



# AGENDA

## LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

### BOARD OF DIRECTORS SPECIAL MEETING

Thursday, August 4, 2011 • 10:30 a.m.  
Grace E. Simons Lodge  
1025 Elysian Park Drive, Los Angeles, CA 90012

Los Angeles Regional Interoperable Communications Systems Authority (the "Authority")

#### **AGENDA POSTED: August 3, 2011**

Complete agendas are made available for review at the designated meeting location during normal business hours and may also be accessible on the Authority's website at <http://www.la-rics.org>.

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#### **Members:**

1. **William T Fujioka**, Chair, CEO, County of Los Angeles
2. **Mark R. Alexander**, City Manager, representing California Contract Cities Association
3. **Leroy D. Baca**, Sheriff, County of Los Angeles
4. **Charles L. Beck**, Vice Chair, Police Chief, City of Los Angeles
5. **Brian Cummings**, Interim Fire Chief, City of Los Angeles
6. **Reginald Harrison**, Deputy City Manager, City of Long Beach
7. **LeRoy J. Jackson**, City Manager, City of Torrance, representing At Large Seat
8. **Dr. Mitchell H. Katz**, Director, DHS, County of Los Angeles
9. **Gerry Miller**, Chief Legislative Analyst, City of Los Angeles
10. **Daryl L. Osby**, Fire Chief, County of Los Angeles
11. **Donald Pedersen**, Police Chief, City of Culver City, representing At Large Seat
12. **Scott Pickwith**, Police Chief, representing the Los Angeles County Police Chiefs Association
13. **Kim Raney**, Police Chief, City of Covina, representing At Large Seat
14. **Harold Scoggins**, Fire Chief, representing the Los Angeles Area Fire Chiefs Association
15. **Miguel Santana**, CAO, City of Los Angeles
16. **Gregory L. Simay**, Assistant General Manager, City of Burbank Water & Power, representing At Large Seat
17. **Steven K. Zipperman**, Police Chief, Los Angeles School Police Department

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#### **Officers:**

1. **Patrick Mallon**, Executive Director
2. **Wendy L. Watanabe**, County of Los Angeles Auditor-Controller
3. **Mark J. Saladino**, County of Los Angeles Treasurer and Tax Collector
4. **Patricia Saucedo**, Board Secretary



**NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA**

**I. CALL TO ORDER**

**II. ANNOUNCE QUORUM – Roll Call**

**III. PUBLIC COMMENTS**

**IV. ADMINISTRATIVE MATTERS**

1. Amendment to the Televate, LLC Contract for Mobile Broadband Engineering Services – Pat Mallon

ACTION ITEM: Recommend the Authority authorize the Executive Director to execute a contract amendment with Televate, LLC.

**Attachments:**      Item 1

**V. MEETING ADJOURNMENT**

**VI. NEXT REGULAR BOARD OF DIRECTORS MEETING:**

Thursday, September 1, 2011 at 9:00 a.m. at the Grace E. Simons Lodge



## BOARD MEETING INFORMATION

Members of the public are invited to address the LA-RICS Authority Board on any item on the agenda prior to action by the Board on that specific item. Members of the public may also address the Board on any matter within the subject matter jurisdiction of the Board. The Board will entertain such comments during the Public Comment period. Public Comment will be limited to three (3) minutes per individual for each item addressed, unless there are more than ten (10) comment cards for each item, in which case the Public Comment will be limited to one (1) minute per individual. The aforementioned limitation may be waived by the Board's Chair.

*(NOTE: Pursuant to Government Code Section 54954.3(b) the legislative body of a local agency may adopt reasonable regulations, including, but not limited to, regulations limiting the total amount of time allocated for public testimony on particular issues and for each individual speaker.)*

Members of the public who wish to address the Board are urged to complete a Speaker Card and submit it to the Board Secretary prior to commencement of the public meeting. The cards are available in the meeting room. However, should a member of the public feel the need to address a matter while the meeting is in progress, a card may be submitted to the Board Secretary prior to final consideration of the matter.

It is requested that individuals who require the services of a translator contact the Board Secretary no later than the day preceding the meeting. Whenever possible, a translator will be provided. Sign language interpreters, assistive listening devices, or other auxiliary aids and/or services may be provided upon request. To ensure availability, you are advised to make your request at least 72 hours prior to the meeting you wish to attend. (323) 881-8291 or (323) 881-8295

SI REQUIERE SERVICIOS DE TRADUCCION, FAVOR DE NOTIFICAR LA OFICINA CON 72 HORAS POR ANTICIPADO.

A transcript of the meeting will be made available.

### **CLOSED MEETINGS MAY BE CONDUCTED**

Under the Brown Act, closed meetings are the exception and permitted only if they meet defined purposes and follow special requirements (§§ 54953(a), 54954.5, 554962).

### **PERSONNEL EXEMPTION:**

In accordance with the Brown Act, the purpose of this closed session is to permit a legislative body (e.g. LA-RICS Board of Directors) in limited circumstances to exclude the public in order to interview and/or select/appoint a potential candidate for the position of Executive Director for LA-RICS (§ 54957).

At the March 3, 2011 LA-RICS Board of Directors Regular Meeting, JPA Counsel shared with the Board the relevant section in the Brown Act Code regarding hiring and interviewing individuals [Independent Contractor] in closed session.

- Pursuant to section 54957(b)(1), which provides, in pertinent part, "...nothing contained in this chapter shall be construed to prevent the legislative body of a local agency from holding close session during a regular or special meeting to consider the appointment [or] employment of a public employee...". Under applicable Attorney General Opinions, a "public employee" includes independent contractors if the independent contractor would be acting in a position that would typically be filled by a public employee, e.g., the Executive Director of LA-RICS.

