to how site costs and/or site remediation of specified antenna sites shall be paid – MOU Section 2.05 (d) (ii)

San José thanks the BayRICS staff for the detail provided with respect to site costs. We recognize that Motorola is paying the majority of costs for site remediation. We also understand that the agreement with Motorola expects that site owners are responsible for environmental costs, compliance with CEQA, and permitting costs for each of their own sites. However, none of the documents address who is responsible for costs related to CEQA clearance for BayWEB at the project level.

The estimated costs to be borne by the Authority should ownership of the Systems later be transferred to the Authority – MOU Section 2.05 (d) (iii)

The Systems Funding Plan assumes a turnkey transition from Motorola’s ownership to the Authority. It states, “(T)he 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.” Additionally, the Systems Funding Plan primarily focuses on the first three years of operation.

San José believes that there are costs that the Authority should plan for related to potential system ownership, including:

- Costs of renegotiating and obtaining site leases for the system that are between Motorola and the jurisdictions;
- System management and engineering expertise that will be retained by the system builder in-house;
- Costs for system upgrades and refresh should investments and maintenance be deferred.

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Good faith estimates of costs and types of devices that will be able to operate on the Public Safety System – MOU Section 2.05 (d) (iv)

Given that there are currently no 4G LTE public safety devices on the market, San José believes that the Systems Funding Plan provides reasonable and cautious estimates for device costs.

The monthly user fees for the Systems – MOU Section 2.05 (d) (v)

San José urges the Authority and Motorola to develop transparent and comprehensive information around the following:

- Process for changing user fees after the first year and communicating those changes with public safety agencies;
- Process for determining the competitive marketplace for rates;
- How subscriptions work for multi-device vehicles. For example, vehicle modem technology is evolving to allow the creation of WiFi hotspots and multi-device connectivity. Departments are going to want to know if their BayWEB subscription package covers the modem, or if separate subscriptions are required for each in-vehicle device (i.e. car camera, e-ticket device, reader).

San José is concerned about the lack of a roaming agreement and the unknown potential costs for roaming outside the system's boundaries. Additionally, this roaming agreement may be dependent upon the 4G LTE devices created and the capacity of those devices to roam onto commercial networks. If devices are created with capacity to roam only onto a single carrier's 4G network, then there is less competition and potentially higher rates for Authority members.

Identification of additional funding sources, if necessary – MOU Section 2.05 (d) (vi)

San José recommends the Authority add a note of caution. The BayWEB system may require substantial investments in the future to remain compliant with FCC standards and to remain competitive with commercial networks whose operators reinvest in performance and coverage enhancements as well as modernization and upgrades to the next generation of technology.

The Draft Systems Funding Plan anticipates that the Authority will obtain grant funding for upgrades and system improvements. Many of the grant funds used for such projects in past years have been one-time (American Recovery and Reinvestment Act) or scaled back (Urban Area Security Initiative).

The MOU does provide for other funding mechanisms – either through member jurisdictions or issuing bonds. While the MOU has a provision to protect member jurisdictions from the Authority placing fiscal obligations upon them without advance approval, a complete and transparent systems funding plan would evaluate costs to “deploy additional backhaul solutions such as fiber loop redundancy, add additional sites, upgrade the system or adopt enhanced applications” as well as to maintain FCC

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compliance and would project the likelihood that the Authority would need to increase costs to member agencies or finance such investments.

Additional Items

San José agrees with the Authority's plan to finance ongoing operational costs through a fee added onto monthly subscriber bills, acknowledging that the fee must be reasonable so as not to make BayWEB uncompetitive with commercial offerings.

San José encourages the Authority to complete its negotiations with Motorola with respect to end user support and to return to members with a detailed Administrative Plan for staffing or contracting for the required services.

Conclusion

San José has a long history of support for improvements to the communications systems for police, fire, and other first responders. Whether it is the possibility of a major earthquake or other natural disaster, or the potential of an attack on Silicon Valley's vital high-technology, defense, and economic infrastructure, our region has long been at risk. Over the past two decades, we have learned how critical it is for public safety agencies to be able to communicate in times of emergency. San José knows well that disasters don't stop at the city limits or county line.

Because our first responders rely on these systems, it is vital that the systems be well-designed and planned. BayWEB is a case of working backwards: the Authority is responding to a resource set – the federal grant provided to Motorola – and determining what capabilities after the fact. In developing a public works project, best practice is to define the capabilities required, and then determine the resources needed. The BayWEB draft systems funding plan demonstrates the shortfalls in front-end planning.

San José respects the tremendous effort made by Authority staff in developing this plan, and our comments in no way diminish their work. The fact is BayWEB has significant unanswered questions. And, as the draft plan says in too many places, attempting to answer those questions would be "guesswork." For this reason, San José respectfully submits these comments for the Board's consideration. At this time and as initially drafted and revised, the City cannot support the Systems Funding Plan.

Sincerely,

Chuck Reed, Mayor

Debra Figone, City Manager

ATTACHMENT E

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.

Agreed Statements Regarding Timing of Documents and Execution [to be removed from final execution draft]

If this Agreement is not forwarded to the Members of the Authority by November 29, 2011, (i) Motorola reserves the right and may advise the NTIA that it will not pursue further the BTOP Grant, and (ii) regardless of Motorola's actions, the NTIA might revoke its approval of this project.

The Authority and Motorola acknowledge that there are critical timelines with respect to the approval and implementation of the BOOM Agreement. The Authority has agreed that it shall distribute the final draft of the BOOM Agreement which is attached to this letter to its members no later than November 29, 2011. The earliest date that the Agreement can be formally approved by

the Authority for execution under its governing documents is January 16, 2012. Prior to January 16, 2012, the Authority and the other Eligible User Entities will work with Motorola to finalize and enter into Site Access and Use Agreements for the System. If the Boom Agreement is not distributed to the Members by November 29, 2011, Motorola has the right at any time during the next ninety (90) days to withdraw from this Agreement. Further, in the event NTIA revokes its approval of the BTOP Grant at any time prior to approval and execution of the BOOM Agreement, Motorola's obligations to further perform under this Agreement shall cease from the date of such revocation. The NTIA has advised Motorola that no extensions of the BTOP Grant completion period (which expires July 31, 2013) should be expected.

The Parties shall agree on a draft of the Exhibits no later than November 29, 2011, with final Exhibits to the execution copy of the Agreement that are dependent upon the List of Sites to be completed by January 5, 2012.

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 December 15, 2011.
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 December 15, 2011
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 December 15, 2011
Exhibit N	List of Eligible User Entities dated November 28, 2011
Exhibit O	[Intentionally omitted]
Exhibit P	List of Motorola and Authority Key Personnel dated November 28, 2011
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, the Public Access 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" means the public internet access system using point-to-point or point-to-multipoint technologies that Motorola intends to build and operate concurrently with the System pursuant to one or more separate agreements with the wholesalers, possibly including the Authority.
- 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 or the Public Access 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 both the Public Access System and 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 and the Public Access 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. Motorola and the Authority will meet to review the best information available on Site suitability and availability for inclusion in the System. The Parties will create a List of Sites which will be included in the Specifications (Exhibit B.). 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; 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 The Authority is responsible for providing a preliminary plan and status report on the Central Backhaul Transport System(s) to be included in Exhibits A and B by November 29, 2011. 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 (except for Motorola's Public Access System equipment located 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 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 30th. 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 (i) 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, (ii) the Public Access System including the Equipment, but not including Software. 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 and the Public Access System assets; (iii) the transferee expressly agrees to fulfill the terms and conditions of the BTOP Grant relating to the System and the Public Access 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 or the Public Access 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 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 provide 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 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. 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 identify of any subcontractors in advance and consult with the Authority if the Authority has concerns with respect to a particular subcontractor.

16.2 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.

16.3 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.

16.4 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.

16.5 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.

16.6 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.

16.7 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:

Motorola Solutions, Inc. Attention: _____ _____ _____ Fax: _____	The Authority Attention: _____ _____ _____ Fax: _____
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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:

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

16.8 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.

16.9 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.

16.10 SURVIVAL OF TERMS. ***This section will need to be conformed by the Parties in the final execution draft*** The following provisions will survive the expiration or termination of this Agreement for any reason: Section 3.7 (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); Subsection 9.2 (System Functionality) and 9.3 (Disclaimer of Implied Warranties); 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>

ATTACHMENT E – EXHIBITS

Exhibit H
System Readiness Certificate by Phase

Project Name: San Francisco BayWEB LTE Public Safety System

Phase No.: _____

This System Readiness Certificate memorializes the determination by Motorola that the above referenced Phase of the System is ready for use and that Motorola has demonstrated to the reasonable satisfaction of Lead Eligible User that this Phase of the System is ready for use.

Motorola Representative:

Signature: _____
Print Name: _____
Title: _____
Date: _____

Concurrence by Lead Eligible User

Lead Eligible User Authorized Representative:

Signature: _____
Print Name: _____
Title: _____
Date: _____

FINAL PROJECT READINESS:

~~Motorola has provided and Lead Eligible User has received all deliverables, and Motorola has performed all other work required for Final Project Readiness.~~

Motorola Representative:

Signature: _____
Print Name: _____
Title: _____
Date: _____

~~Concurrence by Lead Eligible User~~

~~Lead Eligible User Authorized Representative:~~

Signature: _____
Print Name: _____
Title: _____
Date: _____

Exhibit L
Motorola Software License Agreement
(for Software in Devices and System if ~~when~~ transfer by Motorola of ~~of~~ System ownership occurs)

SOFTWARE LICENSE AGREEMENT

This Software License Agreement ("~~Agreement~~Agreement") is between Motorola, Inc., ("Motorola"), and ~~X-Lead~~ Eligible User as identified in the Primary Agreement ("Licensee"). If applicable, each Eligible User on the System will be included within the meaning of the term "Licensee."

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

Section 1 DEFINITIONS

1.1 "Designated Products" means products provided by Motorola to Licensee with which or for which the Software and Documentation is licensed for use.

1.2 "Documentation" means product and software documentation that specifies technical and performance features and capabilities, and the user, operation and training manuals for the Software (including all physical or electronic media upon which such information is provided).

1.3 "Open Source Software" means software with either freely obtainable source code, license for modification, or permission for free distribution.

1.4 "Open Source Software License" means the terms or conditions under which the Open Source Software is licensed.

1.5 "Primary Agreement" means the agreement to which this exhibit is attached.

1.6 "Security Vulnerability" means a flaw or weakness in system security procedures, design, implementation, or internal controls that could be exercised (accidentally triggered or intentionally exploited) and result in a security breach such that data is compromised, manipulated or stolen or the system damaged.

1.7 "Software" (i) means proprietary software in object code format, and adaptations, translations, de-compilations, disassemblies, emulations, or derivative works of such software; (ii) means any modifications, enhancements, new versions and new releases of the software provided by Motorola; and (iii) may contain one or more items of software owned by a third party supplier. The term "Software" does not include any third party software provided under separate license or third party software not licensable under the terms of this Agreement.

Section 2 SCOPE

Motorola and Licensee enter into this Agreement in connection with Motorola's delivery of certain proprietary Software or products containing embedded or pre-loaded proprietary Software, or both. This Agreement contains the terms and conditions of the license Motorola is providing to Licensee, and Licensee's use of the Software and Documentation.

Section 3 GRANT OF LICENSE

3.1. Subject to the provisions of this Agreement and the payment of applicable license fees, Motorola grants to Licensee a personal, limited, non-transferable (except as permitted in Section 7) and non-exclusive license under Motorola's copyrights and Confidential Information (as defined in the Primary Agreement) embodied in the Software to use the Software, in object code form, and the Documentation solely in connection with Licensee's use of the Designated Products. This Agreement does not grant any rights to source code.

