

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

In the Matter of)	
)	
Partitioning, Disaggregation, and Leasing of)	WT Docket No. 19-38
Spectrum)	
)	

COMMENTS OF FEDERATED WIRELESS, INC.

Federated Wireless, Inc. (“Federated Wireless”) hereby submits its comments in response to the Notice of Proposed Rulemaking (“NPRM”) issued by the Federal Communications Commission (“Commission”) in the above-captioned proceeding.¹ Federated Wireless commends the Commission for its ongoing efforts to ensure that valuable spectrum resources are made available to those who will expeditiously put spectrum to productive use, particularly in unserved and underserved rural areas. Federated Wireless encourages the Commission to use this proceeding to evaluate the use of available technology and tools to drastically reduce the transaction costs associated with the secondary spectrum market today and simplify the process for both licensees and prospective users, thus ensuring that the secondary spectrum market is as robust as possible and that it facilitates access for a wide variety of users. In particular, the Commission should examine the use of a voluntary, database-enabled approach, which would: (1) significantly reduce the transaction costs associated with the negotiation and implementation of secondary market agreements, thereby facilitating greater use of the Commission’s secondary market mechanisms, and (2) streamline the Commission’s performance of its spectrum management, licensing, and oversight obligations.

I. THE TRANSACTION COSTS OF NEGOTIATING AND IMPLEMENTING SECONDARY MARKET TRANSACTIONS UNDER THE EXISTING PROCESSES CREATE DISINCENTIVES TO LEASE OR SELL SPECTRUM USE RIGHTS.

As the Commission acknowledges, under the current secondary markets rules there exist “substantive [and] procedural barriers to leasing [and sales] that inefficiently limit the use of the program

¹ *Partitioning, Disaggregation, and Leasing of Spectrum*, WT Docket No. 19-38, Notice of Proposed Rulemaking, FCC 19-22 (2019) (“NPRM”).

by spectrum licensees,” such as the lengthy process to initiate negotiations to reach an agreement for a transaction that complies with Commission’s rules, prepare and file applications for Commission approval thereof, and then to await the Commission’s review and disposition of such applications.² This process obviously introduces friction at multiple points along the way: (a) identifying where suitable spectrum might be available for use pursuant to a secondary market transaction; (b) initiating, conducting, and concluding negotiations with the relevant licensee; (c) preparing and submitting the applications for Commission consent; and (d) awaiting Commission action on such applications. Licensees must therefore weigh the significant administrative burdens and costs of working through the secondary markets process, as well as the potential impact of such transactions on network and business planning, against the expected benefits associated with a transaction. Too often, the burdensome nature of the process skews this cost-benefit analysis against engaging in such transactions.

Such inefficiencies and their effect on the likelihood of success in negotiating a secondary market agreement for spectrum access are particularly problematic for small and rural carriers. These spectrum users are generally less likely to have the resources to obtain geographic area licenses at auction and are thus more likely to be disproportionately dependent on obtaining spectrum use rights through the secondary market to support their business needs and serve their customers. It is therefore imperative that the Commission use all of the tools at its disposal to better facilitate secondary markets transactions to ensure spectrum access is promptly enabled for all users who need it, such as rural and small carriers, particularly as the roll-out of 5G service rapidly approaches.

II. THE COMMISSION SHOULD USE A VOLUNTARY, DATABASE-ENABLED APPROACH TO AUTOMATE CRITICAL STEPS OF SECONDARY MARKET TRANSACTIONS AND FACILITATE MORE FRICTIONLESS SPECTRUM ACCESS FOR SMALL AND RURAL CARRIERS AND OTHER PROSPECTIVE USERS.

Requiring prospective spectrum users to undertake the lengthy process under the current secondary markets rules is inefficient and contravenes the Commission’s goals of enabling rapid spectrum access for users of all types. To reduce these inefficiencies and better incent licensees to enter into

² *Id.* at para. 25.

secondary market transactions with parties requiring spectrum access, including small and rural carriers, the Commission should take advantage of the capabilities of database-enabled approaches to automate and streamline many of the processes that introduce friction into today's secondary market for spectrum use. By leveraging the capabilities of these technologies to automate such transactions, the Commission can facilitate a more robust secondary market for spectrum use rights for all users as 5G, and the myriad, bandwidth-intensive applications it will enable, nears.