### **ACTION TAKEN IN CLOSED SESSION UNDER SPECIFIED CIRCUMSTANCES:**

At the conclusion of the closed session meeting, if any final decision is made, the legislative body may be required to report on such action. (§ 54957.1.)

- Action and Votes in closed session must be publicly reported orally or in writing (§ 54957.1(b)), and copies of any contracts or settlements approved must be made available promptly (§ 54957.1(b), (c)).



## LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

2525 Corporate Place, Suite 200  
Monterey Park, California  
(323) 881-8291

PATRICK J. MALLON  
EXECUTIVE DIRECTOR

August 4, 2011

Board of Directors  
Los Angeles Regional Interoperable Communications System Authority (the "Authority")

Dear Directors:

### **APPROVE AMENDMENT TO TELEVATE, LLC CONTRACT FOR MOBILE BROADBAND ENGINEERING SERVICES**

#### **SUBJECT**

It is recommended that the Authority authorize the Executive Director to execute a contract amendment with Televate, LLC to include system design review initiating from Request for Proposals (RFP) development through system implementation.

The contract Term and Maximum Contract Sum would remain unchanged.

#### **BACKGROUND**

The Broadband Technology Opportunities Program ("BTOP") grant from the Department of Commerce's National Telecommunications and Information Administration ("NTIA") will fund the LA-SafetyNet project, a 700 MHz public safety mobile broadband network across all of Los Angeles County, featuring almost 300 wireless LTE sites using new and existing infrastructure, fixed microwave backhaul rings, and 100-miles of high-capacity fiber backbone.

On March 3, 2011, your Board approved execution of a contract with Televate, LLC for broadband engineering services. The Request for Proposals (RFP) and Contract Scope of Work included the contractor serving as Subject Matter Expert (SME) on all LTE broadband related initiatives and activities. It also included providing support and design review specifically "in parallel to negotiations, and continuing through system implementation...."

In order to address the technical requirements necessary for issuing the RFP, we request your Board to approve the attached Contract Statement of Work amendment, to allow for pre-RFP design review.

#### **PURPOSE/ JUSTIFICATION OF RECOMMENDED ACTION**

The Authority requires certified and experienced subject matter experts to assist in LTE broadband design review prior to release of the RFP and through system implementation.

**AGENDA ITEM 1**

The existing contract includes language for design review concurrent with contract negotiations. The purpose of the amendment is to allow for Subject Matter Expert Support, including design review, during RFP preparation through system implementation.

**FISCAL IMPACT/FINANCING**

All contract costs will continue to be fully reimbursable under the BTOP grant award. The Maximum Contract Sum will remain unchanged.

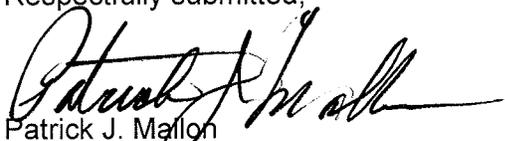
**FACTS AND PROVISIONS/ LEGAL REQUIREMENT**

The Authority's counsel and procurement officer have reviewed the recommended action.

**AGREEMENTS/ CONTRACTING**

On behalf of the Authority, the Executive Director, or his designee, will have full authority to execute a contract amendment with the Televate, LLC to include system design during RFP preparation. The Executive Director will continue to issue all work orders, and pay all invoices for an amount not to exceed \$1,500,000 for a term no longer than three years from the original date of execution.

Respectfully submitted,



Patrick J. Mallon  
Executive Director  
PJM:soc

cc: Counsel to the Authority

Attachments: A) Executed Contract Statement of Work, Televate, LLC  
B) DRAFT – Proposed Amendment 1, Televate, LLC



Agreement # 004 between

**The Los Angeles Regional  
Interoperable Communications  
System Authority**

**and**

**Televate, LLC**

## **Exhibit A      Statement of Work**

Consultant shall provide the following professional services in accordance with this Exhibit A.

### **I. BACKGROUND**

The Department of Commerce's National Telecommunications and Information Administration (NTIA) awarded the Los Angeles Regional Interoperable Communication System Authority (the "Authority") a Comprehensive Community Infrastructure Broadband Technology Opportunity Program ("BTOP") grant in the amount of \$154,640,000. BTOP funds were awarded to the Authority to develop and deploy LA-SafetyNet, a 700 MHz public safety mobile broadband network across all of Los Angeles County, featuring almost 300 wireless 700 MHz public safety broadband sites using new and existing infrastructure, fixed microwave backhaul rings, and 100-miles of high-capacity fiber backbone. The Federal Communications Commission ("FCC") has required public safety broadband networks to adopt Long Term Evolution ("LTE") technology. This network will enable computer-aided dispatch, rapid law-enforcement queries, real-time video streaming, medical telemetry and patient tracking, geographic information systems services for first responders, and many other broadband-specific applications.

The Authority will implement LA-SafetyNet as a major component of LA-RICS, which will incorporate both voice and data communications systems. LA-RICS will be designed and built under a contract ("Contract") with a vendor ("Vendor"). The Authority has concluded its evaluation of vendor proposal documents ("Proposal") that responded to the original RFP, issued on April 5, 2010, and to the broadband mobile data system addendum, issued October 26, 2010.

To address the technical requirements necessary for implementing this new technology, Consultant shall provide expertise in LTE technology and the use of mobile broadband technology for public safety use. Consultant may provide support via phone, e-mail, conference call, online meeting, or other electronic means. The Authority, at its discretion, shall require Consultant to attend in-person project meetings or other on-site work as required.

