

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
Public Safety and Homeland Security Bureau) PS Docket No. 12–94
Seeks Comment on Transition Process for 700)
MHz Public Safety Broadband Waiver)
Recipients)

To: Chief, Public Safety and Homeland Security Bureau

COMMENTS

Ericsson hereby responds to the Public Safety and Homeland Security Bureau’s Public Notice¹ seeking comment on the transition process for 700 MHz Public Safety broadband waiver recipients in light of the provisions of the recently enacted Spectrum Act.² This legislation directed the Commission to issue a 700 MHz license for the public safety broadband spectrum and the D Block to the First Responder Network Authority (“FirstNet”), an independent authority to be formed within the National Telecommunications and Information Administration (“NTIA”) at the Department of Commerce.

I. INTRODUCTION AND SUMMARY

Under the Spectrum Act, FirstNet will be responsible for ensuring the buildout of the nationwide public safety broadband network and will assume the role of Public Safety Spectrum Trust (“PSST”), which the Commission designated as the Public Safety Broadband Licensee (“PSBL”) before enactment of the Spectrum Act.

¹ Public Notice, *Public Safety and Homeland Security Bureau Seeks Comment on Transition Process for 700 MHz Public Safety Broadband Waiver Recipients*, PS Docket No. 12–94 (April 6, 2012) (“Public Notice”).

² Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. 112-96, 126 Stat. 156 (2012) (“Spectrum Act”), available at <http://www.gpo.gov/fdsys/pkg/PLAW-112publ96/pdf/PLAW-112publ96.pdf>.

This proceeding addresses open issues concerning how the transition from PSST to FirstNet affects the Commission’s previous grants of waiver petitions to public safety entities seeking early deployment of public safety networks in the 700 MHz public safety broadband spectrum.³ In granting the waivers, the Commission imposed certain technical compatibility standards, such as a requirement to adopt 3GPP Release 8 Long Term Evolution (“LTE”) or higher.⁴ Most important, the Commission required the waiver applicants to enter into spectrum leases with the PSST.⁵

After coordinating with the Emergency Response Interoperability Center (“ERIC”), the Public Safety and Homeland Security Bureau approved technical requirements for those entities that sought waivers and filed interoperability showings.⁶ Given that FirstNet will be assuming responsibility for establishment of the broadband public safety network, the Commission should facilitate the provision of service by granting any rule waivers that may be needed under the Spectrum Act.

Ericsson urges the Commission not to stay or otherwise delay deployment by the waiver recipients. Prompt authorization of the waiver deployments will bring substantial public safety benefits and accelerate the nationwide buildout of the FirstNet network. Accordingly, the Commission should approve the interoperability showings and authorize the waiver recipients to enter into service based on the *Interoperability Waiver Order*.

³ *Requests for Waiver of Various Petitioners to Allow the Establishment of 700 MHz Interoperable Public Safety Wireless Broadband Networks*, 25 FCC Rcd 5145 (2010) (“*Waiver Order*”).

⁴ *Id.* at ¶¶ 38, 45.

⁵ *Id.* at ¶ 22. See also *Requests for Waiver of Various Petitioners to Allow the Establishment of 700 MHz Interoperable Public Safety Wireless Broadband Networks*, 26 FCC Rcd 6783 (PSHSB 2011) (*Texas Waiver Order*).

⁶ *Requests for Waiver of Various Petitioners to Allow the Establishment of 700 MHz Interoperable Public Safety Wireless Broadband Networks*, 25 FCC Rcd 17156 (2010) (“*Interoperability Waiver Order*”).

Until such time as FirstNet has been fully established and is able to take over responsibility for the nationwide public safety network, the Public Safety Spectrum Trust (“PSST”) remains the Commission-designated overseer of the 700 MHz public safety spectrum. Accordingly, the Commission should allow the waiver applicants to renew their spectrum leases with PSST. When PSST’s license is transferred to FirstNet, the Commission can take any additional action needed to facilitate the transfer of those spectrum leases as well.

