



# **FINANCE COMMITTEE**

## **SPECIAL MEETING MINUTES**

**LOS ANGELES REGIONAL  
INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY**

Thursday, February 28, 2019 • 1:30 p.m.  
Los Angeles Regional Interoperable Communications System  
Headquarters  
Large Conference Room  
2525 Corporate Place, Suite 200, Monterey Park, CA 91754

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**Finance Committee Members Present:**

**John Geiger**, County of Los Angeles Chief Executive Office  
**Bill Song**, County of Los Angeles Sheriff's Dept.  
**Karolyn (Kay) Fruhwirth**, County of Los Angeles Department of Health Services  
**Rebekka Hosken**, California Contract Cities Association  
**Marie DiBernardo**, City of Inglewood Police Department

**Alternates For Finance Committee Members Present:**

**Ric Walczak**, City of Covina Police Department  
**Leticia Rivera**, County of Los Angeles LACoFD

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**Officers Present:**

**Scott Edson**, Executive Director  
**Susy Orellana-Curtiss**, LA-RICS Administrative Deputy  
**Beatriz Cojulun**, Committee Secretary

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**Absent:**

**Doug Cline**, County of Los Angeles LACoFD  
**John Curley**, City of Covina Police Department  
**Ron Sagmit**, City of Signal Hill Police Department

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

**I. CALL TO ORDER**

Chair John Geiger called the Regular Meeting of the Finance Committee to order at 1:31 p.m.

**II. ANNOUNCE QUORUM – Roll Call**

Committee Secretary, Beatriz Cojulun performed a roll call and acknowledged the presence of quorum.

**III. APPROVAL OF MINUTES (A)**

**A. December 20, 2018 – Regular Meeting Minutes**

Chair Geiger read in the minutes for December 20, 2018, and asked if there were any changes or corrections. With the absence of any objections, Chair Geiger deemed the meeting minutes approved.

**MOTION APPROVED.**

**B. January 24, 2019 – Special Meeting Minutes**

Chair Geiger read in the minutes for January 24, 2019, and asked if there were any changes or corrections. With the absence of any objections, Chair Geiger deemed the meeting minutes approved.

**MOTION APPROVED.**

**IV. PUBLIC COMMENTS – (None)**

**V. CONSENT CALENDAR – (None)**

**VI. REPORTS (C-D)**

**(CHAIR GEIGER RECOMMENDED DISCUSSION ITEMS C AND D BE TAKEN OUT-OF-ORDER AND PROCEEDED WITH ADDRESSING DISCUSSION ITEM E AHEAD OF DISCUSSION ITEMS)**

**C. LONG TERM EVOLUTION (LTE) UPDATE – Jacobs Project Director, Christopher Odenthal**



Jacobs Project Director, Christopher Odenthal shared updates on Public Safety Broadband Network (PSBN)/ LTE Round 2.

- LA-RICS is currently reviewing its internal schedule for Site Access Agreement/Lease Agreement options are scheduled accordingly.
- The Department of Public Works (DPW) will take lead of the prequalification process seeking out site builders. Motorola Solutions, Inc. (Motorola) will not participate in this process, since they will be building/ implementing the forest sites. DPW will also be facilitating bids for all of the other sites.
- Site design/design review is progressing. Mark Revis, PSBN Manager, is taking lead and working alongside AT&T Corp. (AT&T) currently addressing any question, if any; in an effort attain approval of site designs and avoiding future delays.
- The Site Acceptance Check List is being finalized to ensure LA-RICS and AT&T are building to the same scope and expectation.
- Site Updates: Currently there are no site building permits; and since there were no sites requiring clearance via a Finding of No Significant Impact (FONSI), LA-RICS was unable to process Notice to Proceed (NTP) or move forward beyond the Design Phase.
- The National Telecommunication and Information Administration (NTIA) is once again operational and with no foreseeable shutdown, LA-RICS hopes not to experience any further interruptions in any future environmental clearances and/or release of funds.

Televate Technical Lead, Eileen Healy, reported to the Committee that LA-RICS received an AT&T Authorization Letter allowing LA-RICS the use of Band 14, which are for cell sites that trunk the Cell on Light Trucks (COLTS). LA-RICS will provide further updates as it moves forward and continues with the purchase of the County of Los Angeles (County) COLTS.

There were no questions at the conclusion of the report.