### **II. SCOPE OF WORK**

#### **A. Task 1: Contract Negotiations Support**

Consultant shall confer with Authority staff to identify, discuss, and refine the Authority's core objectives for the LA-SafetyNet project. Consultant shall then support the Authority during contract negotiations to ensure that these objectives are furthered by the final system contract. Consultant shall thoroughly review and analyze all documentation in connection to LA-SafetyNet project, the LA-RICS system vendor proposal, and the Vendor's proposed contract language and identify any risk areas that may prevent project success. Identified risks must be presented to the Authority's staff with a recommended negotiation strategy to mitigate that

particular risk. Consultant shall also provide a comprehensive vendor price proposal analysis, including a market analysis for off the shelf components and other LA-RICS available competitor proposals, and a maintenance & operations cost analysis, with recommended strategies for cost containment overall.

To mitigate and manage risks to the Authority's core project objectives, Consultant shall also manage risk through a risk register document that tracks contract risks, their impacts, and recommended mitigation strategies. In addition, Consultant shall review contract payment plan and overall finance strategy and provide recommendation on how to maintain the long-term viability of the network.

Consultant shall also provide detailed analysis and recommendations on negotiated outcomes that best meet the Authority's core objectives on the following:

1. Vendor's operation and maintenance strategy to ensure LA-SafetyNet is operating optimally;
2. Vendor's project plan to ensure project tasks and timeline are reasonable and deliverables are accurate;
3. Vendor's test and acceptance plans to ensure that the vendor's system components are tested to meet all requirements outlined in the contract.

#### B. Task 2: Design Reviews

In parallel to negotiations, and continuing through system implementation, Consultant shall provide support to the Authority to ensure that Vendor's proposed system design not only meets the Authority's coverage and capacity requirements, but is feasible. Consultant shall also review vendor designs to ensure that they maximize the efficient use of existing infrastructure, at minimum meeting the Authority's in-kind match requirements.

Consultant shall perform a thorough analysis of the Vendor's proposed LA-SafetyNet system design to verify that the proposed design is achievable and that the design can be implemented within the required timeframe and budget. This includes the requirements for each engineering functional area for the project including but not limited to:

- a. IP Engineering
- b. Core Network Engineering (including backhaul)
- c. Application Engineering
- d. RF Engineering
- e. Civil Engineering
- f. Electrical Engineering
- g. Site Feasibility

Consultant shall perform an initial design review, as described above, to provide broadband expertise and engineering support to the Authority's negotiations team. Consultant shall perform a thorough review of the Vendor's first post-contract final design. Consultant shall perform ongoing design reviews resulting from any approved or proposed change orders during system implementation.

#### C. Task 3: Implementation and Deployment Reviews

After the Authority executes a contract with the selected system vendor, Consultant shall provide support to adherence to project goals and overall quality assurance through ongoing review and analysis of project implementation and deployment stages. This includes but is not limited to:

1. Design plan reviews in a timely manner to ensure that the vendor continues to make progress towards the schedule and identify unrealistic design assumptions;
2. Project plan reviews to ensure that the appropriate tasks are undertaken to achieve project success;
3. Change order request management process whereby all changes are documented, evaluated by Contractor, and agreed to by the Authority resulting from Consultant's evaluation of change order request;
4. Quality assurance reviews and inspections;
5. Vendor's specifications reviews to ensure that vendor is compliant with contract requirements and 3GPP standards;
6. System and acceptance testing that supplements vendor contractual testing;
7. System integration plan and execution reviews to fully understand the interface between the systems and its impact to ongoing operations. Consultant shall also provide analysis on a cut over plan and identify all tests required to ensure two systems will operate successfully together;
8. Final acceptance testing review to ensure that all contractual requirements have been met. Final acceptance would ensure that the delivered system meets the quality and functional requirements as specified in the LA-RICS system contract.

#### D. Task 4: Regulatory and Standards Requirement Support

Contacting shall actively monitor and, upon Authority approval, participate in and contribute to key government and broadband wireless organizations that will affect and advance the LA-SafetyNet broadband wireless network. Consultant shall assess and formulate policies and standards that best support the LA-SafetyNet objectives through technical guidance and collaboration with the Authority's members, including end users, stakeholders, engineers, and executive leadership. Key government organizations include, but are not limited to:

- a. Federal Communications Commission ("FCC")
- b. Emergency Response Interoperability Center ("ERIC")
- c. National Public Safety Telecommunications Council Broadband Task Force ("NPSTC")

- d. Public Safety Communications Research (“PSCR”) Organization
- e. Public Safety Spectrum Trust (PSST)/Public Safety Broadband Licensee (PSBL)
- f. Others as directed

In addition, Consultant shall monitor 3GPP standards development, recommend to the Authority new 3GPP features to ensure operational and technical benefits and cost savings, and develop strategies for influencing 3GPP to adopt features critical to LA-SafetyNet users in future releases.

**E. Task 5: Subject Matter Expert (“SME”) Support to LTE Broadband Initiatives and Activities Support**

In addition to the tasks specified above, where required by the Authority Consultant shall provide subject matter expertise and recommendations on 700 MHz Broadband Wireless standards, including but not limited to national device requirements, incident peer-to-peer communications, high powered mobile user equipment (“Ue”) to extend eNodeB coverage area, Ue device types and features, and 4G to 3G roaming and all related policy and regulatory matters in regards to the application of LTE technology to public safety.

Consultant shall provide key broadband technical advice to support the Authority in ongoing communication with the public and the LA-RICS user community to ensure that all stakeholders are properly informed about the progress of the LA-SafetyNet project.