II. THE TRANSITION AND THE WAIVER APPLICANTS

The Public Notice points out that:

To date, three jurisdictions have filed the interoperability showings that, under the *Waiver Order*, the Commission must approve in order for these jurisdictions’ networks to go into service: the State of Texas (Texas), Charlotte, North Carolina (Charlotte), and the Adams County, Colorado, Communication Center (Adams County). Texas and Charlotte contemplate entering into service in 2012, with proposed service availability dates of May 31 and June 30 respectively.⁷

In granting the waivers, the Commission emphasized that “[t]hese waiver deployments are conditioned on use of the 3GPP Long Term Evolution (LTE) technology platform and on adherence to other requirements, including baseline technical interoperability mandates established by the Public Safety and Homeland Security Bureau in December 2010.”⁸

Meanwhile, the *Interoperability Waiver Order* established baseline performance requirements for the networks deployed by waiver recipients.⁹

In addition, the Commission went well beyond the formal requirements of a rulemaking to facilitate waiver deployments. The FCC established baseline rules for waiver applicants that

⁷ Public Notice at 3 (footnotes omitted). Other waiver applicants should, likewise, be subject to the requirements of the *Interoperability Waiver Order*.

⁸ Public Notice at 3.

⁹ See *Interoperability Waiver Order*, 25 FCC Rcd at 17158-64; see *id.*, App. A, 25 FCC Rcd at 17166-70.

were focused on the minimal requirements needed to ensure a “solid foundation for any future network structure . . . [or] governance model . . . that would be established for the nationwide network.”¹⁰ As a result of this forward-looking planning, waiver recipients that conform to the *Interoperability Waiver Order* should be as compatible with FirstNet as they would be with PSST.

Now, the Spectrum Act has changed the governance model for these waiver applicants. PSST will be replaced by FirstNet, under somewhat different organizational instructions. The Commission should ensure a reasonable transition of the Public Safety 700 MHz band oversight from PSST to FirstNet — a transition that allows the existing public safety waiver grantees the opportunity to build their networks and benefit the public. The transition should be based on the existing *Interoperability Waiver Order*.

The Commission established the waiver process specifically to address “the pressing need for public safety to begin development and deployment of wireless broadband network infrastructure” even while the long-term move toward a nationwide public safety network was in its early regulatory and planning stages.¹¹ The National Telecommunications and Information Administration (“NTIA”) likewise processed and granted funding requests from waiver applicants. For example, NTIA approved over \$16 million in Broadband Technology Opportunity Program (“BTOP”) grants for the City of Charlotte’s CharMeck Connect project, which will use the 700 MHz broadband public safety spectrum under a waiver to establish a city-

¹⁰ *FCC Staff Assessment of Public Safety Interoperability Requirements for the Public Safety Broadband Spectrum in the 700 MHz Band*, at 5 (PSHSB April 6, 2012) (“*Staff Interoperability Assessment*”), available at <http://apps.fcc.gov/ecfs/document/view?=7021907499>.

¹¹ *Waiver Order*, 25 FCC Rcd at 5148. *Cf.* Section 6206(b)(1)(C) of the Spectrum Act, to be codified at 47 U.S.C. § 1426(b)(1)(C) (encouraging FirstNet to use “existing commercial wireless infrastructure to speed deployment of the network,” where possible).

and countywide wireless broadband network serving over 11,000 public safety users.¹² The Adams County Communications Center in Colorado has been awarded over \$12 million in BTOP funding to serve about 2000 first responders.¹³ The funds awarded by NTIA through the BTOP program will complement the funds that will eventually flow into FirstNet as the Spectrum Act is implemented.

The Commission should allow these projects to proceed, consistent with the BTOP objectives of creating job growth and stimulating the economy by expanding the availability of broadband service. Over a decade has passed since the terrorist acts on September 11, 2011, and the lack of interoperable public safety networks continues to plague the nation. Authorization of the waiver projects will advance an interoperable public safety wireless infrastructure one piece at a time, speeding the development of a nationwide network.