**D. LAND MOBILE RADIO (LMR) UPDATE** – Jacobs Project Director, Christopher Odenthal

Project Director Odenthal provided an overall LMR update:

- The site permit for Industry Water Tanks (INDWT), located near the 57 freeway, was just received and will begin construction within the next week along with Agoura Hills (AGH). Both sites have little to no commercial cell phone or public safety coverage. For this reason, both sites were targeted for quite some time in an effort to boost area coverage.
- Urban Area Security Initiative (UASI) '16 - is closing out.



- UASI '17 - INDWT and AGH, as well as other sites are well under way. Completed construction at Oat Mountain (OAT), which is a Chatsworth microwave pass-through.

### Capacity

Project Director Odenthal addressed one (1) of the most frequently asked questions from users is if there will be enough capacity for all the potential users. At this time, Project Director Odenthal introduced Lead Motorola Engineer, Micah Schirmer, who is the LA-RICS Network Architect design builder. Project Director Odenthal also introduced LA-RICS LMR Systems Manager, Steven Page, is currently serving as the Motorola and LA-RICS interface. Both managers and LA-RICS technical staff collaborated and prepared the LMR Site/System Design PowerPoint Presentation (PPT). Project Director Odenthal reference four of the slides reflecting a breakdown of the Four LMR Sub-systems showing the individual sub-system layers and described how that is unique to LA-RICS.

Executive Director Edson stated that LA-RICS is the only system capable of providing not only all the various types of spectrum for public agencies to choose from but also a system that can automatically choose the best control channel, best reception, best transmission, and band for its users.

Project Director Odenthal iterated that the system, unlike all other systems, talks to a single core. This allows, for example, dispatchers to move users on a 800 MHz analog conventional System and patch them to a 700 MHz digital trunk talk group.

Project Director Odenthal referenced the DTVRS 700 MHz System slide from his presentation, noting that the LA Basin includes the San Fernando Valley in it (from South of the 210 to the coast), which has a higher coverage requirement than the Santa Monica Mountains (not included) for greater signal strength, better building penetration and ground coverage. That is at 95% of reliability over 97% of the region in that zone. The LA-RICS coverage level with 57 sites far, with a substantially better coverage footprint, exceeds what LASD has today (approximately 26-27).

Project Director Odenthal reference the DTVRS UHF (Channel 15, 46 sites) requires fewer sites in order to get the same level of coverage as the 700 MHz layer.

Project Director Odenthal stated the UHF trunked system performs better in the Angeles National Forest because of terrain than the 700 MHz system. Pine Mountain (PMT), a solar site, is located in an area with no reception above Duarte/Glendora, and satisfies a critical need. Power requirements for solar restricted 700 MHz at PMT; however, analog conventional, VHF (fire ground activity site), and UHF/T-Band were



chosen to be installed at that site, increasing coverage percentages in the Angeles National Forest.

Project Director Odenthal pointed out that there are 89 unique DTVRS 700 MHz channels, which uses Time Division Multiple Access (TDMA) technology that means every 12.5 KHz channel essentially counts as two because the channels can be split into 6025 KHz. On the other hand, UHF was not designed to use TDMA technology and although it capable but UHF was scoped, from a capacity standpoint, to only use one channel. There are 178 talk paths on 700 MHz and 192 on T-Band.

Project Director presented the Loading Analysis and Assumptions slide and asked Mr. Schirmer to indicate how LA-RICS designed the call type in order to represent different use applications. For example, the fire department, law enforcement, and Emergency Medical Services (EMS) all have different radio usage requirements and the following factors influence their respective requirements such as call length, call frequency, location of call, and same area multiple call frequency.

Mr. Schirmer stated that information was retrieved from databases of Southern California local systems, as well as from documents received during the RFP phases of the project.

Project Director Odenthal said the source of those documents are from when the former Joint Powers Authority (JPA) existed, which included LACoFD, LASD, the City of Los Angeles Police and Fire Departments, Glendale, Burbank, Long Beach, and Pasadena. Information compiled from these agencies such as what a fire call looks like, how many fire users, how many are expected help illustrate how capacity/system actually performs. LA-RICS is able to see the balance of frequencies and its use. For example, the Downtown Los Angeles area has a far greater concentration of users, therefore when an emergency arises; there is a need for much higher capacity than in a non-metropolitan area.

Project Director Odenthal explained that LA-RICS expects 40,000 users on the system; and 20,000 of them being on the system at any given time. Realistically, very rarely would all of LASD be on their network at the same time. If LA-RICS allows 20,000 users onto the system, the system could take it just on the one 700 MHz layer.