Consultant shall provide other tasks and services within the functional areas identified in Task 2 as directed by LA-RICS staff.

**III. DELIVERABLES**

The following deliverables represent the expected scope of work under this contract and the expected schedule for the work product. However, the Authority and Televate will have the ability to adjust these deliverables and schedules based on actual need and after developing an integrated plan with the chosen LTE vendor at the direction of the Authority. The deliverable schedule includes three categories of work: 1) on demand notice that Televate assistance is required to work off site or in Los Angeles for short durations; 2) prior, pre-scheduled notification, where Televate is required to work off site or in Los Angeles for short/long periods of time; 3) prior pre-schedule notification where Televate is required to work on-site for longer periods of time.

**Task 1: Contract Negotiations Support**

- 1. Review Vendor Proposals:
  - a. Schedule: Start immediately upon Televate contract execution and continue support throughout the LA-RICS vendor contract negotiations and final award.

- b. Deliverables: Various vendor technical and pricing proposal and contract document analysis, assessment, and opinion reports and presentations. Participation in internal strategy meetings and with vendors as appropriate.
- 2. Review LA-RICS win themes:
  - a. Schedule: Start immediately upon Televate contract execution and continue support throughout the LA-RICS vendor contract negotiations and final award.
  - b. Deliverables: Collaborate with LA-SafetyNet project team members and provide written and verbal communications, reports and presentation as required.
- 3. Develop LA-RICS negotiations strategy:
  - a. Schedule: Start immediately upon Televate contract execution and continue support throughout the LA-RICS vendor contract negotiations and final award.
  - b. Deliverables: Collaborate with LA-SafetyNet project team members and provide written and verbal communications, reports and presentation as required.
- 4. Develop detailed price analysis
  - a. Schedule: Within two weeks of receipt of pricing.
  - b. Deliverable: Price analysis of items with comparisons against off-the-shelf and alternative LA-SafetyNet bidder comparable equipment.
- 5. Developed detailed analysis and recommendations regarding:
  - a. Operation and Maintenance (“O&M”) Strategy: Review vendor operational proposal details and associated pricing and conduct industry research as warranted to validate vendor proposal. Propose alternative O&M structure options for select or comprehensive aspects of the network for the LA-SafetyNet based on LA-RICS requirements
    - 1. Schedule: Timeline for completing this effort based on the maximum allowable time to complete to support LA-RICS contract negotiations requirements.
    - 2. Deliverable: Develop a position paper/presentation based on our findings and recommendations and be available in person or via conference bridge to convey information and be responsive to the Authority’s inquiries for information
  - b. Project Plan Review: Study and analyze the LA-SafetyNet vendor’s project plan and assess validity of the plan and provide recommendations where appropriate to highlight issues and/or opportunities to optimize the plan.
    - 1. Schedule: Timeline for completing this effort based on the maximum allowable time to complete to support LA-RICS contract negotiations requirements.
    - 2. Deliverable: Develop a position paper/presentation based on our findings and recommendations and be available in person or via conference bridge to convey information and be responsive to the Authority’s inquiries for information
  - c. Vendor Acceptance Plan Review: Study and analyze the LA-SafetyNet vendor’s acceptance plan and assess the validity of the plan(s) and provide recommendations where appropriate to highlight issues and/or opportunities to optimize the plan.
    - 1. Schedule: As needed and directed by the Authority
    - 2. Deliverable: Develop a position paper/presentation based on our findings and recommendations and be available in person or via conference bridge to convey information and be responsive to the Authority’s inquiries for information

6. Risk Register:
  - a. Schedule: monthly (day of month to occur with monthly project review timetable)
  - b. Deliverable: A risk register depicting major project risks, their potential impact, and the plan to mitigate those risks.
7. Other (Proposed): Design Review Package Requirements:
  - a. Schedule: The schedule can be accelerated if the vendor provides detailed requirements and sample packages for review.
    1. Wave 1: By May 1, 2011
    2. Wave 2: By June 1, 2011
    3. Wave 3: By July 1, 2011
  - b. Deliverable: A set of requirements for each agreed upon set of design packages

Task 2: Design Reviews: Televate presumes that Design Review will occur over several waves. The following would be the schedule for those waves, however, it would be a function of the vendor work plan.

1. Wave 1: High Level Network Design:
  1. Schedule: Anticipate completion of the reviews within three weeks of receipt of the design package.
  2. Deliverable/Scope: It is anticipated that this package would include the initial design that demonstrates meeting the contract requirements (including matching asset use). The initial design package would include sufficient information for the Authority to “approve” of a constellation of sites in the overall design. The initial design package would include a backhaul engineering plan, RF engineering plan, basic facilities construction plan (including sufficient information to determine the feasibility to build each site). It is preferable to receive these packages in zones (beginning with LA City). The deliverable would be a detailed analysis of the high level design for each zone. Meetings with LA-RICS Authority staff will be conducted to determine the appropriate response to the vendor and assist in preparing the response by the following week.
2. Wave 2: Site Packages:
  1. Schedule: The complete review of each cluster will be completed within two weeks with the same deliverables as in Wave 1 and the same proposed process
  2. Deliverable/Scope: It is anticipated that site packages will come in clusters of sites. The preference would be that these design packages include all required detailed information to fully evaluate the site and the design from RF engineering, backhaul engineering, structural engineering, electrical engineering. It is preferable to review these site packages in clusters of 10 or more sites. The final deliverable for each site package will be recommendations regarding the proposed design (approve, reject, and issues or cause for rejection with the package)
3. Wave 3: EPC and IP Engineering and Application Integration Design:
  1. Schedule: This wave can be conducted in parallel with Wave 2. The review of the proposed design is expected to take three to four weeks with a deliverable and timetable schedule otherwise equivalent to Wave 1.
  2. Deliverable/Scope: This work will include a full analysis of the LTE packet core design and system configuration. It will also include an analysis of the IP engineering (routing, MPLS, addressing) as well as the security plan from the vendor and the proposed plan to integrate required applications. This would also include a design review (with regional IT staff) of any desired integration with existing applications.

