

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Procedures for Commission Review of State Opt-) PS Docket 16-269
Out Requests from the FirstNet Radio Access)
Network)

ORDER

Adopted: September 14, 2017

Released: September 15, 2017

By the Commission: Chairman Pai and Commissioner Rosenworcel issuing statements.

I. INTRODUCTION AND BACKGROUND

1. On June 22, 2017, the Federal Communications Commission (Commission) adopted a Report and Order in this docket establishing Commission procedures for administering the state opt-out process as provided under the Public Safety Spectrum Act, as well as delineating the two-prong statutory standard by which the Commission will evaluate state alternative plans. The Report and Order resolved all issues, except the standard under which the FCC would review compliance with "Prong 2" of the statutory test. The Report and Order directed the Public Safety and Homeland Security Bureau (Bureau) to issue a Public Notice establishing an expedited comment period for public comment on ex parte filings submitted by the First Responder Network Authority (FirstNet) on this standard.

2. In a June 5, 2017 ex parte filing, FirstNet filed a spreadsheet listing "FCC Evaluation Requirements" associated with specific elements of its anticipated state plan categories. FirstNet stated that the spreadsheet represents an "interoperability compliance matrix that documents the technical standards that will be necessary to ensure a state or territory's [Radio Access Network (RAN)] is interoperable with the [Nationwide Public Safety Broadband Network (NPSBN)]." On June 16, 2017, FirstNet filed an additional ex parte letter in which it proffered a revised interoperability compliance

1 See Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156 §§ 6001-6303, 6413 (codified at 47 U.S.C. §§ 1401-1443, 1457) ("Public Safety Spectrum Act" or "Act"). Specifically, Section 6302(e)(3)(C)(i) provides that states making a timely opt-out decision shall "submit an alternative plan for the construction, maintenance, operation, and improvements of the radio access network within the State to the Commission, and such plan shall demonstrate—(I) that the State will be in compliance with the minimum technical interoperability requirements developed under section 6203 [of the Act]; and (II) interoperability with the nationwide public safety broadband network." We refer to these requirements herein as "Prong 1" and "Prong 2" respectively.

2 Procedures for Commission Review of State Opt-Out Requests from the FirstNet Radio Access Network, PS Docket No. 16-269, Report and Order, 32 FCC Rcd 5311 (2017) (Report and Order).

3 Id. at 5328, para. 63.

4 Id. at 5328, para. 64.

5 Letter from Patrick Donovan, First Responder Network Authority, to Marlene H. Dortch, Secretary, Federal Communications Commission, and Spreadsheet entitled "State RAN Opt-Out Requirements_FCC_v1.0.xlsx" (June 5, 2017) (PS Docket 16-269) (FirstNet June 5 Ex Parte).

6 Id.

matrix.⁷

3. In the revised matrix, FirstNet proposed that the Commission's review under the second statutory prong be limited to whether alternative state plans comply with recommended requirements [4] and [5] from the Interoperability Board Report.⁸ These recommendations apply to the use of Access Point Names or APNs.⁹ Recommended requirement [4] states that “[h]ardware and software systems comprising the NPSBN SHALL support APNs defined for PSAN [Public Safety Application Network] usage.”¹⁰ Recommended requirement [5] states that “[h]ardware and software systems comprising the NPSBN SHALL support nationwide APNs for interoperability.”¹¹

4. On June 28, 2017, the Bureau released the requisite Public Notice seeking comment “on FirstNet’s proposal, as reflected in its June 5 and June 16 *ex parte* filings and any related filings, and specifically on whether and to what extent the Commission should utilize the criteria proposed by FirstNet when evaluating the interoperability of a state’s proposed RAN with the NPSBN under the second prong of the Commission’s statutory interoperability analysis.”¹² Ten parties filed comments in response to the Public Notice.¹³

II. DISCUSSION

A. Scope of Prong 2 Review

5. In its June 16th *ex parte*, FirstNet argues that recommended requirements [4] and [5] are necessary to ensure the successful integration of the opt-out State’s RAN and the interworking of the RAN-to-core interface.¹⁴ FirstNet seeks to have the Commission utilize these requirements under Prong 2 of its analysis to highlight the need for an opt-out State’s RAN to support multiple APNs in order to

⁷ Letter from Patrick Donovan, First Responder Network Authority, to Marlene H. Dortch, Secretary, Federal Communications Commission, and Spreadsheet entitled “State RAN Opt-Out Requirements_FCC_v2.0.xlsx” (June 16, 2017) (PS Docket 16-269) (FirstNet June 16 *Ex Parte*).