Project Director Odenthal stated the UHF layer could take another 10,000 or 11,000 users on top of that. At any given time, 30,000 plus users can operate on the system and is able to indicate and predict an incoming influx of users. The influx range can vary based on the emergency 100% of the time, and if need be another 1,000 can be added.



Project Director Odenthal said that the Base system is expecting to have 35,000 users on it at any given time and it will still maintain a grade of service of 1%. This means that there can be approximately a 2.5 seconds meantime delay and be placed in the queue, which equals to 1%, indicating that it is available 99% of the time within that period. He also said that users would not be placed in the queue 99% of the time.

Project Director Odenthal referenced the Loading Analysis by Discipline slide and asked Mr. Schirmer, LMR Systems Manager Page, and Mark Revis to speak on the matter.

LMR Systems Manager Page reiterated the target of greater of service of 1% equals the maximum delay of 2.5 seconds, and that is the worst case scenario under the maximum loading.

LMR Systems Manager Page referenced the Loading Analysis Results slide. He addressed the scenario with 146,945 generated calls. He indicated that there is an expectation of a system-wide mean of less than 2.4 seconds, which falls at the contract target of 2.5. The way to build a system is by taking the number of prospective users, number of channels, and dividing them out based on the number of calls per hour, duration of calls, time of incoming calls, how often users key their radio upward, and the changing of channels (32.5 full channels will be used at all times). The numbers add up and based on what other systems deliver, LA-RICS system does not get busy at all. This is an extremely conservative calculation; LA-RICS system does not expect to see busy signals at all. Every time a fire fighter or officer keys a radio, they are going to get through first time and every time.

Mr. Shirmir stated the analysis was done at the busiest peak hour available, plus with an event happening at that time, and at multiple spontaneous events. LMR Systems Manager Page also added for example having the Rose Bowl going on, the end of the Rose Parade, Super Bowl preparations, and plus an earthquake all at the same time. The expectation is less than 2.5 seconds delay with all of the simultaneous ongoing events.

Project Director Odenthal concluded by stating there are 35,000 users expected, designed for being on the system simultaneously, and that is just on the trunk side. He said that does not have anything to do with LACoFD or any of the other fire agencies, or LASD who will be using analog conventional pieces for tactical communications or Immediately Dangerous to Live or Health (IDLH) environments. They do not even factor into that number.

There were no questions at the conclusion of the report.

## VII. DISCUSSION ITEMS – (E)

### **(CHAIR GEIGER RECOMMENDED DISCUSSION ITEMS C AND D BE TAKEN OUT-OF-ORDER WHILE PRESENTATION FOR LTE AND LMR UPDATES CAME ONLINE)**

#### E. Finance Ad-Hoc Committee Reporting

Administrative Deputy Susy Orellana-Curtiss asked the Committee to reference their folder packet containing a draft report from the Ad-Hoc Committee, which essentially summarized some of the discussions in the Finance Committee, Ad-Hoc meetings, and email communications.

Administrative Deputy Orellana-Curtiss began by summarizing some of the main topics captured in the Draft Report by recapping the history of the current adopted funding plan, with established costs factors based on population at 50% and geography at 50%. She reminded the Committee these factors were found problematic by members as they were unable to appropriately budget for their share of the costs due to uncertainties tied to the member fluctuations. This was one of the main reasons cited when members opted out of LA-RICS. Current feedback indicates the preference for fair price for a strong interoperable system would attract agencies to subscribe to the system.

Administrative Deputy Orellana-Curtiss summarized previous discussions from the December 2018 Finance Committee meeting regarding the make-up of the baseline costs that are included in the draft plan, which include estimates for administrative, operations and maintenance and lifecycle costs. The section titled LMR Baseline Costs in the draft report includes a detailed summary of the \$11.5 million dollar costs. The table includes two scenarios with the Lifecycle annualized over 10 years and 15 years. We included both a 10-year lifecycle and a 15-year lifecycle as we considered various subscription rate scenarios. The estimated costs, spread over 10 years or 15 years, would impact the number of subscribers LA-RICS needs to bring into the system at go-live to fully offset the LMR baseline costs which will be addressed in a later section.

Administrative Deputy Orellana-Curtiss went on to say that currently, operations and contracts staff are looking into whether or not the existing Administrative, O&M, and the Lifecycle Costs accurately reflect these costs corresponding to the System as designed today. Staff is preparing this information for inclusion in the final report. Administrative Deputy Orellana-Curtiss stated for the purpose of rate setting discussion, LA-RICS has included some baseline costs such as Motorola's proposed price for the O&M of the System for 15 years following the 1-year Warranty Period, as included in their original LMR contract proposal.