3.2. If the Software licensed under this Agreement contains or is derived from Open Source Software, the terms and conditions governing the use of such Open Source Software are in the Open Source Software Licenses of the copyright owner and not this Agreement. If there is a conflict between the terms and conditions of this Agreement and the terms and conditions of the Open Source Software Licenses governing Licensee's use of the Open Source Software, the terms and conditions of the license grant of the applicable Open Source Software Licenses will take precedence over the license grants in this Agreement. If requested by Licensee, Motorola will use commercially reasonable efforts to: (i) determine whether any Open Source Software is provided under this Agreement; (ii) identify the Open Source Software and provide Licensee a copy of the applicable Open Source Software License (or specify where that license may be found); and, (iii) provide Licensee a copy of the Open Source Software source code, without charge, if it is publicly available (although distribution fees may be applicable).

Section 4 LIMITATIONS ON USE

4.1. Licensee may use the Software only for Licensee's internal business purposes and only in accordance with the Documentation. Any other use of the Software is strictly prohibited. Without limiting the general nature of these restrictions, Licensee will not make the Software available for use by third parties on a "time sharing," "application service provider," or "service bureau" basis or for any other similar commercial rental or sharing arrangement.

4.2. Licensee will not, and will not allow or enable any third party to: (i) reverse engineer, disassemble, peel components, decompile, reprogram or otherwise reduce the Software or any portion to a human perceptible form or otherwise attempt to recreate the source code; (ii) modify, adapt, create derivative works of, or merge the Software; (iii) copy, reproduce, distribute, lend, or lease the Software or Documentation to any third party, grant any sublicense or other rights in the Software or Documentation to any third party, or take any action that would cause the Software or Documentation to be placed in the public domain; (iv) remove, or in any way alter or obscure, any copyright notice or other notice of Motorola's proprietary rights; (v) provide, copy, transmit, disclose, divulge or make the Software or Documentation available to, or permit the use of the Software by any third party or on any machine except as expressly authorized by this Agreement; or (vi) use, or permit the use of, the Software in a manner that would result in the production of a copy of the Software solely by activating a machine containing the Software. Licensee may make one copy of Software to be used solely for archival, back-up, or disaster recovery purposes; *provided* that Licensee may not operate that copy of the Software at the same time as the original Software is being operated. Licensee may make as many copies of the Documentation as it may reasonably require for the internal use of the Software.

4.3. Unless otherwise authorized by Motorola in writing, Licensee will not, and will not enable or allow any third party to: (i) install a licensed copy of the Software on more than one unit of a Designated Product; or (ii) copy onto or transfer Software installed in one unit of a Designated Product onto one other device. Licensee may temporarily transfer Software installed on a Designated Product to another device if the Designated Product is inoperable or malfunctioning, if Licensee provides written notice to Motorola of the temporary transfer and identifies the device on which the Software is transferred. Temporary transfer of the Software to another device must be discontinued when the original Designated Product is returned to operation and the Software must be removed from the other device. Licensee must provide prompt written notice to Motorola at the time temporary transfer is discontinued.

4.4. When using Motorola's Radio Service Software ("RSS"), Licensee must purchase a separate license for each location at which Licensee uses RSS. Licensee's use of RSS at a licensed location does not entitle Licensee to use or access RSS remotely. Licensee may make one copy of RSS for each licensed location. Licensee shall provide Motorola with a list of all locations at which Licensee uses or intends to use RSS upon Motorola's request.

4.5. Licensee will maintain, during the term of this Agreement and for a period of two years thereafter, accurate records relating to this license grant to verify compliance with this Agreement. Motorola or an independent third party ("Auditor") may inspect Licensee's premises, books and records, upon reasonable

prior notice to Licensee, during Licensee's normal business hours and subject to Licensee's facility and security regulations. Motorola is responsible for the payment of all expenses and costs of the Auditor. Any information obtained by Motorola and the Auditor will be kept in strict confidence by Motorola and the Auditor and used solely for the purpose of verifying Licensee's compliance with the terms of this Agreement.

Section 5 OWNERSHIP AND TITLE

Motorola, its licensors, and its suppliers retain all of their proprietary rights in any form in and to the Software and Documentation, including, but not limited to, all rights in patents, patent applications, inventions, copyrights, trademarks, trade secrets, trade names, and other proprietary rights in or relating to the Software and Documentation (including any corrections, bug fixes, enhancements, updates, modifications, adaptations, translations, de-compilations, disassemblies, emulations to or derivative works from the Software or Documentation, whether made by Motorola or another party, or any improvements that result from Motorola's processes or, provision of information services). No rights are granted to Licensee under this Agreement by implication, estoppel or otherwise, except for those rights which are expressly granted to Licensee in this Agreement. All intellectual property developed, originated, or prepared by Motorola in connection with providing the Software, Designated Products, Documentation or related services, remains vested exclusively in Motorola, and Licensee will not have any shared development or other intellectual property rights.

Section 6 LIMITED WARRANTY; DISCLAIMER OF WARRANTY

6.1. The commencement date and the term of the Software warranty will be a period of ninety (90) days from Motorola's shipment of the Software (the "Warranty Period"). If Licensee is not in breach of any of its obligations under this Agreement, Motorola warrants that the unmodified Software, when used properly and in accordance with the Documentation and this Agreement, will be free from a reproducible defect that eliminates the functionality or successful operation of a feature critical to the primary functionality or successful operation of the Software. Whether a defect occurs will be determined by Motorola solely with reference to the Documentation. Motorola does not warrant that Licensee's use of the Software or the Designated Products will be uninterrupted, error-free, completely free of Security Vulnerabilities, or that the Software or the Designated Products will meet Licensee's particular requirements. Motorola makes no representations or warranties with respect to any third party software included in the Software.

6.2 Motorola's sole obligation to Licensee and Licensee's exclusive remedy under this warranty is to use reasonable efforts to remedy any material Software defect covered by this warranty. These efforts will involve either replacing the media or attempting to correct significant, demonstrable program or documentation errors or Security Vulnerabilities. If Motorola cannot correct the defect within a reasonable time, then at Motorola's option, Motorola will replace the defective Software with functionally-equivalent Software, license to Licensee substitute Software which will accomplish the same objective, or terminate the license and refund the Licensee's paid license fee.

6.3. Warranty claims are described in the Primary Agreement.

6.4. The express warranties set forth in this Section 6 are in lieu of, and Motorola disclaims, any and all other warranties (express or implied, oral or written) with respect to the Software or Documentation, including, without limitation, any and all implied warranties of condition, title, non-infringement, merchantability, or fitness for a particular purpose or use by Licensee (whether or not Motorola knows, has reason to know, has been advised, or is otherwise aware of any such purpose or use), whether arising by law, by reason of custom or usage of trade, or by course of dealing. In addition, Motorola disclaims any warranty to any person other than Licensee with respect to the Software or Documentation.

Section 7 TRANSFERS

Licensee will not transfer the Software or Documentation to any third party without Motorola's prior written consent. Motorola's consent may be withheld at its discretion and may be conditioned upon transferee paying all applicable license fees and agreeing to be bound by this Agreement. If the Designated Products are Motorola's radio products and Licensee transfers ownership of the Motorola radio products to a third party, Licensee may assign its right to use the Software (other than RSS and Motorola's FLASHport® software) which is embedded in or furnished for use with the radio products and the related Documentation; *provided* that Licensee transfers all copies of the Software and Documentation to the transferee, and Licensee and the transferee sign a transfer form to be provided by Motorola upon request, obligating the transferee to be bound by this Agreement.

Section 8 TERM AND TERMINATION

8.1 Licensee's right to use the Software and Documentation will begin when the Primary Agreement is signed by both parties and will continue for the life of the Designated Products with which or for which the Software and Documentation have been provided by Motorola, unless Licensee breaches this Agreement, in which case this Agreement and Licensee's right to use the Software and Documentation may be terminated immediately upon notice by Motorola.

8.2 Within thirty (30) days after termination of this Agreement, Licensee must certify in writing to Motorola that all copies of the Software have been removed or deleted from the Designated Products and that all copies of the Software and Documentation have been returned to Motorola or destroyed by Licensee and are no longer in use by Licensee.

8.3 Licensee acknowledges that Motorola made a considerable investment of resources in the development, marketing, and distribution of the Software and Documentation and that Licensee's breach of this Agreement will result in irreparable harm to Motorola for which monetary damages would be inadequate. If Licensee breaches this Agreement, Motorola may terminate this Agreement and be entitled to all available remedies at law or in equity (including immediate injunctive relief and repossession of all non-embedded Software and associated Documentation unless Licensee is a Federal agency of the United States Government).

Section 9 UNITED STATES GOVERNMENT LICENSING PROVISIONS

This Section applies if Licensee is the United States Government or a United States Government agency. Licensee's use, duplication or disclosure of the Software and Documentation under Motorola's copyrights or trade secret rights is subject to the restrictions set forth in subparagraphs (c)(1) and (2) of the Commercial Computer Software-Restricted Rights clause at FAR 52.227-19 (JUNE 1987), if applicable, unless they are being provided to the Department of Defense. If the Software and Documentation are being provided to the Department of Defense, Licensee's use, duplication, or disclosure of the Software and Documentation is subject to the restricted rights set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 (OCT 1988), if applicable. The Software and Documentation may or may not include a Restricted Rights notice, or other notice referring to this Agreement. The provisions of this Agreement will continue to apply, but only to the extent that they are consistent with the rights provided to the Licensee under the provisions of the FAR or DFARS mentioned above, as applicable to the particular procuring agency and procurement transaction.

Section 10 CONFIDENTIALITY

Licensee acknowledges that the Software and Documentation contain Motorola's valuable proprietary and Confidential Information and are Motorola's trade secrets, and that the provisions in the Primary Agreement concerning Confidential Information apply.

Section 11 LIMITATION OF LIABILITY

The Limitation of Liability provision is described in the Primary Agreement.

Section 12 NOTICES

Notices are described in the Primary Agreement.

Section 13 GENERAL

13.1. **COPYRIGHT NOTICES.** The existence of a copyright notice on the Software will not be construed as an admission or presumption of publication of the Software or public disclosure of any trade secrets associated with the Software.

13.2. **COMPLIANCE WITH LAWS.** Licensee acknowledges that the Software is subject to the laws and regulations of the United States and Licensee will comply with all applicable laws and regulations, including export laws and regulations of the United States. Licensee will not, without the prior authorization of Motorola and the appropriate governmental authority of the United States, in any form export or re-export, sell or resell, ship or reship, or divert, through direct or indirect means, any item or technical data or direct or indirect products sold or otherwise furnished to any person within any territory for which the United States Government or any of its agencies at the time of the action, requires an export license or other governmental approval. Violation of this provision is a material breach of this Agreement.

13.3. **ASSIGNMENTS AND SUBCONTRACTING.** Motorola may assign its rights or subcontract its obligations under this Agreement, or encumber or sell its rights in any Software, without prior notice to or consent of Licensee.

13.4. **GOVERNING LAW.** This Agreement is governed by the laws of the United States to the extent that they apply and otherwise by the internal substantive laws of the State to which the Software is shipped if Licensee is a sovereign government entity, or the internal substantive laws of the State of Illinois if Licensee is not a sovereign government entity. The terms of the U.N. Convention on Contracts for the International Sale of Goods do not apply. In the event that the Uniform Computer Information Transaction Act, any version of this Act, or a substantially similar law (collectively "UCITA") becomes applicable to a party's performance under this Agreement, UCITA does not govern any aspect of this Agreement or any license granted under this Agreement, or any of the parties' rights or obligations under this Agreement. The governing law will be that in effect prior to the applicability of UCITA.

13.5. **THIRD PARTY BENEFICIARIES.** This Agreement is entered into solely for the benefit of Motorola and Licensee. No third party has the right to make any claim or assert any right under this Agreement, and no third party is deemed a beneficiary of this Agreement. Notwithstanding the foregoing, any licensor or supplier of third party software included in the Software will be a direct and intended third party beneficiary of this Agreement.