A. A Voluntary, Database-Enabled Approach to Streamlining Secondary Market Transactions Would Generate Benefits for Both Licensees and Prospective Users and Incent Greater Use of The Commission's Secondary Market Mechanisms.

Specifically, the Commission should authorize the establishment of one or more databases into which licensees could, on a voluntary basis, confidentially enter information regarding its existing deployments and the circumstances and terms (including, for example, protection criteria to be implemented between the licensee's operations and those of any prospective user) under which the licensee would agree to enter into a secondary market transaction. The administrator of the database could then calculate what spectrum is available in what locations, and publish aggregated, anonymized and obfuscated spectrum availability information that would not reveal any radio- or licensee-specific data while enabling prospective users to assess spectrum availability in their area. Such aggregated, anonymized and obfuscated data would provide prospective users general information about spectrum use while withholding potentially commercially sensitive or security-related, licensee-specific information, and thus would serve to balance the needs of licensees and prospective users. The database administrator would only be permitted to publish, for instance, a graphical mosaic or heat map—based on certain aggregated, anonymized or obfuscated licensee deployment information—showing the level of spectrum use in a given area and the amount of spectrum available (or in use). Such information would not reveal the licensee identity, specific location of any radio, or the specific frequencies in use, and a prospective counterparty would not obtain such details until it entered negotiations with the licensee (subject to a nondisclosure agreement if required by the licensee). This approach would address potential security and commercial concerns about the publication of such aggregated and anonymized data, as the licensee,

location, and operational information for any given deployment would be withheld from public disclosure, while permitting current and prospective users to better plan for future deployments.

Such an approach was recently implemented for the Citizens Broadband Radio Service³ and would reduce burdens for both prospective users and licensees, and thus should be applied more broadly to close the information gap between prospective users and licensees and facilitate more widespread, dense spectrum use. For prospective users, the existence of such a database would significantly streamline the process of identifying where suitable spectrum to support their needs is available. For licensees, voluntarily making such information available would similarly simplify the process of identifying counterparties whose needs match the licensee's current and future plans for use of its spectrum.

Moreover, by enabling licensees to upload the terms and conditions on which spectrum access would be made available, such a voluntary database would permit prospective users to review and instantaneously agree to those terms on a click-through basis. In so doing, this approach could significantly shorten the timelines and reduce the administrative costs of negotiating secondary market agreements. As a result, prospective users would be able to obtain the spectrum access they need in a much more expeditious and straightforward manner than they do today, enabling them to focus their resources on putting the spectrum to productive use at the earliest possible opportunity. This approach would also provide licensees with an effective tool for use by their sales organizations, allowing them to quickly and efficiently execute and implement commercial agreements that generate revenue for the business. This is particularly so in those geographic areas where full-scale deployments have presented a challenging business proposition for the licensee but where a prospective user has a need that can be met by the licensee's spectrum holdings.

Most importantly, by effectively automating the process of identifying counterparties and negotiating an appropriate agreement, the use of such a voluntary database would dramatically reduce the

³ See *Promoting Investment in the 3550-3700 MHz Band*, GN Docket No. 17-258, Report and Order, FCC 18-149, at paras. 112-23 (2018).

transaction costs associated with these steps today. In this way, a voluntary, database-enabled approach would help licensees monetize their unused or little-used spectrum, and do so with little corresponding cost. As described above, the licensee could determine upfront the protection criteria required to implement secondary market transactions in its license areas. Once it has made this determination and uploaded its requirements into the database, the licensee would not have to conduct its own interference analyses for each prospective transaction. Instead, the database administrator would conduct the necessary analyses to determine whether a prospective user's desired operations would comply with the licensee-specific protection criteria and, if it did not, would not present the prospective user with the option to initiate negotiations with the licensee. Similarly, by housing the terms and conditions on which a licensee would make spectrum available in the secondary market, which the licensee could customize to best fit its operations in particular areas and/or spectrum bands, and automating the negotiation process, this approach would relieve licensees of the need to devote legal and operational resources to each and every transaction as a one-off matter.