Administrative Deputy Orellana-Curtiss raised prior discussions held by both Finance Committee as well as the Joint Operations and Technology Committees, as well as discussions at Board level, regarding the treatment of cache radios and the definition of an active radio versus a radio that is in cache. The Joint Technical and Operations Committee is reviewing how other agencies' interoperable communication systems, at the local and state and nationwide-level, treat "cache radios" and any possible impacts on rate setting or the number of radios expected to be on the system at go-live. The Joint Committee will provide a report regarding the treatment of these cache radios at their March 19, 2019, meeting. The Authority will update the section of the report to reflect the Joint Committees' report if the Joint Committees makes a recommendation, takes action, or brings forth a discussion item at the March 19 meeting.

Administrative Deputy Orellana-Curtiss addressed another topic that has come up at the Board and Committee levels, which is the treatment of the Contract Cities with respect to their contractual relationship with the County for police and/or fire services, and whether or not a revision to the existing funding plan would result in their double payment. Administrative Deputy Orellana-Curtiss reminded the Committee that Lieutenant Ed Winslow presented LASD's Contract Law existing contract model structure at the December 2018 Finance Committee meeting and this contract model would ensure there would be no double billing against the Contract Cities.

Administrative Deputy Orellana-Curtiss stated the subscriber onboarding timeline and radio count, which is critical to the development and finalization of the rate setting. The Authority's Operations support staff is working aggressively to provide an update and they are meeting with various agencies in the region, including members and non-members, to establish the necessary technical and operational steps required to onboard users as subscribers to LA-RICS. Price is a significant factor and discussions are ongoing.

Administrative Deputy Orellana-Curtiss summarized subscription rate scenarios discussed by the Ad-Hoc committee with initial feedback from the group indicates LA-RICS would be able to onboard approximately 22,000 to 24,000 radios on the system at Year 1 go-live based on the existing member count in combination with the prospective subscribers from LASD, LACoFD, and other County departments. These figures factor into the subscription rate scenario recommendation.

Administrative Deputy Orellana-Curtiss detailed the various rate scenarios contemplated, which included rates that contemplated an introductory rate for years 1-5. However, there was confusion as to what the price would be if an agency joined LA-RICS at year 6 or later. Would that agency be offered the introductory rate at \$18 for years 1-5 of their subscription ? The committee decided that offering a constant



baseline rate was best. Other scenarios contemplated whether to (1) LA-RICS to offer a system that included value adds at year 1 or (2) LA-RICS to offer a go-live radio system with users on the system and introduce value add at a later time.

Administrative Deputy Orellana-Curtiss went on to say that based on the positive feedback from the Ad-Hoc Committee and others, the draft report recommends Scenario 1B which provides a monthly fixed rate of \$22 per radio with no increase after 5 years. However, Scenario 1B would take the life cycle cost annualized over 10 years, as opposed to 15 years. For years 1-5, LA-RICS would require revenue to offset O&M costs and administrative costs to run the LMR System. Operationally, the system would require approximately 23,000 radios on air to fully offset the LMR baseline costs. Years 1-5 would allow enough time to bring additional users on the system over time. At year 6, lifecycle costs would be introduced, and at that time, the Authority would require approximately 44,000 radios on the system. 23,000 radios at year 6 was deemed achievable. The Authority Operations staff is looking at the subscriber onboarding timeline, among other things, to determine if 44,000 radios to fully offset LMR baseline costs is achievable at year 6.

Administrative Deputy Orellana-Curtiss discussed the possibility of a shortfall on the number of required users required to offset those LMR baseline costs and whether a guarantor is necessary for that shortfall so that LA-RICS can maintain a constant subscription rate regardless of number of radios on the system. A more clear understanding of the subscriber onboarding timeline is critical in determining potential shortfall and thus this analysis will continue.

Administrative Deputy Orellana-Curtiss mentioned that certain value add components such as Computer Aided Dispatch (CAD), Records Management System (RMS), and Push-to-Talk (PTT) have been considered as potential value-add items for the LMR system. These discussions are in parallel while LA-RICS continues rate setting discussions. The Joint Operations and Technical Committee and contracts staff are gathering pricing for the value add menu items. Once the onboarding timeline is established and Authority staff understands the projected revenue, the Authority will determine whether to consider the value add menu items as procurement items for inclusion in the Authority's service level agreements or offerings.