13.6. **SURVIVAL.** Sections 4, 5, 6.3, 7, 8, 9, 10, 11 and 13 survive the termination of this Agreement.

13.7. **ORDER OF PRECEDENCE.** In the event of inconsistencies between this Exhibit and the Primary Agreement, the parties agree that this Exhibit prevails, only with respect to the specific subject matter of this Exhibit, and not the Primary Agreement or any other exhibit as it applies to any other subject matter.

13.8. **SECURITY.** Motorola's Information Assurance Policy addresses the issue of security. Motorola uses reasonable means in the design and writing of its own Software and the acquisition of third party Software to limit Security Vulnerabilities. While no software can be guaranteed to be free from Security Vulnerabilities, if a Security Vulnerability is discovered, Motorola will take the steps set forth in Section 6 of this Agreement.

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Exhibit N – Eligible User Entities

FCC Eligibility

Section 337 of the Communications Act governs the use of the 700 MHz band of spectrum.

Section 337(f)(1) defines what constitutes "public safety services" for which the 700 MHz public safety spectrum is allocated:

(f) Definitions:

For purposes of this section:

- (1) Public safety services
The term "public safety services" means services-
 - (A) the sole or principal purpose of which is to protect the safety of life, health, or property;
 - (B) that are provided-
 - (i) by State or local government entities; or
 - (ii) by nongovernmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services; and
 - (C) that are not made commercially available to the public by the provider.

The BayRICS JPA has interpreted this to mean police, fire, paramedic, EMT, and other public safety personnel both employed by and operating under contract to BayRICS jurisdictions.

JPA Eligible User Entities

The BayRICS geography encompasses the ten-county Bay Area: the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, Santa Clara, Santa Cruz, San Mateo, Solano, and Sonoma.

Incorporated cities in the Joint Powers Authority geography are the following:

Alameda County Incorporated Cities

Alameda, Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Newark, Piedmont, Pleasanton, San Leandro, Union City

Contra Costa County Incorporated Cities

Antioch, Brentwood, Clayton, Concord, Danville, El Cerrito, Hercules, Lafayette, Martinez, Moraga, Oakley, Orinda, Pinole, Pleasant Hill, Richmond, San Pablo, San Ramon, Walnut Creek

San Mateo County Incorporated Cities

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Atherton, Belmont, Brisbane, Burlingame, Colma, Daly City, East Palo Alto, Foster City, Half Moon Bay, Hillsborough, Menlo Park, Millbrae, Pacifica, Portola Valley, Redwood City, San Bruno, San Carlos, San Mateo, South San Francisco, Woodside

Santa Clara County Incorporated Cities

Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, Santa Clara, Saratoga, Sunnyvale

Santa Cruz County Incorporated Cities

Capitola, Santa Cruz, Scotts Valley, Watsonville

Marin County Incorporated Cities

Belvedere, Corte Madera, Fairfax, Larkspur, Mill Valley, Novato, Ross, San Anselmo, San Rafael, Sausalito, Tiburon

Napa County Incorporated Cities

American Canyon, Calistoga, Napa, St. Helena, Yountville

Sonoma County Incorporated Cities

Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Santa Rosa, Sebastopol, Sonoma, Windsor

Solano County Incorporated Cities

Benicia, Dixon, Rio Vista, Suisun City, Vacaville, Vallejo

Additional Public Safety Agencies and Eligible Users

State of California Public Safety Agencies

Fire Districts

School district public safety departments

Special districts with qualified public safety employees or contractors

The BayRICS JPA will annually conduct a population survey to determine the number of eligible surveys in the above agencies.

Exhibit P
Key Personnel

The table below lists the names of Motorola Key Personnel as dictated by Section 3.10 of the Build, Own, Operate and Maintain Communication System Agreement.

Name	Role	Phone	Email
Coyle Schwab	Program Director	(630) 797-0666	coyle.schwab@motorola.com
Rob Ziminsky	Program Manager	(847) 878-2409	rob.ziminsky@motorola.com
Jeff Van Dell	Lead Engineer	(650) 616-4318	jeff.van.dell@motorola.com
Paolo Caltagiorone	Account Manager	(650) 577-0339	p.caltagiorone@motorola.com
TBD	System Manager	TBD	TBD



MEMORANDUM OF INSURANCE

PRODUCER AON RISK SERVICES CENTRAL, INC. AON CENTER 200 EAST RANDOLPH STREET CHICAGO, ILLINOIS 60601 <small>D/B/A Aon Risk Insurance Services of Illinois. CA License #0095623</small>	THIS MEMORANDUM IS A MATTER OF INFORMATION ONLY. THIS MEMORANDUM DOES NOT AMEND, EXTEND OR ALTER THE COVERAGES AFFORDED BY THE POLICIES BELOW. COMPANIES AFFORDING COVERAGE COMPANY A LIBERTY MUTUAL FIRE INSURANCE COMPANY COMPANY B LIBERTY INSURANCE CORPORATION COMPANY C COMPANY D
INSURED MOTOROLA SOLUTIONS, INC. AND ITS SUBSIDIARIES 1303 EAST ALGONGUIN ROAD SCHAUMBURG, IL 60196	

COVERAGES
 THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES, LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	GENERAL LIABILITY -Commercial General Liability -Occurrence	TB2-641-005169-071	7/01/2011	7/01/2012	GENERAL AGGREGATE	\$5,000,000
					PRODUCTS - COMP/OP AGG	Included
					PERSONAL & ADV INJURY	\$5,000,000
					EACH OCCURENCE	\$5,000,000
					FIRE DAMAGE (any one fire)	\$250,000
					MED EXP (any one person)	\$10,000
A	AUTOMOBILE LIABILITY -Any Auto	AS2-641-005169-011 (Domestic Auto- All Sates)	7/01/2011	7/01/2012	COMBINED SINGLE LIMIT	\$5,000,000
					BODILY INJURY (per accident)	
					BODILY INJURY (per accident)	
					PROPERTY DAMAGE	
	GARAGE LIABILITY				AUTO ONLY (each accident)	
					OTHER THAN AUTO ONLY	
					EACH ACCIDENT	
					AGGREGATE	
	EXCESS LIABILITY				EACH OCCURENCE	
					AGGREGATE	
B	WORKERS COMP & EMPLOYER'S LIABILITY	WA7-64D-005169-081 (Deductible)	7/01/2011	7/01/2012	<input checked="" type="checkbox"/> WC Statutory limits	
B		WC7-641-005169-091 (Retro)			EL EACH ACCIDENT	\$1,000,000
					EL DISEASE-POLICY LIMIT	\$1,000,000
					EL DISEASE - EA EMPLOYEE	\$1,000,000
	OTHER					

FOR INFORMATIONAL PURPOSES ONLY

**SITE ACCESS AND USE AGREEMENT
For Public Safety and Public Access Systems**

This Site Access and Use Agreement ("Agreement") is made as of _____, 2011 ("Effective Date"), by and between Motorola Solutions, Inc. ("Motorola") and _____ ("Public Entity"). Motorola and Public Entity are herein referred to individually as a "Party" and collectively as "Parties."

RECITALS

A. WHEREAS, Motorola intends to enter into (or has entered into) a Build, Own, Operate and Maintain Agreement ("BOOM Agreement") with the BayRICS Joint Powers Authority ("JPA") regarding: (1) a regional, interoperable public safety broadband communications system ("Public Safety System"), and (2) a wireless broadband system for public access that focuses on community anchor institutions such as public libraries, schools, parks and recreation districts, health care facilities, local governmental facilities, and community centers ("Public Access System" and together with the Public Safety System, the Bay Area Wireless Enhanced Broadband System or "BayWEB");

B. WHEREAS, Public Entity is ___/ is not ___ a member of the JPA. Whether or not Public Entity is a member of the JPA, it may request and receive from Motorola a copy of the BOOM Agreement once it becomes effective if a copy is not otherwise available from the JPA;

C. WHEREAS, Public Entity intends to allow certain properties it owns or that are under its control to be accessed and used by Motorola in BayWEB, both in advance of the execution of the BOOM Agreement between Motorola and the JPA and thereafter during the entire term of the BOOM Agreement (as defined in Section 3.8 of the BOOM Agreement);

D. WHEREAS, the JPA requested that Motorola rather than the JPA enter into this Agreement with Public Entity, as well as other similar site agreements with other public entities in the region, for BayWEB, but that the JPA will assist Motorola in the performance of its duties under this Agreement;

E. WHEREAS, the Parties acknowledge that the JPA has a legitimate interest and need for a copy of this Agreement, all amendments to it, and all non-confidential and significant documentation that is prepared by a Party in the performance of its duties under this Agreement and provided to the other Party;

F. WHEREAS, the Parties desire and intend to enter into this Agreement whereby Public Entity will grant to Motorola the right to enter onto, have access to, and use on a continuous and uninterrupted basis certain properties, referred to herein as "Sites" or a "Site", to do all things and in any manner that are reasonable or necessary for Motorola's proper deployment, ownership, operation and maintenance of BayWEB. As used in this Agreement, the term "Site" means a facility, such as a tower or building, at, on or in which Equipment or Software will be installed as part of the Public Safety System, excluding the LTE core and aggregation sites at backhaul locations unless they are specifically included on the List of Sites (Exhibit A); and

G. WHEREAS, BayWEB is funded in large part by a grant to Motorola from the Department of Commerce ("DOC") under its Broadband Technology Opportunities Program ("BTOP"), which is administered by the NTIA, Award Number NT10BIX5570089 (the "BTOP Grant"), plus a significant financial "match" from Motorola.

NOW, THEREFORE, for good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Compliance with BTOP Grant Requirements. Because Motorola has certain obligations under the BTOP Grant, both Motorola and Public Entity will perform their respective duties under this Agreement in a manner that promotes and ensures compliance with all applicable requirements of the BTOP Grant, including the Special Award Conditions, as such requirements may be amended by NTIA. The BTOP Grant and Motorola's contractual commitments to the NTIA provide for both this Public Safety System and the Public Access System. Public Entity agrees that Motorola may install the Public Access System equipment at some or all (as determined by Motorola in accordance with the Public Access System design) of the same Sites specified for the Public Safety System and that Motorola may install the Public Access System equipment when and in a manner similar to the installation of Public Safety System equipment, provided that the Site is qualified as described herein for the Public Access System equipment installation. All of Public Entity's duties in this Agreement pertaining to Sites apply to both the Public Safety System and the Public Access System. Consistent with its BTOP Grant, Motorola intends to contract with one or more internet service wholesalers who in turn will contract with Wireless Internet Service Providers who provide service to end users.

2. Right of Entry, Access, and Use. Subject to the terms and conditions set forth in this Agreement, Public Entity hereby grants to Motorola, its contractors and consultants, a nonexclusive, nontransferable right of entry onto the Sites which are owned by Public Entity or under Public Entity's control, as described with more particularity on Exhibit A, attached hereto and incorporated herein, subject to all existing but not subsequent leases, subleases, licenses, easements, encumbrances and claims of title affecting such Sites, for Motorola to (i) enter onto the Sites, (ii) have access to the Sites, and (iii) use the Sites on a continuous and uninterrupted basis during the term of this Agreement to perform its duties under this Agreement and the BOOM Agreement, and to do all things and in a manner that are reasonable or necessary for Motorola to engineer, remediate, deploy (including installing equipment), test, own, operate and maintain BayWEB at the Sites. Without limiting the generality of the preceding sentence, Motorola's rights include the following: Motorola (and its contractors or consultants) may perform work on, at or concerning the Sites to select, design, evaluate and qualify the Sites for use in BayWEB; if the Site is not qualified in its current condition, to remediate the Sites as is reasonable or necessary for use as a BayWEB Site in accordance with Site remediation/construction drawings approved by the Public Entity, which approval shall not unreasonably be withheld or delayed; and to use the Sites for the installation, testing, operation, and maintenance of equipment (such as antennas and other communications network infrastructure equipment) that is part of BayWEB. In exercising its rights as described in this section, Motorola will reasonably consult on material matters with Public Entity's "point of contact" whose name and contact information will be provided to Motorola and kept current by Public Entity. No other work shall be conducted on the Sites or that affect the Sites without the prior written consent of Public Entity.