⁸ *See id.* at 5; *see also* Recommended Minimum Technical Requirements to Ensure Nationwide Interoperability for the Nationwide Public Safety Broadband Network, Final Report (May 22, 2012) *available at* https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-68A3.pdf (Interoperability Board Report).

⁹ *See* Interoperability Board Report at 1.3.1. Access Point Names are network identifiers that enable user equipment (UE) to connect with individual networks. In Long Term Evolution (LTE) networks, each network gateway that is used to connect UE to an individual network has an APN that translates into the IP address for the gateway to that network. The use of APNs in LTE was initially defined by 3GPP in the context of UMTS and used for purposes of identifying Gateway GPRS Support Nodes (GGSN). APNs follow the naming syntax defined in RFC 2181, RFC 1035, and RFC 1123, and internal LTE Domain Name Server (DNS) functionality is used to translate the APN into the IP address of the gateway. *See* 3GPP TS 23.003 V14.4.0 (2017-07), Section 9; *see also* <http://www.rcrwireless.com/20140509/evolved-packet-core-epc/apn-lte>.

¹⁰ *Id.* The Interoperability Board Report defines PSANs as State, Regional, Local, Tribal, or Agency application networks which provide public safety services with local scope. Examples of such services are Next Generation Public Safety Answering Points (PSAPs) and Computer Aided Dispatch (CAD). Spectrum Act section 6206(b)(2)(C) directs FirstNet to promote integration of the NPSBN with PSAPs. *See* Interoperability Board Report Section 4.1.5.5.

¹¹ *Id.*

¹² *Public Safety and Homeland Security Bureau Seeks Comment on FirstNet Ex Parte Submissions Proposing Interoperability Requirements For State Opt-Out Requests From The FirstNet Radio Access Network*, PS Docket No. 16-269, Public Notice, 32 FCC Rcd 5104, 5104-05 (PSHSB June 28, 2017) (*Public Notice*). On July 10, 2017, the *Public Notice* was published in the Federal Register. *See* 82 FR 31602. This commenced a ten-day comment period that ended on July 17, 2017.

¹³ We attach a list of commenting parties as an Appendix.

¹⁴ FirstNet June 16 *Ex Parte* at 5.

ensure both interoperability and Public Safety custom usage.¹⁵ The FirstNet solution incorporates the use of general, specific, and custom APNs, among others.¹⁶ FirstNet concedes that APN interoperability is primarily between the User Equipment (UE) and the Core Network, but argues that support of multiple APNs in a device will also require the device to interoperate with the RAN in order to set up multiple default and dedicated bearers based on supported APNs.¹⁷ FirstNet believes that utilizing these two requirements to meet the Prong 2 showing is necessary to ensure interoperability with the NPSBN.¹⁸

6. We conclude that our review under Prong 2 should be limited to determining whether alternative state plans comply with recommended requirements [4] and [5] from the Interoperability Board Report. Several commenters concur that utilizing these requirements will satisfy the Commission's interoperability finding under Prong 2.¹⁹ In this respect, we also find that these requirements are consistent with industry standards for LTE deployment, resulting in an understandable and achievable benchmark.²⁰ Moreover, no party disputes FirstNet's arguments or proposes a viable alternative standard for use under this prong in response to FirstNet's proposal.

7. We also agree with AT&T that operation of FirstNet's national network will entail the use of several kinds of APNs (*e.g.*, general, specific, custom, emergency) applicable to numerous kinds of functionalities (*e.g.*, network data services; public internet access; IP Multimedia Subsystems (IMS) such as Voice over LTE (VoLTE) and IP messaging; E911; access to enterprise intranets).²¹ However, we disagree with AT&T's contention that opt-out states should be limited to using the *same* APNs as FirstNet to comply with Requirements [4] and [5]. We believe that such a requirement would be unnecessarily restrictive. While we conclude that an opt-out state must *include* the set of APNs that FirstNet defines or requires, AT&T fails to show how restricting the an opt-out state's set of APNs to the exact set of APNs that FirstNet employs, and precluding the use of other APNs, is relevant to Prong 2 or would enhance interoperability.

