



July 19, 2010

Admiral James Arden Barnett, Jr.  
Chief, Public Safety and Homeland Security Bureau  
Federal Communications Commission  
Washington, D.C. 20554

Re: City of Charlotte, North Carolina  
700 MHz Public Safety Broadband Network- Quarterly Report  
PS Docket No. 06-229

Dear Admiral Barnett:

On behalf of the City of Charlotte, North Carolina (Charlotte), this letter submits the quarterly report required by the Commission's *May 12, 2010 Order* addressing the 700 MHz public safety broadband segment.<sup>1</sup> The *May 12, 2010 Order* granted conditional waivers to twenty-one state or local agencies for early deployment of public safety broadband networks in the 700 MHz public safety broadband spectrum. Charlotte is a waiver recipient. Paragraph 64 of the *May 12, 2010 Order* states that each waiver recipient, on a quarterly basis, must provide the Commission information addressing Planning, Funding and Deployment of the project. This information follows.

## **I. Planning**

In this section, the Commission inquires of the expected timing and issuance of a Request for Information (RFI)/Request for Proposals (RFP). An RFP was released on Friday, July 16, 2010; responses are due Wednesday, August 25, 2010.

Prior to issuance of the RFP, a detailed requirements document was prepared. This document addressed the technical and operational elements of the network and provides information relating to users and infrastructure availability. It is the source upon which vendors will prepare their individual proposals. An important underpinning of the path to an RFP is the information contained in the *Interoperability Showing* required by Paragraph 55 of the *May 12, 2010 Order*. Charlotte's *Interoperability Showing* has been submitted today to the Commission.

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<sup>1</sup> In the Matter of Requests for Waiver of Various Petitioners to Allow the Establishment of 700 MHz Interoperable Public Safety Wireless Broadband Networks, *Order*, FCC 10-79, PS Docket 06-229, Paragraph 64 (May 12, 2010).

Substantial resources were committed to prepare the *Interoperability Showing* and RFP. In presenting these documents, Charlotte consulted technology and equipment providers, other agencies, representatives of the Public Safety Spectrum Trust (PSST) and other parties. It has drawn on its own internal resources and expertise. The documents represent Charlotte's serious commitment to a broadband network embracing pervasive interoperability. As the Commission is aware, the *May 12, 2010 Order* requires, based on the information submitted, that the Emergency Response Interoperability Center (ERIC) and its technical advisors, establish the framework defining the interoperability criteria for the deployments.

Additionally, site information, number, type and location of users, capital and maintenance cost estimates, are among the other facets that were developed. These elements are discussed below and are addressed in detail in the *Interoperability Showing*

With the release of the RFP on July 16, 2010 and responses due August 25, 2010, Charlotte intends to move forward as expeditiously as possible. Evaluation and necessary review and approval by City's leadership is scheduled for October 18, 2010. We do note that the process will have to accommodate the funding circumstance and review by ERIC and Commission decisions regarding the network.

## **II. Funding**

Charlotte has submitted an application to the Broadband Technology Opportunities Program (BTOP) administered by the National Telecommunications and Information Administration (NTIA) of the Department of Commerce. As the Commission is aware, subsequent to its *May 12, 2010 Order*, NTIA recognized the value of a nationwide, interoperable public safety wireless broadband network and explicitly recognized the availability of funding under American Recovery and Reinvestment Act.

Charlotte has responded in detail to NTIA inquiries and provided additional information as part of the agency's due diligence in examining and evaluating applications. Charlotte has committed to a funding level from its own sources. It has stressed to NTIA that the project will serve as a model for municipal entities across the country and other Urban Area Security Initiative (UASI) regions in developing, deploying and managing regional multi-jurisdictional, multi-disciplinary public safety networks using 700 MHz spectrum based on LTE technology and will make a significant contribution to the region's economy. The BTOP funding is the cornerstone for deploying a wireless broadband public safety network for the Charlotte UASI region. Documents relating to the BTOP application can be made available to the Commission.

We are hopeful for a substantive decision from NTIA in the coming months yet there is no precise commitment that we will have such.

Exploring resources needs and funding sources will remain a priority. Beyond the capital investment required, estimates are being developed to determine the costs associated with maintaining the network and securing adequate funding for such. The network's funding requirements also depend on the yet defined technical and operational requirements that will be established by the Commission.

### III. Deployment

Charlotte's *Interoperability Showing* also addresses deploying the network. The implementation plan encompasses several technical undertakings directly related to the LTE network such as equipment installation, integration, optimization, and training. The ERIC and Commission review process will influence specific subscriber equipment and/or application development.

The proposed LTE network is designed to support 4,050 concurrent public safety users and is capable of future expansion. The system provides on-street coverage for users with edge data rates at a minimum of 256 Kbps uplink and 768 Kbps downlink.

With regard to site infrastructure, the design uses 30 total sites; 24 Fire Station sites and 6 sites in the P25 Overlay. The design reuses existing sites. All Fire Station sites have 80' monopole towers. The existing P25 sites will use 100' at a minimum except the North site which will use antenna heights of 200 feet. This assumption is based on the premise that current tower loading is adequate at each site. Site surveys will be performed to determine final heights in the system design. We do not currently anticipate rights of way challenges.

The timeline developed reflects a three (3) year schedule. This plan and schedule are subject to change based on Commission action, NTIA grant and other funding demands, logistic circumstances and resolution of a final system design.

As we have noted, Charlotte has today submitted its *Interoperability Showing*. We also represent to the Commission, pursuant to Paragraph 54 of the *May 12, 2010 Order*, that all public safety agencies within the geographic area of the network will have access to the system.

## Summary

Since prior to the Commission's *May 12, 2010 Order*, Charlotte has dedicated substantial resources to funding, designing and deploying a public safety broadband network in the 700 MHz that ensures interoperability and brings advanced services to law enforcement and emergency response services. It has drawn on a range of public and private expertise, including the PSST, to assist the project and has moved expeditiously to commence the acquisition process. The objective is a critical priority that will advance the important responsibility to respond effectively to the citizen facing an emergency. Charlotte reiterates its commitment to this important project and appreciates the Commission's important role in bringing it to reality.

We have provided a copy of this quarterly report to Chief McEwen of the Public Safety Spectrum Trust.

Please call upon me if I can provide any additional information.

Respectfully,



Dennis Baucom  
Network Technology Services Director  
Business Support Services  
527 Spratt Street  
Charlotte, North Carolina 28206  
704-336-5349

Copy Provided to:

Chief Harlan McEwen  
Chairman, Public Safety Spectrum Trust