2.I. As used herein, the term "non-exclusive" means Public Entity or others may have concurrent use of a Site so long as that concurrent use does not interfere with Motorola's rights under this Agreement; however, if Motorola remediates and improves a Site, Motorola will have exclusive use of the Site improvement unless otherwise agreed in writing by the Parties. For example, if Motorola remediates and improves a Site by installing a monopole so that BayWEB equipment may be installed, then Public Entity may not install or allow the installation of any other equipment on the monopole without Motorola's prior written consent.

If the Public Entity requests to make use of the Site improvement, then Motorola will consult with the Public Entity to determine whether the requested use would interfere or impede Motorola's

ability to satisfy its obligations under the BOOM Agreement including its Service Level commitments or the BTOP Grant requirements, or would cause Motorola to incur additional costs. If after review, the Parties conclude the requested change does not interfere with or impede Motorola's ability to satisfy its obligations under the BOOM Agreement including its Service Level commitments or the BTOP Grant requirements, then Motorola (i) may agree to the requested change, or (ii) may conditionally agree to the requested change if the Public Entity agrees to pay a quoted price caused by any additional costs required for the proposed use and the requested change will be treated as enhanced Site Remediation Work as more fully described below in Section 3. Concerning this last choice, the Public Entity will, within five (5) business days after receipt of Motorola's quoted price, either (1) agree to pay the quoted price, in which case the Parties will execute a written amendment to this Agreement (or a separate agreement) which will include the Public Entity's agreement to pay the quoted price, or (2) will reject the quoted price, in which case the use request from the Public Entity is deemed withdrawn. Unless that amendment or agreement provides to the contrary, payment of the quoted price will be due within thirty (30) days of the Public Entity's receipt of an accurate and complete invoice which will be sent promptly after the execution of the amendment or agreement. Depending on the nature and scope of the requested change, the Parties may agree to payment milestones rather than a single invoice. Motorola shall not unreasonably withhold consent to allow such uses if the proposed uses are otherwise acceptable under this section.

2.2. As used herein, the term "non-transferable" excludes any transfer by Motorola to the JPA or its approved designee, to a Motorola affiliated or successor company, or to any other entity if that transfer is required by the Department of Commerce or the NTIA. Motorola will provide reasonable notice to the Public Entity if such transfer is mandated.

2.3. As used herein, the Site qualification process is described as follows: throughout the term of this Agreement, Public Entity will provide to Motorola all available records, structural, environmental or other analytical reports (including R56 compliance reports), photographs, drawings, certifications, third-party lease agreements and other information in Public Entity's possession concerning each Site, and concerning the issue of whether the Site is in "installation ready" condition.

2.3.1. The term "installation ready" means (i) the Site is accessible, available, ready and suitable for Motorola to install the intended BayWEB equipment at the Site consistent with Motorola's design requirements as described in the BOOM Agreement,

2.3.2. Site design requirements 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 BayWEB equipment, and for Motorola to perform its related installation, testing, 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.

2.3.3. In interpreting clause (viii) above, the Parties acknowledge Special Award Condition number 12 of the BTOP Grant Award Documents (Exhibit T to the BOOM Agreement), 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 a result of the consultation processes. The Parties agree that if Motorola’s compliance with conditions placed on the project as the result of the consultation processes affects the Sites, then they will take all actions that are reasonable and necessary to make the Sites conform to such conditions. 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. Public Entity agrees to provide promptly to Motorola any such notices that it receives.

2.4. Before installing the BayWEB equipment at a Site, Motorola will inspect the Site and conduct analysis, testing as needed, and other due diligence activities concerning the Site and will provide a written report that advises Public Entity of any apparent deficiencies or non-conformities with Motorola’s requirements. The report and advice given by Motorola to Public Entity concerning Sites will be without any warranty from Motorola or any liability to Motorola except as otherwise provided in Section 3 concerning the payment for Site Remediation Costs. Public Entity assumes the risk and may rely upon Motorola’s advice to the extent that it in its sole discretion considers such reliance to be appropriate. Public Entity may at its expense employ other consultants, contractors or experts to advise it on any issues concerning a Site. A Site that has no uncorrected deficiencies or non-conformances is “qualified” for Motorola’s use in connection with BayWEB.

2.5. After a Site is qualified, Public Entity will not modify and will not allow another party to modify the Site (including adding to or changing equipment installed at or connected to the Site) that would negatively affect BayWEB without first receiving Motorola’s prior written consent which will not be unreasonably withheld or delayed.

3. Site Remediation Work and Costs. As used herein, the term “Site Remediation Work” means the work that is reasonable or necessary as determined by Motorola in consultation with Public Entity for the Site to be made into “installation ready” condition, and the term “Site Remediation Costs” means the capital costs that are reasonable or necessary as determined by Motorola in consultation with Public Entity for Motorola to perform the Site Remediation Work. During the Site qualification process, Motorola might determine that Site Remediation Work is needed for the Site to become qualified. Motorola (or in some cases the JPA under its duties described in the BOOM Agreement, particularly Section 3.2.4) and not Public Entity will pay for Site Remediation Costs, except that if Public Entity wishes for the Site Remediation Work to be performed in a manner that enhances the Site beyond Motorola’s needs and if the Parties agree that Motorola will perform the enhanced Site Remediation Work, then Public Entity will pay for the capital costs of such enhancements. Public Entity and not Motorola will pay for all other Site related costs and expenses, including Site operating costs such as Site maintenance, security, electricity and other utilities, lease payments, property taxes, and the like.

4. Leased Sites. If any Site is not owned by Public Entity but is “controlled” by Public Entity by means of a lease or other form of legal right, then Site qualification for those “Leased Sites” will be conditioned upon Public Entity’s ability to obtain from the owner of that Leased Site and any person or entity with an intermediary right a written and signed acknowledgement of this Agreement and

Motorola's rights under this Agreement. Public Entity must provide that signed acknowledgment on November 15, 2011, or as soon as possible thereafter. If Public Entity has not provided the signed acknowledgement by December 31, 2011, then Motorola and Public Entity will promptly meet and confer to discuss whether the Leased Site should be disqualified. If Public Entity has not provided the signed acknowledgement by January 31, 2012, then Motorola may disqualify the Leased Site by giving notice to Public Entity and the Parties will amend this Agreement to delete the disqualified Leased Site. Public Entity will prepare the acknowledgement form, subject to Motorola's reasonable approval of the form and content. Alternatively, such person or entity may insert and sign its acknowledgment beneath the signature block of this Agreement.

If a Leased Site becomes disqualified under the paragraph immediately above, Motorola, Public Entity, and the JPA may agree before May 31, 2012, upon an alternative available Site as a substitute for the disqualified Leased Site, 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, Motorola shall retain responsibility for Site Remediation Costs concerning the substitute Site, provided that the total Site Remediation Costs for all Sites do not exceed the BayWEB project's Site Remediation Costs budget. Notwithstanding the preceding sentence, absent Motorola's negligence, Motorola may request that Public Entity reimburse Motorola for any Site Remediation Costs that Motorola expended at the original but disqualified Leased Site. If Motorola makes this request, Public Entity may either reimburse Motorola for such expended costs or, alternatively decline the request and Motorola will be excused from any obligations to Public Entity to add the substitute Site and from any obligations under this Agreement (or the BOOM Agreement) related to the deleted disqualified Leased Site.

Motorola, its contractors and consultants shall, to the extent applicable, comply the terms and conditions of the Lease agreements for Leased Sites. Public Entity will provide to Motorola by November 15, 2011, a written copy of all applicable terms and conditions of the Lease agreements for Leased Sites. If Motorola is unable or unwilling (exercising its reasonable judgment) to comply with the terms and conditions of the Lease Agreement, then Motorola may disqualify the Site.

5. Term. The term of this Agreement shall begin on the Effective Date and continue for the entire duration of the BOOM Agreement (as defined in Section 3.8 of the BOOM Agreement). Public Entity acknowledges that the BOOM Agreement provides for a future transfer of BayWEB by Motorola to the JPA or its designee. At the time of such transfer, Public Entity will allow the JPA to have a reasonable time (not to exceed six months) to negotiate its own site access and use agreement with Public Entity, or remove the BayWEB equipment from the Sites and restore the Sites to good condition reasonable wear and tear excepted.

6. Use of Sites to Minimize Adverse Impacts on Sites. Motorola shall use the Sites in accordance with the procedures set forth on Exhibit C, attached hereto and incorporated herein, if any, and shall use all reasonable efforts to minimize any adverse impacts to any other users of the Sites, and Public Entity shall use all reasonable efforts to minimize any adverse impacts to Motorola from its or another's use of the Sites.

6.1 If significant and measureable interference occurs at a Site between (i) the equipment provided by Motorola for this System and (ii) existing licensed communications equipment on the Site that is properly operated and maintained and that is operated by Public Entity or another party, then Motorola and Public Entity will promptly meet and confer to determine the cause of the interference. If the cause of the interference is malfunctioning equipment provided by Motorola for this System, then Motorola will promptly take all actions that are reasonable and necessary to correct its malfunctioning equipment and eliminate the significant and measureable interference, including temporarily ceasing

operation of its malfunctioning equipment at the Site if the corrective measures take longer than twenty-four (24) hours from Motorola's receipt of notice of the significant and measureable interference. If the cause of the interference is Public Entity's or another party's malfunctioning equipment, then Public Entity will promptly take all actions that are reasonable and necessary to correct its malfunctioning equipment and eliminate the significant and measureable interference or will cause the other party to take such corrective measures.

7. Accessing Sites. Motorola and its subcontractors or consultants shall access and conduct its activities on the Sites in accordance with the procedures set forth on **Exhibit C**, attached hereto and incorporated herein. In addition, Motorola and its subcontractors or consultants shall at all times conduct their activities on the Sites in a safe, neat and orderly fashion; minimize any dust and noise in conformance with neighborhood and governmental standards; and promptly remove any and all garbage and/or debris on the Sites resulting from Motorola's activities under this Agreement. Public Entity may not impose unreasonable special conditions or limitations on access to and use of the Sites or Motorola's performance of the work.

8. Results of Site Evaluation. For the limited purpose of furthering the performance of this Agreement, it might become necessary or desirable for a Party to provide Confidential Information to the other Party.

8.1. The terms "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.

8.2. The Parties will use reasonable efforts to avoid sharing Confidential Information with each other. However, during the term of this Agreement, if a Party provides the other with Confidential Information, the following applies. Each Party will: 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; restrict disclosure of the Confidential Information to its employees who have a "need to know" and not copy or reproduce the Confidential Information; 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 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 Public Entity 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"). Public Entity 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, Public Entity 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, Public Entity 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 Public Entity 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 Public Entity's actions, taken at Motorola's request, in compliance with this provision in protecting Motorola's Confidential Information from public disclosure.

Public Entity acknowledges that the BTOP Grant requires Motorola to report on various matters concerning BayWEB 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. Public Entity 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 Public Entity or any other party.

9. Compliance with Laws. Each Party will comply with all applicable laws, ordinances, codes and regulations of federal, state and local governments with respect to its permitted activities on the Sites, including but not limited to laws and regulations relating to the disposal of hazardous materials.