Approving the interoperability showings and authorizing the waiver recipients to begin service will bring substantial public benefits with no adverse effect on FirstNet. On the other hand, to disapprove or stay these waiver projects would have adverse effects on public safety spectrum deployment. In fact, these waiver projects will pave the way for FirstNet, employing the LTE technology that the FCC initially settled upon and that Congress chose for use by FirstNet,¹⁴ thereby ensuring open standards and interoperability. Moreover, the interconnection model that the waiver applicants employ can be extended to a national public safety broadband network, including the network to be established by FirstNet.

¹² NTIA, BroadbandUSA, *City of Charlotte*, <http://www2.ntia.doc.gov/grantee/city-of-charlotte>.

¹³ NTIA, BroadbandUSA, *Adams County Communications Center, Inc. (ADCOM)*, <http://www2.ntia.doc.gov/grantee/adams-county-communications-center-inc-adcom>.

¹⁴ See Section 6203(c)(2) of the Spectrum Act, to be codified at 47 U.S.C. § 1423(c)(2).

Other advantages also flow to FirstNet from proceeding with the waiver projects. The open-standards equipment that will be used can be directly integrated into the network built out by the waiver recipients, and the equipment can even be reconfigured and repurposed for use in the FirstNet system, if necessary. In this way, the waiver projects will actually speed FirstNet's deployment, serving as the first parts of the FirstNet network. These projects will also provide highly valuable operational experience for deploying LTE in a public safety network, serving in effect as pilot projects for public safety broadband usage. They will also stimulate development of public safety broadband applications and will provide a blueprint for how to deploy future network segments. On the other hand, Ericsson estimates that without the waiver deployments, the network will likely be operational at the earliest by 2014. With the waivers, however, parts of the network can become operational by 2012.

There is little risk of stranded investment as a result of the eventual transition to FirstNet. As noted above, much of the equipment can be directly integrated, or can be reconfigured and repurposed if necessary. The vast majority of cell site investment, including towers, power supply, and backhaul will be unaffected by the transition. And even if a portion of the investment in the waiver networks cannot be incorporated into the FirstNet system, that is a small price to pay for accelerating achievement of the goal of a nationwide public safety broadband network.¹⁵

¹⁵ The FCC's Omnibus Broadband Initiative ("OBI") created a Public Safety broadband network cost model as a basis for the National Broadband Plan's public funding recommendations for the nationwide interoperable public safety broadband wireless network. FCC Omnibus Broadband Initiative, A BROADBAND NETWORK COST MODE: A BASIS FOR PUBLIC FUNDING ESSENTIAL TO BRINGING NATIONWIDE INTEROPERABLE COMMUNICATIONS TO AMERICA'S FIRST RESPONDERS, OBI Technical Paper No. 2 (2010), <http://transition.fcc.gov/pshs/docs/ps-bb-cost-model.pdf>. It is useful to look at the cost model to estimate the investment loss should the waiver recipients later be required to reconfigure their networks. In Appendix C, OBI estimated that the capital expenditure for a nationwide

(continued)

III. CONCLUSION

For all the foregoing reasons, the Commission should promptly authorize the waiver recipients to proceed with deployment, consistent with the terms of the *Waiver Interoperability Order*.

Respectfully submitted,

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(footnote continued)

public safety network would be \$15.7 billion, including \$1 billion for core equipment. The radio access network accounted for 80 percent of the capital expenditure estimate. Under the legislation, the common air interface will be LTE, which will also be employed in the waiver projects. As a result, at least 80 percent of the capital expenditure would be safeguarded. Ericsson also considers that a significant portion of the core, if not all of the core network, can be re-used. FirstNet may decide to centralize parts of the upper core network, in which case Ericsson estimates that the portion of the upper core network that may be centralized represents a maximum of a third of the total capital core network expenditure, or 2 percent of the total capital expenditure. Based on the OBI cost model, there may therefore be an additional investment of 2 percent needed to centralize some of the node elements. Accordingly, the potential stranded investment is relatively insignificant compared to the benefits and not sufficient to impede approval of the waiver applications.