

**Before the  
Federal Communications Commission  
Washington, DC 20554**

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

**JOINT COMMENTS OF THE NATIONAL RURAL ELECTRIC COOPERATIVE  
ASSOCIATION AND NTCA–THE RURAL BROADBAND ASSOCIATION**

**I. INTRODUCTION AND SUMMARY**

The National Rural Electric Cooperative Association (“NRECA”)<sup>1</sup> and NTCA–The Rural Broadband Association (“NTCA”)<sup>2</sup> (collectively the “Associations”) hereby submit these comments in the above captioned proceeding.<sup>3</sup> The Associations represent small critical

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<sup>1</sup> NRECA is the national service organization for more than 900 not-for-profit rural electric utilities that provide electric energy to approximately 42 million people in 47 states, comprising 12 percent of U.S. electric customers, covering 75 percent of the U.S. landmass. Kilowatt-hour sales by rural electric cooperatives account for approximately 11 percent of all electric energy sold in the United States. In addition to providing electricity, NRECA members have a strong commitment to social and economic development in the communities they serve.

<sup>2</sup> NTCA represents nearly 900 rural rate-of-return regulated telecommunications providers. All of NTCA’s members are full service rural local exchange carriers (“RLECs”) and broadband providers, and many of its members provide wireless, cable, satellite, and long distance and other competitive services to their communities. Each member is a “rural telephone company” as defined in the Communications Act of 1934, as amended. America’s independent telephone systems serve less than 5 percent of the nation’s telephone subscribers, but their service areas encompass more than 40 percent of the nation’s land mass. NTCA’s mission is to advance communications services to rural America by ensuring the viability and vitality of its members.

<sup>3</sup> In the Matter of Implementing Public Safety Broadband Provisions of the Middle Class Tax Relief and Job Creation Act of 2012, Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, (PS Docket No. 12-94, WT Docket No. 06-150, PS Docket No. 06-229), rel. July 31, 2012.

infrastructure and service providers that use valuable wired and wireless infrastructure, and other technical and operational assets, to serve the most sparsely populated and remotely located areas of our country—areas that remain largely unserved by larger operators.

The Federal Communications Commission (“Commission”) has a public interest obligation to ensure that rural first responders have access to the nationwide, interoperable Public Safety Broadband Network (“PSBN”). As such, the Commission should prescribe clear network deployment phases with rural coverage milestones and requirements to encourage FirstNet to leverage existing commercial rural wireless and wired assets for the efficient construction of the public safety network. The Commission also should institute technical service rules for the 700 MHz public safety spectrum that align with existing rules for other Commercial Mobile Radio Services (“CMRS”) bands and with relevant industry standards, thereby establishing the foundation for interoperability between spectrum bands. Interoperability will enable FirstNet to leverage common technology including equipment developed for commercial use.

## **II. THE COMMISSION HAS A PUBLIC INTEREST OBLIGATION TO PRESCRIBE NETWORK DEPLOYMENT PHASES WITH RURAL COVERAGE MILESTONES AND REQUIREMENTS**

Rural consumers have many of the same emergency and public safety needs as their urban counterparts, even as they may face different challenges in the event of emergencies. Rural areas are often the sites of devastating forest fires and tornadoes, while the presence of military facilities in rural areas raises public safety challenges. These potential national emergencies are unique to rural areas, and require careful coordination between the police, fire, and medical communities. Oftentimes, rural citizens reside many, many miles from the closest first responder, firehouse, police station, or health care institution. A next-generation broadband network can help to overcome the unique challenges presented by this remoteness, enabling first

responders to communicate with one another and with their headquarters' locations. Just as in urban areas, rural first responders need to access criminal databases, transmit a patient's medical data, and send information back to headquarters concerning the specifics of an incident scene. However, today, public safety officials in rural communities experience the same communication challenges as their urban counterparts, struggling to converse with other first responder entities and exchange data in real-time.

To overcome these challenges, Congress enacted the Middle Class Tax Relief Act of 2012 (the "Act"), which paved the way for the country's first interoperable, nationwide PSBN. FirstNet is required by law to have sufficient representation from rural interests.<sup>4</sup> Further, the Act requires FirstNet, in carrying out its duties, to devise "deployment phases with substantial rural coverage milestones" that are "consistent with the license granted by the Commission."<sup>5</sup> Clearly, the spirit of the legislation was to ensure that rural areas of the country gain access to the new public safety network. However, rural coverage is contingent upon the spectrum license granted to FirstNet by the Commission. Clear and specific network deployment milestones prescribed by the Commission will ensure that FirstNet complies with the legislative intent to ensure that rural areas of the country gain access to the PSBN.

As NTCA has highlighted in past proceedings,<sup>6</sup> when left to their own tactics, large nationwide operators typically focus capital investments on urban areas with concentrated

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<sup>4</sup> *Id.*, Section 6204(b)(2)(A)(iii).

<sup>5</sup> *Id.*, Section 6206(b)(3).

<sup>6</sup> As NTCA has noted:

The large carriers argue that if it was economically beneficial for them to deploy services in a particular area, they already have the incentive to do so without regulatory intervention. This large carrier argument is a prime example of the different incentives driving large carriers and small carriers. Large carriers ignore the less dense and less lucrative markets because it is easier to make quick profits in densely populated areas or high usage corridors. Their cost-benefit analysis does not include a look at the needs of a particular community. If they can make enough money by serving an area, or freeing the spectrum, they will do so. If it's not financially worth their trouble, they will not. Small carriers, in contrast, are situated in

population centers, while licensed spectrum in rural areas lies fallow. Historically, nationwide wireless providers do not provide service in rural areas, or, if they do, the implementation timeline is significantly longer than that in urban areas. Given the limited funding allotted to FirstNet, its large assigned licensed spectrum, and its monumental mission, without network coverage guidelines, there is nothing to ensure that FirstNet, a nationwide wireless network operator, will not likewise concentrate its resources on an urban-focused deployment plan and neglect to build out the network in high-cost rural areas.