10. Insurance. During the term of this Agreement, Motorola will obtain and maintain at its expense insurance as described in Exhibit D, which is attached hereto and incorporated herein. Promptly after the execution of this Agreement, Motorola will provide to Public Entity a Certificate of Insurance (standard Acord form) evidencing this insurance. 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 provide 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, except surety, shall be issued by companies which hold a current policy holder's alphabetic and financial size category rating of not less than A- VIII, according to the current Best's Key Rating Guide or a company of equal financial stability that is approved by the County's Insurance Manager. In addition, Motorola will cause any contractor(s) and/or consultant(s) employed by Motorola to work at the Sites to comply with similar insurance requirements as reasonably determined by Motorola's Insurance Department in coordination with its insurance brokers and advisors.

11. Indemnification. Motorola will indemnify, defend, and hold harmless the Public Entity, and its employees, agents, and officers (and the applicable lessor or sublessor if a Site is leased or subleased to Public Entity and that lease or sublease contractually obligates Public Entity to require entities like Motorola who enter onto the Site to indemnify the lessor or sublessor) from and against any claims, loss, damage, and liability for damages, costs, and expenses (including, without limitation, reasonable attorneys' fees actually) incurred by Public Entity as a result of any negligent or intentionally wrongful acts or omissions of Motorola or any of its agents, employees, consultants, or contractors in connection with performing the work under this Agreement. These indemnification and hold harmless obligations include, without limitation, any claims resulting from injury to or death of any person or persons (including any users of the Sites), or injury to any property, including equipment and vehicles, arising out of any negligent or intentionally wrongful action or inaction by Motorola on the Sites. If Motorola is responsible for damage to a Site or Sites under this Section 9, the Parties will meet and confer

to determine whether Motorola, Public Entity, or another party shall repair the damage. The indemnification obligations in this section shall survive the termination or expiration of this Agreement.

Public Entity will indemnify, defend, and hold harmless Motorola, and its contractors or consultants, and their employees, agents, and officers (and the applicable lessor or sublessor if a Site is leased or subleased to Public Entity) from and against any claims, loss, damage, and liability for damages, costs, and expenses (including, without limitation, reasonable attorneys' fees actually) incurred by an indemnified party as a result of any negligent or intentionally wrongful acts or omissions of Public Entity or any of its agents, employees, consultants, or contractors in connection with this Agreement. These indemnification and hold harmless obligations include, without limitation, any claims resulting from injury to or death of any person or persons (including any users of the Sites), or injury to any property, including equipment and vehicles, arising out of any negligent or intentionally wrongful action or inaction by Public Entity on the Sites. The indemnification obligations in this section shall survive the termination or expiration of this Agreement.

12. Limitation of Liability. Motorola's total liability under this Agreement will be limited to the direct damages recoverable under law, but not to exceed the "Cap Amount." The term Cap Amount shall mean \$300,000 multiplied by the total number of Sites being provided by this Public Entity. The first sentence of this Section 14 does not apply to Motorola's liability for (i) personal injury, death, damage to tangible property, or (ii) Motorola's intentional torts or gross negligence, **ALTHOUGH THE PARTIES ACKNOWLEDGE THE POSSIBILITY OF SUCH LOSSES OR DAMAGES, THEY AGREE THAT MOTOROLA WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO OR ARISING FROM THIS AGREEMENT.** If (i) a third party sues Public Entity for damages caused by the negligent or intentionally wrongful acts or omissions of Motorola or any of its agents, employees, consultants, or contractors in connection with performing the work under this Agreement, (ii) that third party is awarded damages by a court or in binding arbitration, and (iii) Public Entity actually pays those damages to the third party, this Section 14 will not apply to those damages. To clarify, the purpose of the preceding sentence is to reflect the agreement of Motorola and Public Entity that as between them, damages paid by Public Entity as described in the preceding sentence will be characterized as direct damages even if they are characterized as indirect damages as between Public Entity and the third party. This limitation of liability provision survives the expiration or termination of the Agreement and applies notwithstanding any contrary provision.

13. Default and Termination.

13.1. 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 a Force Majeure causes the failure. The term "Force Majeure" means an event, circumstance, or act of a third party that is beyond a 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). The non-defaulting Party may assert a default claim by giving the defaulting Party a written and detailed notice of default ("Notice of Default"). Except in the case of Public Entity's default which has a material adverse effect on the Public Safety System and immediate relief is necessary to protect public safety, 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.

13.2. If a defaulting Party fails to cure the default as provided above in Section 13.1, 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, including termination of any unfulfilled portion of this Agreement and recovering from the defaulting Party damages recoverable under applicable law but subject to Section 14 below. Notwithstanding the preceding sentence, Public Entity acknowledges that termination of the Agreement would result in undue financial hardship to Motorola because Motorola has incurred substantial costs under or relating to the BOOM Agreement and this Agreement (including paying Site Remediation Costs). Based on this acknowledgement, Public Entity agrees that it may not terminate this Agreement for Motorola's uncured default if monetary damages are an adequate remedy. Public Entity agrees further that even if monetary damages are not an adequate remedy, it may not terminate this Agreement for Motorola'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. Either Party may request the JPA to participate in these discussions. 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 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.

13.3. Notwithstanding any other provision in this Agreement, Motorola has the right to terminate this Agreement in whole or part, without cause, for any reason including if either the BTOP Grant or the BOOM Agreement is terminated, upon sixty (60) days prior written notice. If Motorola exercises this right, the Parties will promptly meet and confer about a transition plan, but Motorola may remove the BayWEB equipment from the Sites if it so chooses.

14. Assignment. Except as otherwise provided in Section 2.2, neither Party will assign or transfer any interest in this Agreement without the prior written consent of the other Party which shall not be unreasonably withheld or delayed, and any attempt by Party to assign this Agreement or any rights, duties or obligations arising hereunder without such consent shall be void and of no effect.

15. Consultants; Contractors. Any consultant or contractor hired by Motorola to perform the activities described in this Agreement shall be the contractor of Motorola, and Public Entity shall have no obligation under this Agreement to compensate any consultant or contractor hired by Motorola for any work performed pursuant to this Agreement. Motorola shall be responsible for directing the work of its contractors and consultants and shall ensure that all contractors and consultants comply with the terms of this Agreement that are applicable to the contractor or consultant.

16. Amendments. This Agreement may only be amended by written instrument signed by both Parties.

17. Notices. All notices or other communications required hereunder shall be in writing and shall be personally delivered, or sent by national overnight courier service, or sent by facsimile transmission if also sent by one of the other methods provided in this Section, or sent by registered or certified mail, return receipt requested, and shall be deemed delivered upon the earlier date of (a) the date of delivery to the address of the person to receive such notice or (b) three (3) business days after the date of posting the United States Postal Service at the following addresses:

- (a) If to Public Entity:
[Insert address]
Attn: [Insert name of person to receive notices]

(b) If to Motorola:
[Insert address]
Attn: [Insert name of person to receive notices]

18. Governing Law; Venue. This Agreement has been executed and delivered in, and shall be construed and enforced in accordance with, the laws of the State of California. In the event that suit is brought by either Party, the Parties agree that trial of such action shall be exclusively vested in a state or federal court in _____ County, California. [insert the name of the County in which the Sites are located.

19. Severability. If any provision of this Agreement is found by a court of competent jurisdiction to be void, invalid or unenforceable, the same will either be reformed to comply with applicable law or stricken if not so conformable, so as not to affect the validity or enforceability of this Agreement.

20. Waiver. No delay or failure to require performance of any provision of this Agreement shall constitute a waiver of that provision as to that or any other instance of non-compliance. Any waiver granted by a party must be in writing and shall apply to the specific instance expressly stated.

21. Counterparts. This Agreement may be signed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signature pages may be detached from the counterparts and attached to a single copy of this Agreement to physically form one document.

22. Documents to JPA. Public Entity will provide to the JPA a copy of this Agreement, all amendments to it, and all non-confidential and significant documentation that is prepared by a Party in the performance of its duties under this Agreement and provided to the other Party.

23. Authority to Execute. 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.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

MOTOROLA SOLUTIONS, INC.

By: _____
Name: _____
Title: _____
Date: _____

[INSERT NAME OF PUBLIC ENTITY]

By: _____
Name: _____
Title: _____
Date: _____

Approved as to Form and Legality

By: _____
Name: _____
Title: _____
Date: _____

Exhibit A

Sites

Exhibit B

[Intentionally Omitted.]

Exhibit C

Site Access and Use Procedures

[To be completed by Public Entity]

1. Contacts for Site Access and Scope of Work.

For Public Entity:

For Motorola:

2. Notice Requirements and Other Procedures Related to Site Access.

None unless expressly indicated [Note that Motorola will prepare a schedule for accessing the Sites and accessing the Sites will be coordinated through the JPA and Public Entity representatives with reference to this master schedule.]

3. Special Conditions for Site Access.

None unless expressly indicated and then such special conditions shall be coordinated by Public Entity

4. Limitations on Accessing Sites or Conducting Scope of Work.

None unless expressly indicated

Exhibit D

Insurance Requirements

Special Award Conditions

Award Number: NT10BIX5570089
Amendment Number: 0

1) ARRA Special Award Condition for Reporting Requirements

Reporting Requirements:

Pursuant to ARRA Special award conditions which are incorporated into this award. The recipient will report on the progress of their approved projects as reflected in the description of work which is incorporated by reference. Information from the progress reports will be available to the public.

The Recipient shall report the information described in section 1512(c) of the ARRA special award Condition using the reporting instructions and data elements that are provided online at www.FederalReporting.gov and ensure that any information that is pre-filled is corrected or updated as needed. Note: This is the primary reporting requirement under ARRA. Additional progress reports are needed for the program office which is identified in a separate special award condition.

The ARRA report is due no later than 10 days following the end of each calendar reporting period. For example, for the period ending September 30, due October 10th, period ending December 31, due January 10th, period ending March 31, due April 10th, period ending June 30, due July 10, following this pattern until the expiration date of the award is reached.

Failure to provide acceptable reporting by the due date may result in the suspension or termination of your award.

2) BTOP-Wide SACs

A. Guidelines for Matching Funds:

Recipient will provide, from non-Federal sources, not less than 20 percent of the total project cost. Matching funds can be in the form of either cash or in-kind contributions consistent with the 15 CFR 14.23, 24.3 and 24.24 as applicable. The recipient may be asked to provide supporting documentation upon request from the Grants Officer or NTIA.

B. Incorporation of Requirements from the Notice of Funding Availability (NOFA):

The recipient shall comply with the requirements found in the Department of Commerce, National Telecommunications and Information Administration Broadband Technology Opportunities Program, 75 FR 3792, January 22, 2010 (http://www.ntia.doc.gov/fnotices/2010/FR_BTOPNOFA_100115.pdf)

C. Notice of Limited Waiver of Section 1605 (Buy American Requirement) of the American Recovery and Reinvestment Act of 2009 (ARRA)

In accordance with Section 1605 of the Recovery Act, the Secretary of Commerce has granted a limited waiver of the Recovery Act's Buy American requirements with respect to certain broadband equipment that will be used in projects funded under the BTOP. A description of this equipment is included in the notice of waiver published in the Federal Register at 74 FR31410 (July 1, 2009).

D. Whistleblower Protection Act Requirement:

The Recipient shall comply with the Whistleblower Protection requirements of the American Recovery and Reinvestment Act (Recovery Act), Section 553 of Division A, Title XV, Public Law 111-5 which provides protection for employees of non-federal employers including employees of state and local governments, contractors, subcontractors, recipients, and any other non-federal employers receiving Recovery Act fund recipients, making specified disclosures relating to possible fraud, waste, or abuse of Recovery Act funds. The act requires any non-federal employer receiving Recovery Act funds to post a notice of the rights and remedies provided under the Act. The Recipient shall post notice of employees rights and remedies for whistleblower protections provided under section 1553 of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5) and shall include this notice requirement in all contracts with subrecipients, contractors, and subcontractors

Recipients are reminded that the Office of Inspector General will verify the appropriate place of this poster as part of any field work conducted. Failure to display the poster may result in an audit finding. The poster can be downloaded from the following web site: <http://www.oig.doc.gov/recovery/whistleblower.html>

E. Interest-Bearing Accounts

This award is subject to 15 CFR 14.22 requiring recipients of Federal financial assistance that receive more than \$120,000 in Federal awards per year to maintain advances of Federal funds in interest bearing accounts. Interest earned on Federal advances deposited in such accounts (with the exception of \$250 per year, which may be retained for administrative expenses) shall be remitted promptly.