### Task 3: Implementation and Deployment Reviews

1. Design Plan Reviews: See task 2 above.
2. Project Plan Reviews:
  1. Schedule: On demand as directed by Authority. Duration depends on the scope of the plan.
  2. Deliverables: Recommendations, changes, and other input regarding project plans.
3. Change Order Management:
  1. Schedule: On demand and as directed by Authority. Duration depends on the scope of the change order.
  2. Deliverables: Recommendations, suggested changes, negotiation strategy, and other input regarding proposed change orders.
4. Quality Assurance (QA) Reviews: The quality assurance reviews are expected to include a review of the vendor's quality assurance plan, project processes, and the vendor's final product. Consultants review will note deficiencies in the plans, processes, or work products as appropriate. The timing and scope of these deliverables will vary depending on the scope of the vendor's quality assurance deliverables.
5. Vendor Specification Reviews: The Consultant will review vendor work product to ensure it meets contractual requirements, including 3GPP compliance. The deliverables include a comprehensive requirements analysis against the completed solution. The timing of these deliverables will be determined as the deliverables are turned over to the Authority as completed.
6. Acceptance Testing Review: Acceptance testing review will include review of the vendor's acceptance testing plans, witnessing acceptance tests, and review of the results of the acceptance tests. In these cases, Consultant will provide analysis of plans, tests, and results in the form of reports. In addition, the Consultant, as directed by Authority, will design, conduct, and develop reports for other acceptance tests covering other elements of the project (i.e., where the primary vendor does not have the obligation to provide such tests). The deliverables and timing of these activities will be a function of the scope and timing of the vendor's deliverables as well as the additional systems assigned to Consultant to manage testing activities.
7. Integration and Cutover Plan Review: Consultant will review and provide analysis and recommendations regarding the vendor's, the Authority's, and other third party integration and cutover plans. The deliverables for this work will include an analysis of the plans as well recommendations to minimize risks and potential downtime, if applicable.

### Task 4: Regulatory and Standards Support

1. Televate shall participate on NPSTC and PSCR working groups representing the Authority.
  - a. Schedule: As needed and depending on NPSTC and PSCR meeting and activity schedules
  - b. Deliverables: Reports to Authority and management on issues affecting LA-SafetyNet and proposed positioning. Attendance on calls and meetings to represent the Authority's position.
2. Televate shall assist Authority and staff in drafting letters, comments and/or reply to comments to orders, notices and other relevant documents published by the FCC or other agency in regards to the 700 MHz Band

- a. Schedule: On demand and as directed by the Authority.
  - b. Deliverables: Reports, comments, letters and other relevant documents as necessary.
3. Televate proposes to assist and support the Authority with ERIC duties. Deliverables and schedule shall be determined when the Authority requests such services.

**FIRST AMENDMENT TO  
AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES**

**TELEVATE, LLC**

This First Amendment to Agreement for Consulting Services (the "First Amendment") is made and entered into this \_\_\_\_ day of August, 2011 by and between the Los Angeles Regional Interoperable Communications System Authority, a California Joint Powers Authority (the "Authority") and Televate, LLC, a Commonwealth of Virginia limited liability company ("Consultant").

WITNESSETH

WHEREAS, the Authority and the Consultant entered into that certain Agreement for Consulting Services dated April 18, 2011 (the "Agreement"), wherein the Consultant agreed to provide to the Authority specialized services as set forth in the Agreement, and the Authority agreed to pay the Consultant for the performance of such services at the rate set forth therein;

WHEREAS, the Authority and the Consultant desire to amend the Agreement under this First Amendment to provide for design review services throughout the entire scope of the project, including the preparation of a Request for Proposals through system implementation.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Authority and the Consultant agree to amend the Agreement as follows:

1. Exhibit A (Statement of Work) to the Agreement is hereby deleted in its entirety and is replaced by a new Exhibit A (Statement of Work), a true and correct copy of which is attached to this First Amendment.
2. Except as modified under this First Amendment, all terms and conditions of the Agreement shall remain unchanged and in full force and effect.
3. This First Amendment may be executed in one or more counterparts, each of which will be deemed as an original.

IN WITNESS WHEREOF, the Authority has executed this First Amendment, or caused it to be duly executed and the Consultant has executed this First Amendment the day and year first above written.

LOS ANGELES REGIONAL  
INTEROPERABLE COMMUNICATIONS  
SYSTEM AUTHORITY

CONSULTANT  
TELEVATE, LLC

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Patrick J. Mallon  
Executive Director

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A. Richard Burke  
Managing Partner

DRAFT

AGENDA ITEM 1 – ATTACHMENT B

## Exhibit A Amended Statement of Work

Consultant shall provide the following professional services in accordance with this Exhibit A. This Statement of Work, and all tasks and deliverables herein, are limited to Long Term Evolution (“LTE”) only, and do not include any tasks or deliverables for Land Mobile Radio (LMR).

