

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Implementing Public Safety Broadband)	PS Docket No. 12-94
Provisions of the Middle Class Tax Relief and)	
Job Creation Act of 2012)	
)	
Implementing a Nationwide, Broadband,)	PS Docket No. 06-229
Interoperable Public Safety Network in the)	
700 MHz Band)	
)	
Service Rules for the 698-746, 747-762 and)	WT Docket No. 06-150
777-792 MHz Bands)	

COMMENTS OF AT&T SERVICES, INC.

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COMMENTS OF AT&T SERVICES, INC.

AT&T Services, Inc. respectfully submits these comments on behalf of itself and its operating company affiliates (collectively, “AT&T”) pursuant to the Notice of Proposed Rulemaking in the above-captioned proceeding.¹

I. Introduction and Summary

AT&T supports the Commission’s endeavor in this proceeding to implement provisions of the Middle Class Tax Relief and Job Creation Act of 2012 (“Public Safety Spectrum Act” or “Act”)² governing deployment of a nationwide public safety broadband network in the 700 MHz band. In particular, the Commission’s effort to adopt technical service rules for that nationwide network constitutes an important opportunity to promote interoperability within the network and between it and commercial networks. Such interoperability is crucial for developing the kind of robust, reliable, and cost-efficient broadband network that first responders need to improve their ability to preserve, protect, and enhance the Nation’s public safety.

The lodestar for establishing technical service rules must be the Public Safety Spectrum Act itself. And the Act speaks directly to the matter at hand. Specifically, the Act requires that the public safety broadband network in the 700 MHz band operate in accordance with “commercial standards.”³ Congress recognized that operating according to the same service rules and industry standards that apply to commercial LTE networks would not only ensure interoperability throughout the national public safety broadband network and with commercial networks, but it also would reduce the costs of deployment, allowing the public safety broadband

¹*In the Matter of Implementing Public Safety Broadband Provisions of the Middle Class Tax Relief and Job Creation Act of 2012; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Service Rules for the 698-746, 747-762 and 777-792 MHz Bands*, Notice of Proposed Rulemaking, 28 FCC Rcd 2715 (2013) (“Notice”).

² Pub. L. No. 112-96, 126 Stat. 156 (2012).

³ See, e.g., Public Safety Spectrum Act at §§ 6001(10), 6202(b), 6203(c)(2), 6206(b)(1), (b)(2)(B), (c)(3).

network to benefit from scale economies in equipment and devices and to leverage existing commercial network facilities. It also would ensure that first responders could access commercial networks through roaming arrangements.

In accordance with Congress' directive, the Commission must adopt technical service rules that are harmonized with those that apply to commercial mobile spectrum bands. Towards that end, as explained below, the Commission should adopt (i) technical service rules for the public safety broadband network that mirror those in Part 27 of the Commission's rules applicable to commercial broadband networks, and (ii) a catch-all rule to ensure that the public safety broadband network operates in accordance with "commercial standards" as defined in the Public Safety Spectrum Act.

II. Discussion

A. Congress Intended that the Public Safety Broadband Network Be Operated In Accordance with Commercial Standards In Order to Maximize Interoperability.

The Public Safety Spectrum Act clearly demonstrates Congress' intent that the nationwide public safety broadband network be operated in the same manner as commercial broadband networks. The Act requires the licensee of the public safety broadband network, First Responder Network Authority ("FirstNet"), to ensure that the network as a whole consists of both a core network and a radio access network that are "based on commercial standards".⁴ The Act also creates a Technical Advisory Board for First Responder Interoperability ("Interoperability Board") to develop binding recommendations regarding minimum technical

⁴ Public Safety Spectrum Act at § 6202(b). *See, e.g., id.* at § 6206(b)(2)(B)(i) (directing FirstNet to "promote competition in the equipment market, including devices for public safety communications, by requiring that equipment for use on the network be built to open, non-proprietary, commercially available standards").

requirements for the public safety broadband network,⁵ and directs the Interoperability Board to base those requirements “on the commercial standards for Long Term Evolution (LTE) service.”⁶ And the Act defines “commercial standards” as “technical standards followed by the commercial mobile service and commercial mobile data service industries for network, device, and Internet Protocol connectivity.”⁷