The complete address for remitting checks for interest earned on Federal advances is Department of Health and Human Services, Payment Management System, P.O. Box 6021, Rockville, MD 20852. Recipients that do not have electronic remittance capability should send a check to this address. In keeping with Electronic Funds Transfer rules (31 USC part 206), interest should be remitted to the HHS Payment Management System through an electronic medium such as the FEDWIR Deposit System. Electronic remittances should be in the format and should include any data that are specified by the HHS as being necessary to facilitate direct deposit in HHS' account at the Department of Treasury.

F. Nondiscrimination and Interconnection

The recipient shall comply with the nondiscrimination and network interconnection obligations set forth in section V.D.3.b of the NOFA and in Section 6001(j) of the Recovery Act. Recipients may be asked to provide supporting documentation upon request from the Grants Officer. Failure to comply with this provision of the award may be considered grounds for any or all of the following actions: establishment of an account receivable for affected BTOP award, withholding payments under any and all BTOP awards to the recipient, changing the method of payment from advance to reimbursement only, or the imposition of other special award conditions, suspension of any BTOP active awards, and termination of any BTOP active awards.

G. Davis-Bacon Act

The Recipient shall obtain and maintain in its official records documentation of weekly certified payroll reports and the Statement of Compliance from itself and all subrecipients, contractors, and subcontractor(s) in accordance with Section 1606 of the American Recovery and Reinvestment Act of 2009 and the Davis-Bacon Act and related acts.

The Recipient is not required to submit this documentation to the Grants Office except in response to a request for this information from its Grants Officer. The authorized representatives and agents of the Grants Office shall be permitted to

inspect all work, materials, payrolls, personnel records, invoices of materials, and other relevant data and records.

Ten days prior to bid opening, any party soliciting a subrecipient, contractor, or subcontractor for work under this Award to which Davis-Bacon wage determinations apply must verify whether there have been any updates to the applicable Davis-Bacon wage determinations by reviewing the Department of Labor Wage Determinations OnLine website, free of charge, at www.wdol.gov. If there have been updates to the wage determinations, then these updated wage rates must be issued in a bid addendum. The Davis Bacon wage rates that are current ten days prior to the bid opening are the wage rates that will govern work performed under such solicitation.

3) Automated Standard Application for Payments system (ASAP)

Notwithstanding Section A.02 of the DoC Financial Assistance Standard Terms and Conditions, dated March 2008:

- a. The advanced method of payment shall be authorized unless otherwise specified in a special award condition.

- b. Payments will be made through electronic funds transfers, using the Department of Treasury's Automated Standard Application for Payment (ASAP) system and in accordance with the requirements of the Debt Collection Improvement Act of 1996. The following information is required when making withdrawals for this award: (1) ASAP account identification (id) = award number found on the cover sheet of this award; (2) Agency Location Code (ALC) = 13060001; and (3) Region Code = 02. Recipients do not need to submit a "Request for Advance or Reimbursement" (SF-270) for payments relating to this award. All non-ASAP Recipient Organizations must enroll electronically. The ASAP system no longer accepts paper forms for enrollment. If you are not currently enrolled in the ASAP system you must provide the Federal Awarding Agency with a Point of Contact name, e-mail address, mailing address, telephone number, EIN and DUNS numbers of your organization in order for the Federal Awarding Agency Enrollment Initiator (EI) to begin the on-line enrollment. If you have questions on this requirement please contact the Grant Specialist responsible for this award. If you have questions on the electronic process step-by-step instructions you may contact your responsible Regional Finance Center.

Advances taken through the ASAP shall be limited to the minimum amounts necessary to meet immediate disbursement needs. Advanced funds not disbursed in a timely manner must be promptly returned, via an ASAP credit, to the account from which the advanced funding was withdrawn. Advances shall be for periods not to exceed 30 days.

- c. This award has the following control or withdrawal limits set in ASAP:

None
 Agency Review required for all withdrawals (see explanation below)
 Agency review required for all withdrawal requests over
\$ _____ (see explanation below)
Maximum Draw Amount controls (see explanation below)
\$ _____ each month
\$ _____ each quarter

\$ _____ each year

d. Funds that have been withdrawn through ASAP may be returned to ASAP via the Automated Clearing House (ACH) or via FEDWIRE. The ACH or FEDWIRE transaction may only be performed by the Recipient's financial institution. Full or partial payments received by a Payment Requestor/Recipient Organization may be returned to ASAP. All funds returned to the ASAP system will be credited to the ASAP Suspense Account. The Suspense Account allows the Regional Financial Center to monitor returned funds and ensure that they are credited to the correct ASAP account. Returned funds that cannot be identified and classified to an ASAP account will not be accepted and will be returned to the originating depository financial institution (ODFI).

It is essential that the Payment Requestor/Recipient Organization provide its financial institution with ASAP account information (ALC, Recipient ID and Account ID) to which the returned funds are to be credited. Additional detailed information can be found at: <http://www.fms.treas.gov/asap/pay-return2.pdf>

There is a 10-day deadline for the head of the organization to initiate recipient enrollment upon receipt of ASAP registration notification. Failure to comply could subject the award to a change in the method of payment to reimbursement only.

4) Post-Award Reporting Requirements

The recipient shall submit a "Financial Status Report" (SF-425) on a quarterly basis for the periods ending March 31, June 30, September 30, and December 31 or any portion thereof. Reports are due no later than 30 days following the end of each reporting period. A final SF-425 shall be submitted within 90 days after the expiration date of the award.

The recipient shall submit program-specific quarterly performance reports electronically to the Federal Program Officer in the same frequency as the Financial Status Report (SF- 425) unless otherwise authorized by the Grants Officer. The Federal Program Officer will provide updated instructions for accurate report completion at least 30 days prior to reporting period end date.

5) Infrastructure-Wide SACs

A. Sale or Lease of Property Purchased with Award Funds:

Recipients may not sell or lease any portion of the award-funded broadband facilities or equipment during their useful life, except as otherwise approved by NTIA. NTIA will consider a petition for waiver of the restriction if: (1) the transaction is for adequate consideration; (2) the purchaser or lessee agrees to fulfill the terms and conditions relating to the project after such sale or lease; and (3) the transaction would be in the best interests of those served by the project. The petition for waiver may be submitted at any time during the useful life of the award-funded facilities and equipment, and it must include supporting documentation and justification regarding why the petition should be granted. This requirement is not meant to limit CCI awardees from leasing facilities to another service provider for the provision of broadband services, nor is this section meant to restrict a transfer of control of the awardee (NOFA, Section IX.C.2).

B. Security Interest in Real Property including Broadband Facilities and Equipment

The recipient shall execute a security interest or other statement of NTIA's interest in real property including broadband

facilities and equipment acquired or improved with Federal funds acceptable to NTIA, which must be perfected and placed on record in accordance with local law. This security interest will provide that, for the estimated useful life of the real property, facilities, or equipment, the recipient will not sell, transfer, convey, or mortgage any interest in the real property including broadband equipment acquired or improved in whole or in part with Federal funds made available under the award, nor shall the recipient use the real property including broadband facilities and equipment and for purposes other than the purposes for which the award was made, without the prior written approval of the Grants Officer. Such approval may be withheld until such time as the recipient first pays to NTIA the Federal share of the real property including broadband facilities and equipment as provided in 15 CFR 14.32 (15 CFR 24.31 for state, local, or other government entities). This security interest shall be executed in advance of any sale or lease and not later than closeout of the grant.

C. Construction-Related Requirements

- Maintenance. The recipient agrees that, for the estimated useful life of the facility funded with this award, the project will be properly and efficiently administered, operated, and maintained for the purpose authorized by this award and in accordance with the terms, conditions, requirements, and provisions of the award. If NTIA determines at any time during the estimated useful life of the project, that the project and any project property is not being properly and efficiently administered, operated, and maintained, NTIA shall have the right to terminate this award for cause and pursue any other remedies allowed by law.

- Compliance. The recipient shall comply, and must require each contractor or subcontractor to comply, with all applicable Federal, state, and local laws and regulations.

- Energy Efficiency. The recipient shall apply, where feasible, sustainable, and energy efficient, design principles for the purpose of reducing pollution and energy costs and optimizing lifecycle costs associated with the construction.

- Signs. The recipient is responsible for constructing, erecting, and maintaining in good condition throughout the construction period a sign(s) satisfactory to NTIA that identifies the project and indicates that the project is Federally funded. NTIA also may require that the recipient maintain a permanent plaque or sign at the project site with the same or similar information.

- Land, Easements, and Rights of Way. The recipient must disclose all encumbrances to the operating unit. The operating unit will not accept any encumbrance that interferes with the construction, intended use, operation, or maintenance of the project during its estimated useful life. Unless otherwise provided for in the award, prior to grant of the award and commencement of construction, or when requested by the operating unit, the recipient must furnish evidence, satisfactory in form and substance to the operating unit, that title to real property is vested in the recipient, and that it has obtained any rights-of-way, easements, State and local government permits, long-term leases, or other property interests.

- Relocation Assistance. The provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, (Pub. L. No. 91-646; 42 U.S.C. - 4601 et seq.), are applicable to each recipient of assistance from an operating unit. This Act provides assistance to persons, businesses, or farm operations affected by the acquisition, rehabilitation or demolition of real property acquired for a project financed wholly or in part with Federal assistance funds. It also requires compliance with specific guidelines pertaining to reimbursable costs incidental to such land

acquisition.

- Tribal Employment Rights Ordinances. In accordance with Departmental policy, all operating units must recognize Tribal Employment Rights Ordinances ("TEROs"), which may provide for preferences in contracting and employment, in connection with its financial assistance awards. Tribal ordinances requiring preference in contracting, hiring, and firing and the payment of a TERO fee are allowable provisions under Federal awards and should be incorporated by the operating unit under its grants and contracts with American Indian and Alaska Native tribal governments. The payment of the TERO fee, which supports the tribal employment rights office to administer the preferences, should generally be allowable as an expense that is "necessary and reasonable for proper and efficient performance and administration" of an award, as provided under the applicable cost principles set out in 2 CFR 225.

6) Accounting System Verification

The recipient shall submit a signed statement from an authorized official, verifying the ability of the recipient's financial management system to appropriately track and account for federal grant funds and expenditures associated with the funded project. This statement must be received within 30 days of the award start date and the recipient is not allowed to draw down any funds until this statement is received and accepted by the Grants Officer.

7) FCC Compliance and Notification (as Designee) SAC

A. By accepting this award, the recipient is the designee of the City and County of San Francisco, City of Oakland, and the City of San Jose, California (local government partners) regarding the use of the 700 MHz public safety broadband spectrum (763-768 MHz and 793-798 MHz). As such, the recipient and local government partners, to the extent applicable, shall comply with the requirements established in the Federal Communications Commission's (FCC) Order in PS Docket 06-229, adopted on May 11, 2010 (FCC 10-79), and all subsequent orders and public notices regarding the use of such spectrum. If any future regulatory requirement (from the FCC or other governmental entity) results in a material technical or financial change in the project, the recipient must submit a revised budget, associated documentation, and other material, as applicable, for review and approval by the Grants Office.

B. The recipient shall provide NTIA with copies of all reports, showings, and agreements that are required to be submitted to the FCC within 15 days of submission to the FCC. The recipient shall also provide NTIA with copies of all orders, decisions, and public notices adopted or released by the FCC regarding the recipient's use of the 700 MHz public safety broadband spectrum with 15 days of receipt from the FCC.