8. We also concur with Rivada that our Prong 2 review should be limited to the criteria listed in the column of FirstNet's revised matrix labeled as "FCC Evaluation Requirements," and that information contained in the column labeled "NPSBN RFP J-4 Interface Reference" is reference information only, rather than additional criteria for Commission evaluation.²² We will therefore only adopt Requirements [4] and [5] as our Prong 2 standard for review, and our adoption extends only to the Board requirements, as enumerated in each prong, not the matrices, which are reference material. In this respect, we anticipate that there are a variety of commercially standard and reasonable ways that a state alternative plan could satisfactorily demonstrate that it will meet the interoperability standard established for Prong 2.

9. Lastly, we address the argument raised by SouthernLinc that the matrices filed by

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ Comments of the First Responder Network Authority at 2-3 (filed July 17, 2017) (FirstNet Comments); Comments of Rivada Networks, LLC at 4 (filed July 17, 2017) (Rivada Comments); The FirstNet Colorado Governing Body's Comments On FirstNet Ex Parte Submissions Proposing Interoperability Requirements For State Opt-Out Requests From The FirstNet Radio Access Network at 6-8 (filed July 17, 2017) (FNCGB Comments); Comments of AT&T Services, Inc. at 5-7 (filed July 17, 2017) (AT&T Comments) 5-7; Comments of Competitive Carriers Association at 3 (filed July 17, 2017) (CCA Comments).

²⁰ *See also* Rivada Comments at 4; CCA Comments at 3.

²¹ AT&T Comments at 6

²² Rivada Comments at 5-6.

FirstNet, and the associated Public Notice issued by the Bureau, are so vague as to fail to provide adequate notice under the Administrative Procedure Act.²³ We find that SouthernLinc's argument lacks merit.

10. While some parties argue that the matrices FirstNet submitted are somewhat unclear or confusing,²⁴ since issuance of the *NPRM* the Commission has sought comment on the inclusion of some or all of the requirements identified by the Interoperability Board as possible components of interoperability capabilities subject generally to the Commission's opt-out review process.²⁵ While the *NPRM* itself asked whether these requirements were among the minimum that a state plan must meet to pass the Commission's Prong 1 review, the Commission did not preclude their consideration under Prong 2, which the Commission noted "require[d] a broader showing by the state than the first prong."²⁶ Indeed, it would not have been reasonable to assume that the Commission would exclude a requirement that potentially qualified for Prong 1 review from consideration as a component of Prong 2 review, simply because the Commission ultimately determined that it was unnecessary for the Prong 1 review stage.

11. Moreover, the *Public Notice* specifically sought comment on FirstNet's proposal that the Commission limit its review under Prong 2 to whether state plans comply with recommended requirements [4] and [5] from the Interoperability Board Report.²⁷ The matrix filings by FirstNet, and particularly the June 16 filing, specifically delineate recommended Prong 1 and Prong 2 considerations in the column entitled "FCC Evaluation Requirements" and are consistent with industry standards for developing and deploying LTE networks.²⁸ The matrix must also be read in connection with the associated explanation filed by FirstNet, in which it explained why it recommended requirements [4] and [5] for inclusion in Prong 2, and its view that these requirements are necessary to ensure RAN interoperability with the FirstNet core.²⁹ To the extent SouthernLinc finds the matrix and associated explanation unclear or otherwise disagrees with it as reflective of what Prong 2 should require, it has had a full opportunity to amplify on that explanation or advance its own alternative version of a Prong 2 standard. As stated herein, we find that our decision to use these requirements in evaluating Prong 2 of the statutory test is consistent with comments made in the record by FirstNet, AT&T, CCA, and Rivada,³⁰ and is reasonable, clear, and consistent with the line of inquiry on this topic stemming back to the *NPRM*.

B. Complementary Review

12. As the Commission noted in the *Report and Order*, the Commission's review of state opt-out requests is only the first step in a multi-step process; the statute provides that states whose alternative plans are approved by the Commission must go through additional review by the National Telecommunications and Information Administration (NTIA) and FirstNet.³¹ C-Spire, Rivada, and CCA argue that neither NTIA nor FirstNet may impose new or different interoperability requirements in their

²³ Comments of Southern Communications Services, Inc. d/b/a Southern Linc at 4-7 (filed July 17, 2017) (SouthernLinc Comments).

²⁴ Rivada Comments at 2, 3-7; CCA Comments at 3; SouthernLinc Comments at 4-5.

²⁵ *NPRM*, 31 FCC Rcd at 10276, para. 69.

²⁶ *Id.* ("[W]e believe that [Prong 2] requires a broader showing by the state than the first prong, which refers only to demonstrating compliance with elements of the Interoperability Board Report.").