The principal purpose of requiring employment of commercial standards is to maximize interoperability within the nationwide public safety broadband network itself and between the public safety broadband network and commercial broadband networks.⁸ Interoperability, in turn, will make the public safety broadband network part of the multi-billion dollar commercial wireless broadband technology ecosystem, allowing first responders to take advantage of current and future advances in wireless communications technology, wireless devices, applications, networking, security, and network infrastructure. Interoperability will also promote competition, drive innovation, and lower costs among vendors of equipment, user devices, software, and services.⁹ Moreover, interoperability will facilitate roaming between the public safety broadband network and commercial broadband networks.¹⁰

⁵ Public Safety Spectrum Act at §§ 6203, 6206(b)(1) (directing FirstNet to ensure that the public safety network is built, operated, and maintained “without materially changing [] the minimum technical requirements developed” by the Interoperability Board).

⁶ Public Safety Spectrum Act at § 6203(c)(2).

⁷ Public Safety Spectrum Act at § 6001(10). That provision goes on to state that the term “commercial standards” includes “standards developed by the Third Generation Partnership Project (3GPP), the Institute of Electrical and Electronics Engineers (IEEE), the Alliance for Telecommunications Industry Solutions (ATIS), the Internet Engineering Task Force (IETF), and the International Telecommunication Union (ITU).” *Id.*

⁸ *See, e.g., Notice*, 28 FCC Rcd at 2718-19, ¶ 10.

⁹ *See, e.g., In the Matter of Recommendations of the Technical Advisory Board for First Responder Interoperability*, Order of Transmittal, 27 FCC Rcd 7733 (2012) at Appendix A (Interoperability Board Report”), § 3.1 (stating that, although “in some cases” the public safety network may have unique needs, “in order for the NPSBN to take advantage of the interoperability achieved by LTE, FirstNet must *fully* embrace the technologies, standards and best practices used by commercial service providers to ensure interoperability on day 1 of network deployment and beyond”) (emphasis in original).

B. Given the Statutory Goal of Interoperability, the Commission Should Use Part 27 of the Commission's Rules as a Model for Technical Service Rules to be Adopted in Part 90 for the Nationwide Public Safety Network.

Rules governing 700 MHz commercial wireless spectrum reside primarily in Part 27 of the Commission's rules. In light of the Act's directive to apply commercial standards to facilitate interoperability, the Commission should use those Part 27 rules as models for technical service rules to be adopted in Part 90 for the nationwide public safety broadband network.

AT&T now addresses some of the proposed rules below.

1. Power and Antenna Height Limits

The *Notice* proposes to modify Section 90.542(a) of the Commission's rules so that the power and antenna height limits in Section 27.50(b) of the Commission's rules, which currently apply to 700 MHz commercial wireless services, will apply to the national public safety broadband allocation.¹¹ AT&T concurs with that proposal.¹²

2. Power Flux Density Limits

The *Notice* proposes to modify Section 90.542(b) of the Commission rules so that the power flux density limits in rule 27.55(c), which currently apply to 700 MHz commercial wireless services, will apply to the national public safety broadband allocation.¹³ AT&T concurs with that proposal.

¹⁰ See, e.g., Public Safety Spectrum Act at § 6206(c)(5) (authorizing FirstNet to execute roaming agreements).

¹¹ *Notice*, 28 FCC Rcd at 2721-22, ¶¶ 19-20.

¹² The *Notice* observes that there is a difference between rule 27.50(b)'s power limit for hand-held devices and 3GPP's standard power limit for hand-held devices. *Notice*, 28 FCC Rcd at 2722, ¶ 20. In AT&T's view, to the extent necessary that issue should be addressed in accordance with Interoperability Board Report § 4.2.1.4.

¹³ *Notice*, 28 FCC Rcd at 2722, ¶ 21.

3. Emission Limits

For purposes of adopting out-of-band emission (“OOBE”) limits governing emissions from the 700MHz public safety broadband spectrum allocation into the 700 MHz public safety narrowband spectrum, the *Notice* proposes to consolidate the existing limits in Sections 27.53(d) of the Commission’s rules into the identical limits currently in Section 90.543(e) of the Commission’s rules.¹⁴ AT&T concurs with that proposal, given that it will apply to the national public safety broadband spectrum the same requirements applicable to commercial wireless service.