### I. BACKGROUND

The Department of Commerce’s National Telecommunications and Information Administration (NTIA) awarded the Los Angeles Regional Interoperable Communication System Authority (the “Authority”) a Comprehensive Community Infrastructure Broadband Technology Opportunity Program (“BTOP”) grant in the amount of \$154,640,000. BTOP funds were awarded to the Authority to develop and deploy LA-SafetyNet, a 700 MHz public safety mobile broadband network across all of Los Angeles County, featuring almost 300 wireless 700 MHz public safety broadband sites using new and existing infrastructure, fixed microwave backhaul rings, and 100-miles of high-capacity fiber backbone. The Federal Communications Commission (“FCC”) has required public safety broadband networks to adopt ~~Long Term Evolution (“LTE”)~~ technology. This network will enable computer-aided dispatch, rapid law-enforcement queries, real-time video streaming, medical telemetry and patient tracking, geographic information systems services for first responders, and many other broadband-specific applications.

The Authority will implement LA-SafetyNet as a major component of LA-RICS, which will incorporate both voice and data communications systems. LA-RICS will be designed and built under a contract (“Contract”) with a vendor (“Vendor”). ~~The Authority has concluded its evaluation of vendor proposal documents (“Proposal”) that responded to the original RFP, issued on April 5, 2010, and to the broadband mobile data system addendum, issued October 26, 2010.~~

To address the technical requirements necessary for implementing this new technology, Consultant shall provide expertise in LTE technology and the use of mobile broadband technology for public safety use. Consultant may provide support via phone, e-mail, conference call, online meeting, or other electronic means. The Authority, at its discretion, shall require Consultant to attend in-person project meetings or other on-site work as required.

### II. SCOPE OF WORK

#### A. Task 1: Request for Proposal Subject Matter Expert Support

Consultant shall provide support to the Authority in its development of a Request for Proposals as well as broadband expertise and support to the Authority’s procurement team.

#### A.B. Task 2: Proposal Evaluation and Contract Negotiations Support

Consultant shall confer with Authority staff to identify, discuss, and refine the Authority's core objectives for the LA-SafetyNet project. Consultant shall then support the Authority during proposal evaluations and contract negotiations to ensure that these objectives are furthered by the final system contract. Consultant shall thoroughly review and analyze all documentation in connection to LA-SafetyNet project, the LA-RICS system Request for Proposals, vendor proposal, and the Vendor's proposed contract language and identify any risk areas that may prevent project success. Identified risks must be presented to the Authority's staff with a recommended negotiation strategy to mitigate that particular risk. Consultant shall also provide a comprehensive vendor price proposal analysis, including a market analysis for off the shelf components and other LA-RICS available competitor proposals, and a maintenance & operations cost analysis, with recommended strategies for cost containment overall.

To mitigate and manage risks to the Authority's core project objectives, Consultant shall also manage risk through a risk register document that tracks contract risks, their impacts, and recommended mitigation strategies. In addition, Consultant shall review contract payment plan and overall finance strategy and provide recommendation on how to maintain the long-term viability of the network.

Consultant shall also provide detailed analysis and recommendations on negotiated outcomes that best meet the Authority's core objectives on the following:

1. Vendor's operation and maintenance strategy to ensure LA-SafetyNet is operating optimally;
2. Vendor's project plan to ensure project tasks and timeline are reasonable and deliverables are accurate;
3. Vendor's test and acceptance plans to ensure that the vendor's system components are tested to meet all requirements outlined in the contract.

#### B-C. Task 23: Design Reviews

In parallel to negotiations, and continuing through system implementation, Consultant shall provide support to the Authority to ensure that Vendor's proposed system design not only meets the Authority's coverage and capacity requirements, but is feasible. Consultant shall also review vendor designs to ensure that they maximize the efficient use of existing infrastructure, at minimum meeting the Authority's in-kind match requirements.

Consultant shall perform a thorough analysis of the Vendor's proposed LA-SafetyNet system design to verify that the proposed design is achievable and that the design can be implemented within the required timeframe and budget. This includes the requirements for each engineering functional area for the project including but not limited to:

- a. Internet Protocol (IP) Architecture Engineering
- b. Core Network Engineering (including backhaul)
- c. Applications Engineering
- d. Radio Coverage RF Engineering
- e. System Capacity Civil Engineering
- f. Electrical Engineering Installation Requirements
- ~~g. Site Feasibility~~

Consultant shall perform an initial design review, as described above, to provide broadband expertise and engineering support to the Authority's procurement and negotiations team. Consultant shall perform a thorough review of the Vendor's first post-contract final design. Consultant shall perform ongoing design reviews resulting from any approved or proposed change orders during system implementation.

~~C.D.~~ Task 34: Implementation and Deployment Reviews

After the Authority executes a contract with the selected system vendor, Consultant shall provide support to adherence to project goals and overall quality assurance through ongoing review and analysis of project implementation and deployment stages. This includes but is not limited to:

1. Design plan reviews in a timely manner to ensure that the vendor continues to make progress towards the schedule and identify unrealistic design assumptions;
2. Project plan reviews to ensure that the appropriate tasks are undertaken to achieve project success;
3. Change order request management process whereby all changes are documented, evaluated by Contractor, and agreed to by the Authority resulting from Consultant's evaluation of change order request;
4. Quality assurance reviews and inspections;
5. Vendor's specifications reviews to ensure that vendor is compliant with contract requirements and 3GPP standards;
6. System and acceptance testing that supplements vendor contractual testing;
7. System integration plan and execution reviews to fully understand the interface between the systems and its impact to ongoing operations. Consultant shall also provide analysis on a cut over plan and identify all tests required to ensure two systems will operate successfully together;
8. Final acceptance testing review to ensure that all contractual requirements have been met. Final acceptance would ensure that the delivered system meets the quality and functional requirements as specified in the LA-RICS system contract.

