

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Amendment of Parts 1, 22, 24, 27, 74, 80, 90,)	WT Docket No. 10-112
95, and 101 to Establish Uniform License)	
Renewal, Discontinuance of Operation, and)	
Geographic Partitioning and Spectrum)	
Disaggregation Rules and Policies for Certain)	
Wireless Radio Services)	

REPLY COMMENTS OF SENSUS USA INC. AND SENSUS SPECTRUM LLC

Sensus USA Inc. and its wholly-owned subsidiary, Sensus Spectrum LLC¹ (collectively “Sensus”), respectfully submit these reply comments in response to the *Further Notice of Proposed Rulemaking* in the above-captioned proceeding.² For the reasons set forth below, the Commission should not impose new construction requirements or associated penalties on geographic licenses as part of the license renewal process, but should instead continue to use incentives to encourage buildout in rural areas. Alternatively, should the Commission decide to adopt such requirements, it should exempt narrowband geographic licenses that are being used to provide private wireless services.

¹ Sensus USA Inc. and Sensus Spectrum LLC are wholly-owned subsidiaries of Xylem Inc., a leading global water technology company.

² *Amendment of Parts 1, 22, 24, 27, 74, 80, 90, 95, and 101 to Establish Uniform License Renewal, Discontinuance of Operation, and Geographic Partitioning and Spectrum Disaggregation Rules and Policies for Certain Wireless Radio Services*, Second Report and Order and Further Notice of Proposed Rulemaking, WT Docket No. 10-112, FCC 17-105 (rel. Aug. 3, 2017) (“*Further Notice*”).

I. ADDITIONAL CONSTRUCTION REQUIREMENTS AND PENALITIES SHOULD NOT BE IMPOSED ON EXISTING LICENSES AS PART OF THE LICENSE RENEWAL PROCESS.

The overwhelming majority of commenters in this proceeding, including Sensus, oppose new construction requirements and associated penalties on existing licenses as part of the license renewal process. Commenters observe that such requirements would undermine licensees' expectations, impose unwarranted costs, and force uneconomic buildouts.³ Indeed, one commenter noted that applying "additional construction requirements on existing licensees would be fundamentally unfair and unduly burdensome."⁴ Instead, the majority of commenters urge the Commission to continue using incentives to encourage rural buildouts,⁵ which already are narrowing the rural digital divide.⁶ In addition, commenters encourage the Commission to wait to see the results of new, targeted incentives, such as the forthcoming MF-II auction (which will award \$4.53 billion for the deployment of 4G LTE in areas with no coverage or that lack 5 Mbps download speeds) before imposing additional construction requirements on licensees.⁷

In sum, there is very little support in the record for the proposal in the *Further Notice* to impose increasingly aggressive construction requirements on licensees in each successive license term. While three commenters representing the interests of rural wireless carriers voiced general support for this proposal, two of them argued that these requirements should apply only to larger wireless carriers given the economic challenges associated with deployments in rural areas, and

³ See, e.g., Blooston Comments at 4; Critical Messaging Association ("CMA") Comments at 3; CTIA Comments at 12-15; Sensus Comments at 3-4; Verizon Comments at 10-17.

⁴ Blooston Comments at 4.

⁵ See, e.g., CTIA Comments at 3-12; Sensus Comments at 4-5; Verizon Comments at 3-7.

⁶ See, e.g., Verizon Comments at 2-3.

⁷ See, e.g., Blooston Reply Comments at 8.

in order to avoid upsetting the planning and expectations of existing smaller rural licensees.⁸ In other words, even among the few commenters supporting the proposal, all but one seek to apply these rules only to larger mass market oriented carriers, and not to smaller specialized communication system providers like Sensus.

II. GEOGRAPHIC NARROWBAND LICENSES BEING USED TO PROVIDE PRIVATE WIRELESS SERVICES SHOULD BE EXEMPTED FROM ANY NEW CONSTRUCTION REQUIREMENTS.

Any new construction requirements adopted by the Commission in this proceeding should not be applied to geographic narrowband licenses being used to provide private wireless services. The Enterprise Wireless Alliance (“EWA”) argues that “licenses awarded in blocks of 1 megahertz or less, as well as those being used for private, internal communications, be exempt from any renewal construction obligations adopted by the FCC.”⁹ There is also support in the record for exempting licensees that use narrowband spectrum for paging, dispatch and private internal communications.¹⁰

There are three reasons to why geographic narrowband licenses providing private wireless services should be exempted from any new construction requirements. First, applying new construction requirements to these licenses does not further the Commission’s goal of narrowing the digital divide. Specifically, the *Further Notice* seeks to “encourage investment in wireless networks, facilitate access to scarce spectrum resources, and promote the development of mobile service to rural Americans . . .” in order to narrow the digital divide between rural and

⁸ See, e.g., Blooston Comments at 1, 4; and NTCA-The Rural Broadband Association (“NTCA”) Comments at 3-4.

⁹ See, e.g., EWA Comments at 1-2, 4-5.

¹⁰ Blooston Reply Comments at 1, 9-10; see also, American Messaging Services Comments at 3.

urban areas in the United States.¹¹ As support for this laudable goal, the *Further Notice* references the Commission’s *2016 Broadband Progress Report* which found that “advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion.”¹² For purposes of this report, the term “advanced telecommunications capability” is defined to mean “high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.”¹³ In other words, the digital divide identified by the Commission, which the proposals in the *Further Notice* are intended to address, is concerned with the availability of *switched broadband* telecommunications capability. In the absence of any finding that there is an urban/rural digital divide regarding narrowband private systems, these services should be excluded from consideration of the new construction requirements proposed in the *Further Notice*.