²⁷ *Public Notice*, 32 FCC Rcd at 5105.

²⁸ *See generally* FirstNet June 16 *Ex Parte*.

²⁹ FirstNet June 16 *Ex Parte* at 5.

³⁰ FirstNet Comments at 2; AT&T Comments at 6; CCA Comments at 3; Rivada Comments at 2-3.

³¹ *Report and Order*, 32 FCC Rcd at 5325, para. 50 (citing *Procedures for Commission Review of State Opt-Out Request from the FirstNet Radio Access Network et al.*, PS Docket 16-269, Report and Order and Notice of Proposed Rulemaking, 31 FCC Rcd 10253, 10273, para. 60 (2016)).

subsequent reviews of state opt-out plans that the Commission has approved.³² These parties also argue that any review process used by NTIA must be subject to prior public comment.³³

13. We decline to opine on the actions of other agencies with duties under the Act or their implementation of their statutory responsibilities. The Commission previously noted that NTIA will evaluate, *inter alia*, a state's ability to maintain "ongoing" interoperability with the nationwide public safety broadband network.³⁴ The *Report and Order* also stated that the Commission would evaluate state opt-out plans based solely on whether they comply with the requirements for interoperability at the time the plan is submitted and that Commission approval of a state opt-out plan would not create a presumption that the state plan meets any of the criteria that NTIA is responsible for evaluating.³⁵ We find no reason to alter this reasoning. Our focus in this proceeding is on the duties Congress imposed upon the Commission in the Act.

C. Issues Outside of the Scope of this Order

14. In the Public Notice, the Bureau sought comment on the FirstNet *ex parte* filings described in paragraphs 2-3, *supra*. Several parties filed comments raising issues that are not related to these filings or to the application of Prong 2 of the statutory interoperability criteria for state alternative plans. We address these comments below.

15. *State-operated Core*. C-Spire, Rivada, CCA, and Verizon all argue that opt-out states should be allowed to construct their own network cores, and that, technologically speaking such cores are capable of directly connecting to FirstNet's core. They argue that a direct state RAN to FirstNet core connection is not required, and ask the Commission to endorse this view.³⁶ In the *Report and Order*, the Commission stated that while it would not reject an otherwise qualified alternative plan that includes a proposed state core, the issue of state use of a separate core falls outside the Commission's statutory interoperability review responsibility.³⁷ Similarly, the feasibility of direct state core to FirstNet core connection raised by the above parties lies outside the scope of our review. Therefore, we decline to revisit this issue at this time. We also emphasize again that while issues relating to separate state cores are outside the scope of our authority,³⁸ this does not preclude the separate consideration of such issues by NTIA or FirstNet within the scope of their respective authorities.

16. *Review of AT&T Network*. As AT&T has been selected by FirstNet as its commercial partner to implement the buildout of the NPSBN, FNCGB argues that as a condition precedent to making an interoperability determination regarding a state's alternative plan, the Commission must first make a determination that AT&T meets the Interoperability Board's minimum technical requirements.³⁹ Specifically, FNCGB "requests that the Commission specify how it will ensure that AT&T complies with the interoperability requirements so that it is held to the same standard as opt-out states."⁴⁰ Because the

³² Letter from Benjamin M. Moncrief, VP, Government Relations, C Spire, to Marlene H. Dortch, Secretary, Federal Communications Commission at 3 (July 17, 2017) (PS Docket 16-269) (C-Spire Comments); Rivada Comments at 2-3; CCA Comments at 3, 9.

³³ Rivada Comments at 3; CCA Comments at 9.

³⁴ *Report and Order*, 32 FCC Rcd at 5325, para. 50 (citing *NPRM*, 31 FCC Rcd at 10273, para. 61).

³⁵ *Id.* (citing *NPRM*, 31 FCC Rcd at 10274, para. 62).

³⁶ C-Spire Comments at 2-3; Rivada Comments at 4, 7-9; CCA Comments at 3, 5, 7; Letter from William H. Johnson, Senior Vice President, Federal Regulatory and Legal Affairs, Verizon, to Marlene H. Dortch, Secretary, Federal Communications Commission at 2 (July 24, 2017) (PS Docket 16-269).

³⁷ *Report and Order*, 32 FCC Rcd at 5329, para. 66.

³⁸ *Id.*

³⁹ FNCGB Comments at 4-5.

⁴⁰ *Id.* at 5.