~~D.E.~~ Task 45: Regulatory and Standards Requirement Support

Contactors shall actively monitor and, upon Authority approval, participate in and contribute to key government and broadband wireless organizations that will affect and advance the LA-SafetyNet broadband wireless network. Consultant shall assess and formulate policies and standards that best support the LA-SafetyNet objectives through technical guidance and collaboration with the Authority's members, including end users, stakeholders, engineers, and executive leadership. Key government organizations include, but are not limited to:

- a. Federal Communications Commission ("FCC")
- b. Emergency Response Interoperability Center ("ERIC")
- c. National Public Safety Telecommunications Council Broadband Task Force ("NPSTC")
- d. Public Safety Communications Research ("PSCR") Organization
- e. Public Safety Spectrum Trust (PSST)/Public Safety Broadband Licensee (PSBL)
- f. Others as directed

In addition, Consultant shall monitor 3GPP standards development, recommend to the Authority new 3GPP features to ensure operational and technical benefits and cost savings, and develop strategies for influencing 3GPP to adopt features critical to LA-SafetyNet users in future releases.

E.F. Task 56: Subject Matter Expert ("SME") Support to LTE Broadband Initiatives and Activities Support

In addition to the tasks specified above, where required by the Authority Consultant shall provide subject matter expertise and recommendations on 700 MHz Broadband Wireless standards, including but not limited to national device requirements, incident peer-to-peer communications, high powered mobile user equipment ("Ue") to extend eNodeB coverage area, Ue device types and features, and 4G to 3G roaming and all related policy and regulatory matters in regards to the application of LTE technology to public safety.

Consultant shall provide key broadband technical advice to support the Authority in ongoing communication with the public and the LA-RICS user community to ensure that all stakeholders are properly informed about the progress of the LA-SafetyNet project.

Consultant shall provide other tasks and services within the functional areas identified in Task 2 1 as directed by LA-RICS staff.

### **III. DELIVERABLES**

The following deliverables represent the expected scope of work under this contract and the expected schedule for the work product. However, the Authority and Televate will have the ability to adjust these deliverables and schedules based on actual need and after developing an

integrated plan with the chosen LTE vendor at the direction of the Authority. The deliverable schedule includes three categories of work: 1) on demand notice that Televate assistance is required to work off site or in Los Angeles for short durations; 2) prior, pre-scheduled notification, where Televate is required to work off site or in Los Angeles for short/long periods of time; 3) prior pre-schedule notification where Televate is required to work on-site for longer periods of time.

#### Task 1: Request for Proposals Subject Matter Expert Support

##### 1. Review Draft Development of Request for Proposal:

a. Schedule: Start immediately upon draft completion and continue support throughout the issuance of the RFP.

b. Deliverables: Analysis and comment on draft RFP.

#### Task 2: Proposal Evaluation and Contract Negotiations Support

##### 1.2. Review Vendor Proposals:

a. Schedule: Start immediately receipt of vendor proposals and continue support throughout the vendor evaluation, contract negotiations and final award. upon Televate contract execution and continue support throughout the LA-RICS vendor evaluation, contract negotiations and final award.

b. a. Deliverables: Various vendor technical and pricing proposal and contract document analysis, assessment, and opinion reports and presentations. Participation in internal strategy meetings and with vendors as appropriate.

##### 2.3. Review LA-RICS win themes:

a. Schedule: Start immediately upon Televate contract execution and continue support throughout the LA-RICS vendor evaluation, contract negotiations and final award.

b. Deliverables: Collaborate with LA-SafetyNet project team members and provide written and verbal communications, reports and presentation as required.

##### 3.4. Develop LA-RICS negotiations strategy:

a. Schedule: Start immediately upon Televate contract execution and continue support throughout the LA-RICS vendor evaluation, contract negotiations and final award.

b. Deliverables: Collaborate with LA-SafetyNet project team members and provide written and verbal communications, reports and presentation as required.

##### 4.5. Develop detailed price analysis

a. Schedule: Within two weeks of receipt of proposed pricing.

b. Deliverable: Price analysis of items with comparisons against off-the-shelf and alternative LA-SafetyNet bidder comparable equipment.

##### 5.6. Developed detailed analysis and recommendations regarding:

a. Operation and Maintenance (“O&M”) Strategy: Review vendor operational proposal details and associated pricing and conduct industry research as warranted to validate vendor proposal. Propose alternative O&M structure options for select or comprehensive aspects of the network for the LA-SafetyNet based on LA-RICS requirements

1. Schedule: Timeline for completing this effort based on the maximum allowable time to complete to support LA-RICS contract negotiations requirements.
2. Deliverable: Develop a position paper/presentation based on our findings and recommendations and be available in person or via conference bridge to convey information and be responsive to the Authority's inquiries for information
- b. Project Plan Review: Study and analyze the LA-SafetyNet vendor's project plan and assess validity of the plan and provide recommendations where appropriate to highlight issues and/or opportunities to optimize the plan.
  1. Schedule: Timeline for completing this effort based on the maximum allowable time to complete to support LA-RICS contract negotiations requirements.
  2. Deliverable: Develop a position paper/presentation based on our findings and recommendations and be available in person or via conference bridge to convey information and be responsive to the Authority's inquiries for information
- c. Vendor Acceptance Plan Review: Study and analyze the LA-SafetyNet vendor's acceptance plan and assess the validity of the plan(s) and provide recommendations where appropriate to highlight issues and/or opportunities to optimize the plan.
  1. Schedule: As needed and directed by the Authority
  2. Deliverable: Develop a position paper/presentation based on our findings and recommendations and be available in person or via conference bridge to convey information and be responsive to the Authority's inquiries for information

~~6.7.~~ Risk Register:

- a. Schedule: monthly (day of month to occur with monthly project review timetable)
- b. Deliverable: A risk register depicting major project risks, their potential impact, and the plan to mitigate those risks.