Similarly, for purposes of adopting OOBE limits for emissions into commercial spectrum bands adjacent to the expanded 700 MHz public safety spectrum allocation, the *Notice* proposes to codify in Section 90.543 of the Commission’s rules the emission limits established in Section 27.53(d) of the Commission’s rules for the D Block.¹⁵ AT&T concurs with that proposal.

4. Field Strength Limits

As the *Notice* observes, the “State Network” provision in Section 6302 of the Public Safety Spectrum Act contemplates the potential deployment of more than one radio access network in the spectrum band allocated for the nationwide public safety broadband network.¹⁶ Consequently, to mitigate the potential for harmful interference between the nationwide network and any State networks, AT&T believes that the Commission should adopt in Part 90 of the Commission’s rules a field strength limit for the public safety broadband allocation. AT&T further believes that the field strength limit adopted in Part 90 should be the same as the field

¹⁴ *Notice*, 28 FCC Rcd at 2722-23, ¶¶ 22-23.

¹⁵ *Notice*, 28 FCC Rcd at 2723, ¶ 25.

¹⁶ *Notice*, 28 FCC Rcd at 2723-24, ¶ 26.

strength limit specified in Section 27.55(a)(2) of the Commission's rules for 700 MHz commercial wireless services.

5. Interference Coordination

AT&T also supports applying to the public safety broadband licensee the same informal interference coordination approach that applies to commercial 700 MHz licensees in Part 27.¹⁷ In particular, to foster interoperability and mirror commercial standards, the Commission should adopt in Part 90 of the Commission's rules the requirements of Section 27.64 of the Commission's rules currently applicable to commercial broadband spectrum operations. Section 27.64 provides, in essence, that a station operating in full accordance with applicable Commission rules and authorization terms is normally considered to be non-interfering; if the Commission determines that interference is occurring nonetheless, the Commission can require modifications as necessary to eliminate such interference. This requirement has worked well for commercial broadband operators, and there is no reason to believe it would not work equally well for public safety broadband operators.

C. Given the Statutory Directive that The Nationwide Public Safety Network Should Be Operated In Accordance with Commercial Standards, the Commission Should Adopt a General Rule That So Provides.

As described above, the Public Safety Spectrum Act repeatedly directs that the new nationwide public safety broadband network be developed and operated in accordance with commercial standards.¹⁸ To ensure full effectuation of that directive, the Commission should adopt in Part 90 of its rules a general provision that broadly establishes that its technical service rules are designed to achieve consistency with commercial standards. Such a provision would serve to fill any unintended gaps in the other rules, provide important context for construing any

¹⁷ See generally Notice, 28 FCC Rcd at 2724, ¶ 27.

¹⁸ See, e.g., Public Safety Spectrum Act at §§ § 6001(10), 6202(b), 6203(c)(2), 6206(b)(1), (b)(2)(B), (c)(3).

ambiguities in the other rules, and plainly place the Commission in step with the mission of other government entities charged with implementing the Public Safety Spectrum Act. AT&T proposes the following language for this rule, which largely tracks the applicable statutory language:

This Part's technical service rules applicable to the 758-769/788-799 MHz band are designed to help ensure that the nationwide public safety broadband network in that band is built, operated, and maintained in accordance with commercial standards followed by the commercial mobile service and commercial mobile data service industries for network, device, and Internet Protocol connectivity, including standards developed by the Third Generation Partnership Project (3GPP), the Institute of Electrical and Electronics Engineers (IEEE), the Alliance for Telecommunications Industry Solutions (ATIS), the Internet Engineering Task Force (IETF), and the International Telecommunication Union (ITU).

III. Conclusion

For the reasons described above, the Commission should adopt technical service rules for the nationwide public safety broadband network in the 700 MHz band that will promote interoperability within that network and with commercial broadband networks operating in the 700 MHz band. In turn, the Commission should adopt technical service rules for the nationwide public safety broadband network in the 700 MHz band that mirror technical service rules for

commercial broadband networks in the 700 MHz band. To do so, the Commission should use the technical service rules in Part 27 for commercial broadband networks as models for technical service rules to be adopted in Part 90 for the nationwide public safety broadband network.

Respectfully submitted,

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