The Ad-Hoc Committee recommended having a policy in place or in a LA-RICS Service Level Agreement (SLA) addressing potential revenue surplus. Some revenue surplus utilization options included purchasing member user equipment such as radios or consoles, purchasing value add items, or using those reserved funds as pro rata rebate for those members that have been in. However, the Ad-Hoc Committee recommends reserving the funds and addressing use following LA-RICS system go-live, system utilization, establishing the O&M, Lifecycle, and staffing costs.



Administrative Deputy Orellana-Curtiss addressed the concern of potential degradation to the system once a certain number of radios come on the system. The Joint Technical and Operations Committee and Authority staff planned to conduct a presentation at the March 19, 2019 Meeting regarding system capacity and users the system could accommodate.

Administrative Deputy Orellana-Curtiss said the Ad-Hoc Committee will review a draft Service Level Agreement that captured many of the topics of discussion from today's meeting including subscriber engagement to present to the Finance Committee and ultimately, the Board.

Administrative Deputy Orellana-Curtiss was asked if the LA-RICS took into consideration the current number of agencies when determining if LA-RICS could reach 44,000 radios on the system as the outdated funding plan contemplated agencies that are no longer with LA-RICS such as the City of Los Angeles. Administrative Deputy Orellana-Curtiss confirmed LA-RICS could reach 44,000 radios on the system with the current 24 member agencies and the non-member agencies that have expressed interest. What needs to be determined is when these agencies would on-board users onto LA-RICS.

Committee Member Bill Song asked if the repayment of the \$20 million was inclusive. Administrative Deputy Orellana-Curtiss stated the \$20 million payback is not included. The letter Committee Members received regarding the debt collection and the instruction discussed at Committee and Ad-Hoc, is not to include repayment at this time. LA-RICS prepared a subscription rate scenario reflecting no repayment at this time.

Chair Geiger stated this was an ambitious and advised against too much focus on revenue surplus as the focus of the report was rate setting, of which the recommendation is very prudent. Chair Geiger stated once the report and recommendation go to the Board they would address what would be the best use of revenue surplus. Chair Geiger looks forward to the day we have the discussion regarding surplus. Chair Geiger commended the Ad-Hoc Committee on thinking ahead with regards to what will be included in the SLA and how those factors will impact the rate. Again, fundamentally this is an analysis on the recommended rate. The focus should be on the core of that task, and when the group is ready to go forward addressing the items that require follow up, this can be taken as a recommendation to the JPA Board.

Chair Geiger addressed the double billing the Contract Cities. The JPA can only control the rate it charges but it cannot control the pass through rate the County charges the Contract Cities. LA-RICS will charge members for their use which includes their contract obligation for their services. The County may opt to charge

nothing and absorb the cost themselves, partially charge if they pass it through, or mark-up a premium on existing rate between the County and the 3<sup>rd</sup> party recipient. What the County decides to do with billing is uniquely between them and their third party service recipient. Chair Geiger states LA-RICS can ensure there will be no double-billing.

Chair Geiger asked in addition to the discussion regarding treatment of cache radios at the Joint Technical and Operations Committee Meeting on March 19, 2019, are there any other open issues that needed resolution before returning with a final recommended report to the Finance Committee. Administrative Deputy Orellana-Curtiss stated the onboarding timeline is the most critical.

Chair Geiger stated the group seems well positioned to have these discussions further with the executive office, and once finalized you will return to Finance Committee before presenting it to the Board. In the absence of questions and comments, Chair Geiger thanked the team for presenting the draft report.

**VIII. ADMINISTRATIVE MATTERS (None)**

**VIII. MISCELLANEOUS – (None)**

**IX. CLOSED SESSION REPORT – (None)**

The Committee did not enter into Closed Session.

**X. ITEMS FOR FUTURE DISCUSSION AND/OR ACTION BY THE COMMITTEE**

**XI. ADJOURNMENT and NEXT MEETING:**

Next Finance Committee Meeting

Chair Geiger asked for the next Regular Finance Committee meeting tentatively scheduled for Thursday, March 21, 2019, be moved to Thursday, April 25, 2019, thus allowing time to meet after the Board has their April meeting.

Committee Member Karolyn (Kay) Fruhwirth motioned first to approve the change of the meeting date, seconded by Committee Member Ric Walczak.

Ayes 6: Geiger, Song, Hosken, Davenport, Hosken, and DiBernardo.

**MOTION APPROVED.**



The Finance Committee meeting adjourned at 2:23 p.m. The next meeting is a Special Meeting on Thursday, April 25, 2019, at 1:30 p.m., at the LA-RICS Headquarters, 2525 Corporate Place, Large Conference Room, Monterey Park, CA 91754.

**APPROVED  
AS AMENDED**