~~7.8.~~ Other (Proposed): Design Review Package Requirements:

- a. Schedule: The schedule can be accelerated if the vendor provides detailed requirements and sample packages for review.

~~1. Wave 1: By May 1, 2011~~

~~2. Wave 2: By June 1, 2011~~

~~3. Wave 3: By July 1, 2011~~

- b. Deliverable: A set of requirements for each agreed upon set of design packages

Task 23: Design Reviews: Televate presumes that Design Review will occur over several waves. The following would be the schedule for those waves, however, it would be a function of the vendor work plan.

1. Wave 1: High Level Network Design:

1. Schedule: Anticipate completion of the reviews within three weeks of receipt of the design package.
2. Deliverable/Scope: It is anticipated that this package would include the initial design that demonstrates meeting the contract requirements (including matching

asset use). The initial design package would include sufficient information for the Authority to “approve” of a constellation of sites in the overall design. The initial design package would include a backhaul ~~engineering capacity~~ plan, RF ~~engineering coverage~~ plan, ~~proposed site locations and configuration~~ ~~basic facilities construction plan (including sufficient information to determine the feasibility to build each site)~~. It is preferable to receive these packages in zones (beginning with LA City). The deliverable would be a detailed analysis of the high level design for each zone. Meetings with LA-RICS Authority staff will be conducted to determine the appropriate response to the vendor and assist in preparing the response by the following week.

2. Wave 2: Site Packages:

1. Schedule: The complete review of each cluster will be completed within two weeks with the same deliverables as in Wave 1 and the same proposed process

2. Deliverable/Scope: It is anticipated that site packages will come in clusters of sites. The preference would be that these design packages include all required detailed information to fully evaluate the site and the design ~~requirements from RF engineering, backhaul engineering, structural engineering, electrical engineering~~. It is preferable to review these site packages in clusters of 10 or more sites. The final deliverable for each site package will be recommendations regarding the proposed design (approve, reject, and issues or cause for rejection with the package)

3. Wave 3: ~~EPC, and IP Engineering~~ and Application Integration Design:

1. Schedule: This wave can be conducted in parallel with Wave 2. The review of the proposed design is expected to take three to four weeks with a deliverable and timetable schedule otherwise equivalent to Wave 1.

2. Deliverable/Scope: This work will include a full analysis of the LTE packet core design and system configuration. It will also include an analysis of the IP ~~engineering design and configuration~~ (routing, MPLS, addressing) as well as the security plan from the vendor and the proposed plan to integrate required applications. This would also include a design review (with regional IT staff) of any desired integration with existing applications.

Task 34: Implementation and Deployment Reviews

1. Design Plan Reviews: See task 2 above.

2. Project Plan Reviews:

1. Schedule: On demand as directed by Authority. Duration depends on the scope of the plan.

2. Deliverables: Recommendations, changes, and other input regarding project plans.

3. Change Order Management:

1. Schedule: On demand and as directed by Authority. Duration depends on the scope of the change order.

2. Deliverables: Recommendations, suggested changes, negotiation strategy, and other input regarding proposed change orders.

4. Quality Assurance (QA) Reviews: The quality assurance reviews are expected to include a review of the vendor’s quality assurance plan, project processes, and the vendor’s final

product. Consultants review will note deficiencies in the plans, processes, or work products as appropriate. The timing and scope of these deliverables will vary depending on the scope of the vendor's quality assurance deliverables.

5. Vendor Specification Reviews: The Consultant will review vendor work product to ensure it meets contractual requirements, including 3GPP compliance. The deliverables include a comprehensive requirements analysis against the completed solution. The timing of these deliverables will be determined as the deliverables are turned over to the Authority as completed.
6. Acceptance Testing Review: Acceptance testing review will include review of the vendor's acceptance testing plans, witnessing acceptance tests, and review of the results of the acceptance tests. In these cases, Consultant will provide analysis of plans, tests, and results in the form of reports. In addition, the Consultant, as directed by Authority, will design, conduct, and develop reports for other acceptance tests covering other elements of the project (i.e., where the primary vendor does not have the obligation to provide such tests). The deliverables and timing of these activities will be a function of the scope and timing of the vendor's deliverables as well as the additional systems assigned to Consultant to manage testing activities.
7. Integration and Cutover Plan Review: Consultant will review and provide analysis and recommendations regarding the vendor's, the Authority's, and other third party integration and cutover plans. The deliverables for this work will include an analysis of the plans as well recommendations to minimize risks and potential downtime, if applicable.

#### Task 45: Regulatory and Standards Support

1. Televate shall participate on NPSTC and PSCR working groups representing the Authority.
  - a. Schedule: As needed and depending on NPSTC and PSCR meeting and activity schedules
  - b. Deliverables: Reports to Authority and management on issues affecting LA-SafetyNet and proposed positioning. Attendance on calls and meetings to represent the Authority's position.
2. Televate shall assist Authority and staff in drafting letters, comments and/or reply to comments to orders, notices and other relevant documents published by the FCC or other agency in regards to the 700 MHz Band
  - a. Schedule: On demand and as directed by the Authority.
  - b. Deliverables: Reports, comments, letters and other relevant documents as necessary.
3. Televate proposes to assist and support the Authority with ERIC duties. Deliverables and schedule shall be determined when the Authority requests such services.