C. The recipient shall coordinate the public safety component of this project, to the extent applicable, with the full-time Statewide Interoperability Coordinator and the Statewide Interoperability Governance Body established in the State of the project.

8) Transfer of 700 MHz Assets

The recipient is required to execute an agreement on the transfer of ownership of the 700 MHz public safety broadband network, including the components of the public access subsystem that are funded by the Broadband Technology Opportunities Program, to the City and County of San Francisco, City of Oakland, and the City of San Jose, California or

their authorized representative. The precise terms and conditions of the transfer shall be mutually agreed to by the parties. Recipient shall comply with all applicable regulations regarding the transfer of award-funded facilities and equipment. The execution of the agreement shall occur prior to the end date of the grant, and a copy of the executed agreement must be provided to NTIA and the Grants Office.

9) New Award SAC

This award number NT10BIX5570089, to Motorola, Inc., supports the work described in the Recipient's proposal entitled Recovery Act - The San Francisco Bay Area Wireless Enhanced Broadband Project dated 03/26/2010, and revisions dated 3-24-2010 for BTOP Certification, 3-26-2010 for Budget Narrative, 6-23-2010 for Detailed Budget, and 3-26-2010 for SF424CandD which are incorporated into the award by reference. Where the terms of the award and proposal differ, the terms of the award shall prevail.

10) Matching Requirement

Since this award requires the Recipient to provide \$21,890,086 in project-related costs from non-federal sources, the Recipient must maintain in its official accounting records an accounting of \$72,483,637.

11) Baseline Project Plan

Recipients shall submit baseline project plans and details regarding key outputs and outcomes from their projects within 45 days of the close of the first quarter. Federal Program Officers will provide guidance on the format and content of these baseline plans and details for this one-time data gathering activity.

Due Date: 11/15/2010

12) National Historic Preservation Act SAC

The grantee may not expend any Federal funds other than Management and Administration (M&A) funds and limited, preliminary procurement funds prior to the following:

- The completion of any required consultations, to include consultations with the State Historic Preservation Office (SHPO) and the appropriate federally recognized Native American tribes, under Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.) (NHPA);
- Demonstration of compliance with all other applicable federal, state, and local environmental laws and regulations.

Project implementation (site preparation, demolition, construction, ground disturbance, or any other project implementation activities) may not begin prior to the completion of the above activities. The completion of any required consultations under Section 106 of the NHPA must be completed no later than six months after the award date unless a formal request for extension is submitted and approved by the Grants Officer. The grantee must comply with all conditions placed on the project as the result of consultation processes.

The allowable use of M&A funds prior to beginning project implementation includes, but is not limited to, activities necessary for the completion of the following:

- Pre-construction project planning, including collecting environmentally-related information;
- Applications for environmental permits;
- Studies and any wetland delineations, biological assessments, archaeological surveys, or other required analyses, and;
- Required consultation activities.

The allowable use of funds for limited, preliminary procurements prior to beginning project implementation includes, but is not limited to, the initiation of activities necessary to meet the project completion requirements as specified in the award, including the following:

- Purchase or lease of equipment, or entering into binding contracts to do so;
- Purchase of applicable or conditional insurance;
- Funds used to secure land or building leases, including right-of-way easements.

The allowable use of preliminary procurement funds is limited; must not result in an irrevocable commitment of resources; and is only allowed after inclusion in and approval of a revised 6-month expenditure plan. The revised 6-month expenditure plan is due within 30 days of receipt of this Special Award Condition (SAC) and will be reviewed by the Environmental Program Officer, who will make recommendations to the Federal Program Officer and the Grants Officer (who has final approval authority) to ensure all proposed procurement funds are reasonable and necessary to ensure that the project completion deadline requirements are met. All contracts must contain early termination clauses with termination costs clearly specified. All equipment purchased or leased in advance of project implementation and before completion of applicable consultations must be stored in locations other than the proposed project site and where there will be no impact to the environment, human health, or cultural resources (in most cases, this means equipment must be stored in existing warehouses). Under no circumstances will grant funds be drawn down for clearing or excavating land, or demolition or construction of buildings or towers, before all environmental SACs are completed and cleared. This limited, preliminary allowable use of funds for purchases and leases is designed for recipient flexibility and to streamline preparation for project implementation simultaneously during consultations; the clause, and all applicable restrictions, is lifted once the applicable consultations, and Finding of No Significant Impact (FONSI; if applicable) are complete and approved.

While this Special Award Condition is in effect, the Recipient shall submit, in advance of any draw downs from Automated Standard Application for Payments (ASAP), a revised 6-month expenditure plan that presents the proposed M&A and limited, preliminary procurement activities and costs. The revised 6-month expenditure plan will be submitted electronically to the Environmental Program Officer, who will review it and provide recommendations to the Federal Program Officer and the Grants Officer for final approval to ensure that the proposed activities and expenditures are reasonable and necessary in the context of environmental compliance. The Environmental Program Officer and Federal Program Officer must review and recommend and the Grants Officer must approve the revised 6-month expenditure plan prior to fund drawdowns through ASAP.

Once the Consultation activities have been completed, NTIA will review all documentation and determine whether the Consultation activities sufficiently address historical and/or cultural resource impacts. Projects found to have significant

impacts to environmental or historic resources may face de-obligation of funding if impacts cannot be mitigated. The grantee is required to provide any information requested by NTIA to ensure both initial and ongoing compliance with environmental and historic preservation laws, regulations, and best practices. The grantee shall notify NTIA within twenty-four (24) hours upon receipt of any notices of foreclosure; notices for continuing consultation received from the SHPO, Tribal Historic Preservation Office (THPO), USFWS, or other consulting party; or notices of noncompliance received from consulting authorities or regulatory agencies.

For all ground disturbing activities that occur during project implementation in the vicinity of known archaeological sites or suspected or known burials, the grant recipient must ensure that an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards monitors ground disturbance, and if any potential archeological resources or buried human remains are discovered, then the grantee must immediately cease construction in that area and notify NTIA and the interested State Historic Preservation Offices, Tribal Historic Preservation Offices, and tribes. Such construction activities may then only continue with the written approval of NTIA.

NEPA Determination

The proposed activities are categorically excluded from the need for further environmental review under NEPA.

The activities associated with this project qualify under BTOP Categorical Exclusions:

- A.3: Personnel and Administrative Actions.
- A.5: Internal modifications or equipment additions (e.g. computer facilities, relocating interior walls) to structures or buildings.
- B.5: Changes or additions to existing substations, switching stations, telecommunications switching or multiplexing centers, or external changes to buildings or small structures requiring one acre (0.4 hectare) or more but no more than five acres (2 hectares) of new physically disturbed land or fenced property.
- B.7: Changes or additions to microwave sites, substations, switching stations, telecommunications switching, or multiplexing centers, buildings, or small structures requiring new physical disturbance or fencing of less than one acre (0.4 hectare).

The activities associated with this project qualify under DOC Categorical Exclusions:

- A-7: Acquisition, installation, operation, and removal of communications systems, data processing equipment, and similar electronic equipment.
- A-10: Sighting, construction (or modification), and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).
- A-11: Personnel, fiscal, management, and administrative activities, such as recruiting, processing, paying, recordkeeping, resource management, budgeting, personnel actions, and travel.

Any change to the approved project scope that has the potential for altering the nature or extent of environmental or

cultural resources impacts must be brought to the attention of NTIA and will be re-evaluated for compliance with applicable regulatory requirements.

Due Date: 02/01/2011

13) For-Profit Recipient Audit Requirement

A for-profit organization receiving a BTOP award exceeding \$100,000 in Federal funding shall have a program-specific audit performed based on the Recipient's BTOP program year, beginning with the date of the issuance of the BTOP award. The auditor should follow generally accepted government auditing standards and the requirements for a program-specific audit as described in OMB Circular A-133 - 235 and any applicable compliance supplements and BTOP audit guidelines. A copy of the program-specific audit shall be submitted to the Grants officer and to the DOC OIG at the following address:

Office of Inspector General
U.S. Department of Commerce
Atlanta Regional Office of Audits
401 West Peachtree Street, N.W., Suite 2742
Atlanta, Georgia 30308

An audit is required at least once every two years using the following schedule for audit report submission:

- For awards less than 24 months, an audit is required within 90 days of the project expiration and close out period. This audit shall include any costs incurred during the close out period.

- For 2- or 3- year awards, an audit is required:

1. within 90 days after the end of award year 1, and
2. within 90 days following the project expiration date and close out period. This audit shall include any costs incurred during the close out period.

- For awards extended beyond 3 years, an audit is required:

3. within 90 days after the end of award year 1, and
4. within 90 days after the end of award year 3, and
5. within 90 days following the project expiration date and close out period. This audit shall include any costs incurred during the close out period.

Due Date: 10/31/2011

U. S. DEPARTMENT OF COMMERCE

GRANT COOPERATIVE AGREEMENT

FINANCIAL ASSISTANCE AWARD

AWARD NUMBER
NT10BIX5570089

RECIPIENT NAME Motorola, Inc.

STREET ADDRESS 1303 East Algonquin Road

FEDERAL SHARE OF COST
\$50,593,551.00

CITY, STATE, ZIP CODE Schaumburg IL 60196-4041

RECIPIENT SHARE OF COST
\$21,890,086.00

AWARD PERIOD 08/01/2010-07/31/2013

TOTAL ESTIMATED COST
\$72,483,637.00

AUTHORITY The American Recovery and Reinvestment Act of 2009 P.L. 111-5.

CFDA NO. AND PROJECT TITLE
11.557 Recovery Act - The San Francisco Bay Area Wireless Enhanced Broadband Project (BayWEB)

This award offer approved by the Grants Officer constitutes an obligation of Federal funding. By accepting this award offer, the Recipient agrees to comply with the award Terms and Conditions checked below. If this was a paper issued award offer, please send two signed documents to the Grants Officer and retain one set of signed award documents for your files. If this award offer is not accepted without modification within 30 days of receipt, the Grants Officer may unilaterally withdraw this award offer and de-obligate the funds.

- Department of Commerce Financial Assistance Standard Terms and Conditions
- Government Wide Research Terms and Conditions
- Bureau Specific Administrative Standard Award Conditions
- Award Specific Special Award Conditions
- Line Item Budget
- 15 CFR Part 14, Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, Other Non-Profit, and Commercial Organizations
- 15 CFR Part 24, Uniform Administrative Requirements for Grants and Agreements to States and Local Governments
- OMB Circular A-21, Cost Principles for Educational Institutions
- OMB Circular A-87, Cost Principles for State, Local, and Indian Tribal Governments
- OMB Circular A-122, Cost Principles for Non-Profit Organizations
- 48 CFR Part 31, Contract Cost Principles and Procedures
- OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations
- Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements
REF: 73 FR 7696 (February 11, 2008).
- Other(s)
DOC American Recovery and Reinvestment Act Award Terms:
75 FR 3792 January 22, 2010.
75 FR 10464 March 8, 2010.

SIGNATURE OF DEPARTMENT OF COMMERCE GRANTS OFFICER

TITLE

DATE

Sonja Wyatt

Grants Officer

08/13/2010

TYPE NAME AND SIGNATURE OF AUTHORIZED RECIPIENT OFFICIAL

TITLE

DATE

Exhibit U

Training Scope

1. 1.0 Introduction

Motorola will provide training to the BayWEB agencies to support the Quality of Service feature within the BayWEB network. This training will focus on the development and management of the required policies associated with deploying Quality of Service functionality within a multiagency network. To draw focus on the important facets of this complex topic the training will be presented in three segments.

2. 2.0 Training Classes

2.1 FIRST SEGMENT

The first segment will be a workshop for the QoS policy management committee. Representatives from each jurisdiction will be invited to attend an overview session led by Motorola engineers.

2.2 SECOND SEGMENT

The second segment will be a QoS policy management planning workshop. This will be scheduled at a convenient period following the Authorities decisions on the PSM topography. This training will provide guidance on important criteria to consider when implementing QoS during day to day operations as well as during major incidents.