Second, applying new construction requirements to narrowband licenses will not achieve the Commission’s goal of increasing the availability of broadband service in rural areas. By definition, narrowband licenses consist of small slivers of non-contiguous spectrum that cannot be used to provide broadband service, which often require a minimum of 5 MHz of contiguous, paired spectrum. By contrast, the Narrowband PCS (“NPCS”) and Multiple Address System (“MAS”) services in which Sensus holds its licenses are channelized into blocks of spectrum

¹¹ *Further Notice* at ¶ 100.

¹² *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, 2016 Broadband Progress Report, 31 FCC Rcd 699, 700 (2016) (“*2016 Broadband Deployment Report*”).

¹³ *Id.* at 700 n.1 (quoting 47 U.S.C. § 1302(d)(1)).

with bandwidths that vary in size from 12.5 kHz to 150 kHz. Recapturing this spectrum on a license-by-license basis as the *Further Notice* contemplates will not make broadband service more readily available (both services together, in their entirety, occupy only 7 MHz of non-contiguous spectrum), but instead will handicap the further deployment of narrowband systems. In particular, the new construction requirements would make it more difficult for narrowband licensees (like Sensus) to continue expanding service to rural areas without materially adding to the amount of spectrum available for broadband use.

Third, the narrowband market has changed to such an extent that there would be no public interest benefit to applying new, stringent construction requirements to geographic narrowband licenses being used to provide private wireless services. Although the construction requirements for these licenses have remained largely unchanged since first adopted, the market segment served by such systems has dramatically evolved. While the Commission originally intended geographic narrowband licenses to serve mass market customers,¹⁴ this business model has largely disappeared due to fierce competition from mobile broadband carriers. As the Commission recently observed, “[n]arrowband data and paging service [today] comprise a specialized market segment of the mobile wireless industry . . . [providing services] consumed primarily by businesses, government users, and other institutions.”¹⁵ In most instances, narrowband customers require service coverage in limited geographic areas, such as within the confines of a specific campus (*e.g.*, a hospital or government center) or the service territory of a

¹⁴ See, *e.g.*, *Amendment of the Commission’s Rules to Establish New Narrowband Personal Communications Services*, Memorandum Opinion and Order, 9 FCC Rcd 1309, 1319 (1994) (Narrowband PCS construction benchmarks emphasize service to the public).

¹⁵ *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, Twentieth Report, WT Docket No. 17-69, FCC 17-126 at ¶ 18 (rel. Sept. 27, 2017) (“*Twentieth Competition Report*”).

water, gas or electric distribution utility, which necessitates a more limited type of network deployment than the kinds of ubiquitous networks needed to serve mass market customers. As a result, the additional construction requirements proposed in the *Further Notice*, which are intended to increase population or geographic coverage (particularly in rural areas), would impose new network construction requirements on narrowband geographic licenses that are no longer consistent with the types of services they provide. This is particularly true with respect to Sensus.

As Sensus observed in its comments, it holds hundreds of narrowband licenses (both NPCS and MAS licenses) that it leases to customers to support its customers' private wireless networks.¹⁶ Sensus does not sell mass market, consumer-oriented communications services; does not construct the kinds of ubiquitous wireless networks needed to serve such customers; and does not construct networks in advance and then market its services. Rather, Sensus sells an integrated communications solution, FlexNet, consisting of technology, equipment and leased spectrum. This product is marketed to critical infrastructure providers, including water, gas and electric distribution utilities, many of which are located in rural areas.¹⁷ Sensus's customers purchase and deploy these networks to support multiple applications, including advanced metering, power outage detection, distribution automation and monitoring, water leak detection, demand response, and equipment monitoring and control, among others. Sensus's customers

¹⁶ MAS licenses authorized after July 1, 1999 may only be used to provide private internal services. 47 C.F.R. §§ 101.147(a) n. 28, 101.1305. NPCS licenses, by contrast, are presumed to be common carrier, but this presumption may be overcome where a licensee provides private mobile radio services ("PMRS") (*i.e.*, services which are not provided for a profit, interconnected, or available to the public or a substantial portion of the public.) 47 C.F.R. § 20.9(b).

¹⁷ By number, the majority of Sensus system users are smaller utilities, principally located in rural areas.

determine where service is needed (i.e., in their mandated service territories) and then work with Sensus to deploy infrastructure necessary to serve those areas. This business model is particularly attractive to Sensus's smaller critical infrastructure clients, many of whom may otherwise lack the expertise or scale to acquire spectrum rights or deploy network solutions on their own. In the past 10 years, Sensus has sold and deployed over 2400 networks for critical infrastructure clients in the US and continues to add systems at a pace of over 300 per year. While some of these systems are large, many are small and rural; the median customer for a Sensus system connects with about 2200 endpoints (typically water, gas or electric meters).

This business model is a very different than the one envisioned when the Commission first licensed and adopted construction requirements for geographic narrowband licenses, but one which nevertheless clearly serves the public interest, convenience and necessity.¹⁸ Rather than providing common carrier services, Sensus, and many similarly-situated narrowband licensees, provide narrowband network solutions that are used for private, internal communications. Accordingly, any action taken in response to the *Further Notice* in order to reduce the urban/rural digital divide should distinguish between broadband geographic licenses used to provide advanced telecommunications capabilities, and narrowband geographic licenses (like those held by Sensus) which are used to provide private wireless services.

III. CONCLUSION

The Commission should not impose new construction requirements or associated penalties on geographic licenses as part of the license renewal process, but should instead continue to use incentives to encourage buildout in rural areas. Should the Commission decide

¹⁸ Sensus Comments at 10.

to adopt such requirements, it should focus its efforts on radio services that can help bridge the digital divide in advanced telecommunications services between urban and rural areas, and should exempt narrowband geographic licenses that are being used to provide private radio services instead.

Respectfully submitted,

By: /s/ David Alban

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