Act makes no provision for the Commission to undertake such an evaluation, we decline to adopt such a review.

17. *Device Interoperability.* CCA argues that AT&T has the incentive and ability to enter into proprietary device arrangements that could prevent states from obtaining opt-out approval or could force states to agree to unreasonable or discriminatory terms in contracts for equipment.⁴¹ CCA urges the Commission to act in this proceeding to prevent FirstNet, AT&T, and its equipment vendors from implementing proprietary device standards or otherwise limiting device operability in a manner that would create “an insurmountable opt-out condition based on states’ compliance with proprietary technical standards or equipment.”⁴² We find that this issue falls outside the scope of our statutory duties regarding RAN interoperability, and so decline to address it here.

18. *Datacasting.* APTS argues that FirstNet should not ignore the utility of public broadcasting/datacasting as a part of the FirstNet Network.⁴³ Whatever the merits of this suggestion, we find that this comment falls outside of the scope of our authority in this proceeding and so decline to address it.

D. Further Information

19. For further information, contact Roberto Mussenden of the Public Safety and Homeland Security Bureau, Policy and Licensing Division, at (202) 418-1428, or by e-mail at roberto.mussenden@fcc.gov.

III. ORDERING CLAUSE

20. Accordingly, IT IS ORDERED, pursuant to Sections 4(i), 4(j), 301, and 303 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 301, 303, as well as Title VI, Sections 6003, 6203, and 6302(e), of the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156, §§ 6003, 6203, 6302(e), that this *Order* is hereby ADOPTED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

⁴¹ CCA Comments at 11.

⁴² *Id.* at 13.

⁴³ Comments of America’s Public Television Stations (filed July 17, 2017).

APPENDIX**List of Commenting Parties**

Southern Communications Services, Inc. d/b/a SouthernLine (SouthernLine)
The FirstNet Colorado Governing Body (FNCGB)
Rivada Networks, LLC (Rivada)
NTIA on behalf of the First Responder Network Authority (FirstNet)
AT&T Services, Inc. (AT&T)
National Regional Planning Council (NRPC)
Cellular South, Inc. d/b/a C-Spire (C-Spire)
Competitive Carriers Association (CCA)
America's Public Television Stations (APTS)
Verizon

**STATEMENT OF
CHAIRMAN AJIT PAI**

Re: *Procedures for Commission Review of State Opt-Out Requests from the FirstNet Radio Access Network, Order*, PS Docket 16-269.

As communities devastated by Hurricanes Harvey and Irma begin the hard work of rebuilding, our work at the Commission to promote public safety continues. With today's *Order*, we take another step towards the creation of a nationwide interoperable public safety broadband network. Specifically, we finalize the technical criteria the Commission will use to evaluate plans from those states that elect to opt-out of the network that will be deployed by the First Responder Network Authority.

During the recent storms, we have witnessed heroic acts by many first responders. They put their lives on the line each and every day to keep us safe. We owe it to them to give them the tools they need to do their jobs. Effective and reliable communications service is one of those tools. I'm proud that we're doing what we can and must to help them communicate in times of trouble.

**STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL**

Re: *Procedures for Commission Review of State Opt-Out Requests from the FirstNet Radio Access Network*, Order, PS Docket No. 16-269.

It is appropriate that this Order is adopted this week—the anniversary of one of our darkest days. The events of September 11 sixteen years ago left an indelible mark on this country. In my family that mark is personal—because we lost a relative in the Twin Towers.

Compounding the tragedy of that day was a lack of interoperable communications among our first responders. The absence of compatible radio systems meant that too many of the brave public safety officials who sought to respond to the emergency as it unfolded were unable to do their job because they could not communicate with one another. Too many lost their lives as a result.

Thankfully, Congress sought to do something about it. More than five years ago in the Middle Class Tax Relief and Job Creation Act Congress built a framework for interoperable public safety communications by putting first responders on the same airwaves nationwide. This effort, known as the First Responder Network Authority—or FirstNet—is at long last poised for deployment. It is incumbent on this Commission to support this effort to ensure broader public safety communications interoperability—something that the weather events of the last few weeks demonstrate cannot come a moment too soon.

For this reason, I support today’s decision, which clarifies for those who exercise their right to opt-out of this system the standard that the Commission will employ to ensure that a state or territory’s radio access network is fully interoperable.

This Order represents my first recorded vote as a returning Commissioner and reflects my deeply rooted belief that the first duty of the public servant is the public safety.