2.3 THIRD SEGMENT

The third segment will be train the trainer session. Motorola will provide X classes with a maximum of 20 students per class. The class will be a maximum of 4 hours in duration and will be conducted at a JPA provided facility. The training will be conducted prior to system provisioning with ample time for the participating agencies train their operators on the features offered.

ATTACHMENT F

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 grandfather 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**

STAFF REPORT

BOARD OF DIRECTORS MEETING

MEETING DATE: Thursday, December 1, 2011

AGENDA ITEM: Report from TAC regarding Motorola ver 3.0 BOOM Exhibit A – System Description and Exhibit B – System Specifications. These two Exhibits are part of the BOOM Agreement

SUBJECT:Review and comments by Technical Advisory Committee (TAC) on the Motorola-provided system description and specifications documentation. Summary of TAC concerns and recommendations regarding various technical and implementation issues related to the proposed 700 MHz Public Safety Broadband wireless system description and specifications by Motorola.

RECOMMENDATION

That the BayRICS Board of Directors receive and accept the recommendations regarding technical issues and concerns related to the proposed BayWEB Public Safety Broadband System. The Technical Advisory Committee (TAC) was asked by the Board to provide feedback on Motorola Public Safety Broadband System Description and Specifications. As this report is developed, additional changes are disclosed by Motorola, including the replacement of the microwave backhaul vendor. Due to the coverage concerns, specific to the in-building coverage, TAC recommends that the commercial roaming option shall be considered and comprehensive roaming plan, including an agreement, shall be developed. TAC will continue (in an advisory capacity) working closely with the Motorola technical team and participating local agencies as they design and deploy the BayWEB solution.

SUMMARY/DISCUSSION

This report is an attempt to articulate the differences and gaps between the Motorola design and TAC's recommendation on technical requirements for the Public Safety Broadband System. The BayWEB system design is not finalized yet, and there are many technical and operational issues that need to be discussed and finalized. The system description and exhibits include products and technology, however, TAC's primary concerns include that the BayWEB LTE solution is the first implementation of its type in the nation. Many of the key pieces and tools, specified in the solution, have never been deployed before in a multi-jurisdictional public safety environment. It is assumed that once the formal agreement is in place between Motorola and Ericsson (selected LTE vendor), additional detailed information will be provided to the TAC for its review. This

technical report doesn't include any review related to the Motorola proposed Site Access and Use Agreement, and any activities involving the site remediation work. TAC hasn't been involved in the site remediation discussions.

The BayRICS TAC and Motorola have been collaborating in architecting and developing the public safety broadband solution. Motorola has provided the BayRICS Technical Advisory Committee (TAC) with a variety of technical information over a period of time, in pieces, for its review and understanding. The information includes a Request For Proposals (RFP) to select the LTE vendor, various product specifications, and high-level design assumptions. The coverage and performance maps were presented to the TAC in the form of presentations. The first complete system design package including the prediction maps, version 2, were hand-delivered to the TAC on Oct. 19, 2011. During that TAC meeting, the system design overview was given by Motorola. As a result, additional information and clarity were requested by the TAC. The revised and updated documentation package, version 3, was completed on Nov 2, 2011. TAC has met and reviewed Exhibit A - BayWEB System Description and Exhibit B - BayWEB Specifications, version 3 package. TAC has developed a list of significant design assumptions related to the Public Safety Broadband System (BayWEB) which is being proposed by Motorola and significantly funded through the NTIA grant awarded to Motorola. The following table highlights these design assumptions and provides some basic information regarding the design and functionality.

BayWEB Feature and Function	Motorola Design Criteria	TAC Recommendations
Compliance to 3GPP Standards	The BayWEB is a 4G LTE network and will be a 3GPP Release 8 implementation.	3GPP LTE Release 8 and all subsequent releases shall be included in the agreement.
Backhaul – Reliability	The BayWEB network backhaul consists of a hybrid design, using the BayLoop and BART fiber. Portion of the design today are not protected.	A robust Backhaul Core (to include BART Fiber) is critical to the Network design, and it should be protected by a loop configuration.
Radio Access Network (Public Safety Middle-mile network)	Radio Access Network (RAN) will include the Microwave or Fiber termination equipment and connections. The Motorola design will include the switches that will connect the LTE equipment to BayLoop and BART Fiber.	The network design should require that no eNodeB is more than 2 hops away from a protected backhaul node (i.e., site with protected loop, alternate routing, or matrix topology). Exception to be made where it is not can be reasonably achieved
Evolved Packet Core (EPC) – Core Switch	A single EPC Core will be located at the Twin Peaks in San Francisco and connected with BART fiber as well as BayLoop.	A redundant EPC Core is critical to network reliability. A single EPC core design provides a significant risk. This Single Point of Failure would result in total loss of the entire network

Backhaul – Capacity	Motorola believes that a single OC-3 will be sufficient for the 12000 concurrent users.	TAC is unable to determine if a single OC3 will be sufficient. The number of users, types of applications and user patterns will determine the capacity required. TAC is concerned that one OC3 will adequately support future applications or growth of the user base.
LTE Performance – Coverage and Data Rate	To date Motorola only agrees that the System will conform to NTIA standards or compliance with applicable FCC requirements that exist when testing commences.	The system shall comply with all applicable public safety 4G LTE Specifications and other FCC requirements. Including minimum data rates and performance and coverage standards within the service area, which shall be equal to or better than those reflected on inbound and outbound(4GB/6GB) coverage predictions maps approved by the Authority and included in Exhibit “A” throughout the term of the agreement
Sites Density	The original network design consisted of 193 sites. The final design will include some number less than the 193 sites	The actual number of sites included in the final design is likely to result in inconsistent coverage and performance across the region. The TAC believes that some users may experience insufficient system performance. The TAC feels that adding sites in the future will be necessary to enhance system performance
Subscriber Unit	Any subscriber device, compliant to the 3GPP standards will be able to work on the BayWEB network.	As of today no devices are available for this new market. TAC recommends that the system be capable of supporting any subscriber device compliant with 3GPP standards, will work on all frequency bands and accommodate roaming to other networks.
Roaming	Roaming will not be required because of the coverage and performance predictions, therefore there is no commercial roaming option is included in the agreement.	Commercial roaming will be necessary for some agencies to provide redundancy and coverage reliability.

There is a general concern that the remaining time available within the current Motorola/NTIA grant performance period is insufficient to complete the project. Issues such as spectrum licenses, cost estimation (to inform potential users and to develop BayRICS funding plans), site analysis, permitting and preparation, educational outreach to potential users and other pacing items can all take longer than anticipated or longer than desired. If Motorola were to receive an adequate grant performance period extension these schedule concerns would be mitigated.

The issue of internal technical staff resource availability also impacts the schedule and the ability of BayRICS member entity staff to make meaningful progress on resolving the various technical and operational issues that have been explained in this staff report.

FINANCIAL IMPACT

While the above concerns and recommendations do not have any direct or immediate financial impact on the JPA, how they are resolved will likely have a significant impact on the cost of the system design, the cost of implementation and the sustainment costs for the system. Who will bear these costs would be negotiated through the BOOM agreement or other system and site usage agreements. The anticipated cost of roaming could be significant and could essentially double monthly end user costs if end users were to also be required to subscribe to a commercial provider's system in order to be able to roam to it.

ENVIRONMENTAL

Not Applicable.

ATTACHMENTS:

None

ATTACHMENT G

BayRICS JOINT POWERS AUTHORITY

STAFF REPORT

BOARD OF DIRECTORS MEETING

MEETING DATE: Thursday, December 1, 2011

AGENDA ITEM: Report from TAC regarding Motorola ver 3.0 BOOM Exhibit A – System Description and Exhibit B – System Specifications. These two Exhibits are part of the BOOM Agreement

SUBJECT: Review and comments by Technical Advisory Committee (TAC) on the Motorola-provided system description and specifications documentation. Summary of TAC concerns and recommendations regarding various technical and implementation issues related to the proposed 700 MHz Public Safety Broadband wireless system description and specifications by Motorola.

RECOMMENDATION

That the BayRICS Board of Directors receive and accept the recommendations regarding technical issues and concerns related to the proposed BayWEB Public Safety Broadband System. The Technical Advisory Committee (TAC) was asked by the Board to provide feedback on Motorola Public Safety Broadband System Description and Specifications. As this report is developed, additional changes are disclosed by Motorola, including the replacement of the microwave backhaul vendor. Due to the coverage concerns, specific to the in-building coverage, TAC recommends that the commercial roaming option shall be considered and comprehensive roaming plan, including an agreement, shall be developed. TAC will continue (in an advisory capacity) working closely with the Motorola technical team and participating local agencies as they design and deploy the BayWEB solution.

SUMMARY/DISCUSSION

This report is an attempt to articulate the differences and gaps between the Motorola design and TAC's recommendation on technical requirements for the Public Safety Broadband System. The BayWEB system design is not finalized yet, and there are many technical and operational issues that need to be discussed and finalized. The system description and exhibits include products and technology, however, TAC's primary concerns include that the BayWEB LTE solution is the first implementation of its type in the nation. Many of the key pieces and tools, specified in the solution, have never been deployed before in a multi-jurisdictional public safety environment. It is assumed that once the formal agreement is in place between Motorola and Ericsson (selected LTE vendor), additional detailed information will be provided to the TAC for its review. This

technical report doesn't include any review related to the Motorola proposed Site Access and Use Agreement, and any activities involving the site remediation work. TAC hasn't been involved in the site remediation discussions.

The BayRICS TAC and Motorola have been collaborating in architecting and developing the public safety broadband solution. Motorola has provided the BayRICS Technical Advisory Committee (TAC) with a variety of technical information over a period of time, in pieces, for its review and understanding. The information includes a Request For Proposals (RFP) to select the LTE vendor, various product specifications, and high-level design assumptions. The coverage and performance maps were presented to the TAC in the form of presentations. The first complete system design package including the prediction maps, version 2, were hand-delivered to the TAC on Oct. 19, 2011. During that TAC meeting, the system design overview was given by Motorola. As a result, additional information and clarity were requested by the TAC. The revised and updated documentation package, version 3, was completed on Nov 2, 2011. TAC has met and reviewed Exhibit A - BayWEB System Description and Exhibit B - BayWEB Specifications, version 3 package. TAC has developed a list of significant design assumptions related to the Public Safety Broadband System (BayWEB) which is being proposed by Motorola and significantly funded through the NTIA grant awarded to Motorola. The following table highlights these design assumptions and provides some basic information regarding the design and functionality.

BayWEB Feature and Function	Motorola Design Criteria	TAC Recommendations
Compliance to 3GPP Standards	The BayWEB is a 4G LTE network and will be a 3GPP Release 8 implementation.	3GPP LTE Release 8 and all subsequent releases shall be included in the agreement.
Backhaul – Reliability	The BayWEB network backhaul consists of a hybrid design, using the BayLoop and BART fiber. Portion of the design today are not protected.	A robust Backhaul Core (to include BART Fiber) is critical to the Network design, and it should be protected by a loop configuration.
Radio Access Network (Public Safety Middle-mile network)	Radio Access Network (RAN) will include the Microwave or Fiber termination equipment and connections. The Motorola design will include the switches that will connect the LTE equipment to BayLoop and BART Fiber.	The network design should require that no eNodeB is more than 2 hops away from a protected backhaul node (i.e., site with protected loop, alternate routing, or matrix topology). Exception to be made where it is not can be reasonably achieved
Evolved Packet Core (EPC) – Core Switch	A single EPC Core will be located at the Twin Peaks in San Francisco and connected with BART fiber as well as BayLoop.	A redundant EPC Core is critical to network reliability. A single EPC core design provides a significant risk. This Single Point of Failure would result in total loss of the entire network

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ATTACHMENTS:

None