With respect to the PSBN, the Commission has a public interest obligation to ensure that rural areas of the country are not left behind. Network coverage milestones can allow for flexibility at this early stage in FirstNet's development, while also providing guidelines to ensure that the spirit of the legislation is upheld, and the needs of rural consumers are met. The Commission should prescribe clear network deployment milestones and requirements to ensure that there is appropriate parity between urban and rural areas. Rural areas should gain access to the PSBN at the same rate (e.g., geographic percentage of coverage) as urban areas, and with comparable service to urban regions, including upstream and downstream throughput, latency, jitter, and other technical factors.

Robust, but reasonable, rural coverage milestones also will encourage FirstNet to leverage existing infrastructure and assets, which is particularly important in rural areas. In

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the communities they serve. . . A cost-benefit analysis includes a look at the rural community's needs. What may be considered a longer term and too risky investment to a large carrier, can be a necessary one to a rural carrier. Wireless carriers that are not willing to risk their capital in rural areas should not also be permitted to hold the unused spectrum hostage.

*See* In the Matter of Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies To Provide Spectrum-Based Services; 2000 Biennial Regulatory Review Spectrum Aggregation Limits For Commercial Mobile Radio Services; Increasing Flexibility To Promote Access to and the Efficient and Intensive Use of Spectrum and the Widespread Deployment of Wireless Services, and To Facilitate Capital Formation (WT Docket No. 02-381, 01-14, 03-202), Comments of the National Telecommunications Cooperative Association, January 14, 2005.

sparsely populated, high-cost rural areas, overbuilding areas sufficiently served by rural providers is wasteful and unnecessary, and would quickly deplete the entire \$7 billion network construction budget allocated to FirstNet. Overbuilding would also put existing networks at financial risk, jeopardizing consumer access to affordable mobile broadband in rural areas. Rural critical infrastructure and service providers are ideally situated to serve as network partners with FirstNet, with localized knowledge, valuable assets including copper and fiber infrastructure, utility poles, existing wireless networks, towers, rights-of-way, and other operational and technical resources. Further, rural critical infrastructure and service providers stand ready to satisfy any standard that FirstNet may set in the delivery of public safety communications. As a result, the Commission should set rural coverage milestones and requirements that encourage FirstNet to achieve its goals in an expedient and efficient manner, including by leveraging existing commercial infrastructure and local assets to speed network deployment.

### **III. THE COMMISSION SHOULD ESTABLISH TECHNICAL SERVICE RULES FOR THE 700 MHZ D-BLOCK BASED UPON EXISTING STANDARDS**

The Commission should implement flexible technical rules that encourage the development of solutions, including those for rural areas, that satisfy the broad and diverse requirements of our first responders. By implementing rules that are technology neutral, the Commission will maximize the economies of scale that are necessary to make the PSBN a success.

As a general matter, the Commission should avoid establishing rules that are cumbersome and overly specific for the public safety spectrum. Rather, the Commission should place the D-Block band on equal footing with other CMRS bands in order to encourage the

efficient development of equipment and services across the spectrum band. While certain elements of the Part 90 rules should be maintained, the Commission should seek to implement rules for the D-Block that closely reflect those established for other CMRS bands, for example the 700 MHz under Part 27, with certain exceptions necessary to provide the added flexibility to meet the needs of PSBN users. The Commission should harmonize the D-Block with the technical rules for band emissions limits, power limits, receiver performance, and field strength limit with existing rules for other CMRS bands, specifically the 700 MHz B- and C-Blocks. Further, the Commission should ensure consistency with the standards and practices of relevant organizations including the International Telecommunications Union and 3GPP Long Term Evolution technical standards and frequency coordination practices. Both industry standards are important to facilitate rapid deployment of new technologies in the band and investment in the band based on global economies of scale.

Harmonization is important to enable FirstNet to leverage common technology. Even minor differences in technical rules can result in the need to develop specialized or custom devices. However, as long as the fundamental technical rules governing the operation of these devices is consistent with other bands, public safety users will have the ability to take advantage of handsets and other devices developed for commercial use. Increased device availability, and additional roaming partnerships between public and private users, will encourage innovation and keep equipment and device prices lower.

#### **IV. CONCLUSION**

The Commission has a public interest obligation to provide first responders in all areas of the country with access to the PSBN. Rural first responders, and the rural citizens they serve, require access to the same communications capabilities as their urban counterparts. The Commission should prescribe clear network coverage requirements and deployment milestones to ensure that rural areas of the country are not left behind, and encourage efficiency in FirstNet's operation through the utilization of existing infrastructure and assets wherever possible. NRECA's and NTCA's members are eager to ensure that the efforts to construct a nationwide, interoperable PSBN in rural areas are as efficient and effective as possible, leveraging the best possible aspects of a public-private partnership between public safety representatives, FirstNet, and those of who have local experience in designing, constructing, and maintaining critical infrastructure.

The Commission also should institute rules for the 700 MHz public safety spectrum that align with existing service rules for CMRS, specifically the 700 MHz B- and C-Blocks, and with industry standards, thereby establishing the foundation for interoperability between spectrum bands. Interoperability in the 700 MHz spectrum bands will ensure that roaming between the PSBN and commercial networks can be accomplished at a lower total cost, and also allow for public safety users to leverage handsets and other devices developed for commercial use.

Respectfully submitted,

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