

June 24, 2013

Mr. Patrick Mallon
LA-RICS Executive Director
2525 Corporate Place 2nd Floor
Monterey Park, California 91754

Re: *FCC STA File No. 0331-EX-PL-2013*

Dear Mr. Mallon:

Raytheon respectfully requests that LA-RICS in conjunction with the Federal Communications Commission ("FCC") and FirstNet allow us to operate in the 700 MHz Public Safety spectrum to demonstrate and test Long Term Evolution ("LTE") equipment and devices at our Downey, California ("Downey") laboratory from August 1, 2013 to July 31, 2014. We specifically seek authority to use the 700 MHz Band 14 spectrum, 763-768/793-798 and 758-763/788-793. Thus, we seek a letter of concurrence from LA-RICS to use Band 14, as we believe the use by Raytheon will not result in any interference with your planned deployment.

Raytheon has provided specific details of the requested need for the demonstration and use of the 700 MHz Band 14 for a twelve month period in its Form 442 application for experimental radio service (other than broadcast) (FCC File No. 0331-EX-PL-2013). Our demonstration network is installed in the Raytheon Public Safety Regional Technology Center ("RTC") in Downey for use in developing LTE network capabilities and applications to demonstrate to the Los Angeles first responder community the benefits of LTE public safety broadband. In addition, the RTC is collaborating with academia via the University of California Los Angeles to ensure that our first responders are provided with an academic testing environment.

The demonstration system consists of an Alcatel Lucent ("ALU") Model 9412 Base Station ("eNodeB") that includes a stand-alone simulated evolved packet core ("ePC") and three transmit receive duplexer units ("TRDUs"). The three sector base station capability will be distributed among outdoor and indoor antennas to provide demonstration coverage internal to the RTC within a 2 km radius of the Downey RTC facility. The planned demonstrations will be performed with small low power user devices, such as the LG G14 LTE USB modem and will be limited to fewer than 30 devices. Raytheon is in negotiations with additional equipment and device manufacturers to test at the Downey RTC facility and

will update its special temporary authority ("STA") request in accordance with 47 CFR 5.77(a), as long as the equipment change "does not result in operations inconsistent with any term of the outstanding authorization."

Alcatel Lucent acquired a previous STA for operation at this site that expired on May 2, 2012. Raytheon now seeks a longer term experimental license for continued use of the Downey RTC as a laboratory that will now be multi-vendor inclusive and will provide continued testing of equipment to ensure that our first responders get an interoperable multi-vendor network. The Downey RTC demonstration system will not be used for mission-critical operations or in the delivery of live transmissions in duties to protect life, property or safety. The equipment being used will be limited to a base station with an associated antennae and a small number of portable units, as described above and in our experimental license application.

In addition, Raytheon has analyzed the Information from the FCC ULS database and it has been determined that the proposed Downey RTC demonstration network will not interfere or create a significant potential for interference with any public safety or commercial operations in the 700 MHz band, as there is no other known entity or operation of use of the spectrum that exists near the Downey location at this time. Raytheon seeks grant of use of the 700 MHz Band 14 spectrum via an experimental license for initial period of twelve months, starting August 2013, as allowed for under the FCC's rules. Should further operation be desired past the July 2014 expiration date, Raytheon will seek renewal of the experimental license and a separate concurrence from FirstNet to use the spectrum space. The undersigned has been designated as the project manager and as such, he can be contacted at any time to terminate operations should that be required by FirstNet.

Thus, we believe that it is in the best interest of public safety and the public interest as a whole to grant Raytheon's application for the experimental license; as such we seek your concurrence in a letter to the FCC.

If you have any questions regarding this communication, please contact the undersigned, by telephone at 562-803-1094, or by e-mail at ddesollar@raytheon.com.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Daniel C. De Sollar", with a stylized, flowing script.

Daniel C. De Sollar

Director,

Raytheon Public Safety Regional Technology Center