This voluntary, database-enabled approach would allow the licensee to provide its operational and financial requirements upfront and thereafter avoid ongoing management of the secondary market transaction negotiation and implementation process, instead only updating its requirements as necessary, thus providing a significant amount of cost avoidance. In reducing the costs associated with engaging in a secondary market transaction in this way, as well as more readily identifying potential counterparties, the use of such a voluntary database would fundamentally alter the cost-benefit analysis that licensees must conduct and thereby increase the likelihood that such an analysis would result in the execution of a commercial agreement between the licensee and the prospective user. This is particularly crucial as 5G roll-out approaches. 5G will enable a wide variety of new use cases, many of which will require robust throughput and capacity, and as a result 5G deployments will be conducted by many more non-traditional users than was the case in the transition from 3G to 4G. By facilitating streamlined secondary markets transactions, a voluntary, database-enabled approach would allow licensees to efficiently execute commercial agreements to provide such non-traditional users with the spectrum access they need, and thus aid in expediting the roll-out of 5G services.

B. A Voluntary, Database-Enabled Approach Would Facilitate Streamlined, Robust Commission Oversight of Spectrum Use.

In addition to incenting increased secondary market transactions between licensees and prospective spectrum users, a voluntary, database-enabled approach to such transactions could also aid the Commission in performing its spectrum management, licensing, and oversight functions. For example, to facilitate a given transaction, the database would have to obtain certain information that the Commission would likewise require for purposes of its oversight of the use of commercial spectrum: licensee and counterparty identities and information, licensed service of the spectrum at issue, geographic area covered by the transaction, amount of spectrum covered by the transaction, term of the agreement (for leases), etc. The database could similarly gather additional information required by the Commission, such as any required certifications as to the prospective user's qualifications for holding a license, including those related to foreign ownership, character and other requirements.⁴ By interfacing with the Commission's licensing databases, such as the Universal Licensing System, the voluntary secondary markets database could provide the Commission information on a transaction and the parties thereto that would allow the Commission to perform its oversight functions with respect to such a transaction on an expedited basis. Moreover, the voluntary secondary markets database could provide any ongoing reporting functions needed to ensure the Commission's records remain accurate, for example, as a secondary market agreement is terminated, extended, or modified in terms of the covered geography or spectrum.

In addition, by reducing the transaction costs associated with the current processes required to negotiate and implement a secondary market transaction, the use of a voluntary secondary markets database would enhance the effectiveness of regulatory incentives already enacted by the Commission. For example, the Commission's spectrum leasing rules provide that a licensee may rely on its lessee's buildout to satisfy any performance requirements applicable to the licensee.⁵ As noted above, however, a

⁴ See, e.g., 47 C.F.R. § 1.9046 (providing for the collection of such pre-certifications to streamline spectrum manager leases in the Citizens Broadband Radio Service).

⁵ See *id.* §§ 1.9020(d)(5), 1.9030(d)(5).

licensee must weigh the expected benefits of a given secondary market transaction against its expected costs, including those associated with negotiating and implementing it. Given the high transaction costs present in today's secondary market, the value of these benefits—including the ability to rely on a counterparty's activities to satisfy regulatory requirements—is effectively discounted. By reducing the expected costs of a given transaction, the use of a voluntary secondary markets database would eliminate this discount against the value of a transaction's benefits, giving existing regulatory incentives, such as the ability to rely on a lessee's buildout, the value the Commission expected when it adopted these rules.

III. CONCLUSION.

Federated Wireless applauds the Commission for its continued efforts to assure spectrum access for all users and encourages the Commission to examine every available tool at its disposal to accomplish these ends, particularly as 5G and its increased demands on our spectrum resources loom. For the foregoing reasons, the Commission should explore the use of a voluntary, database-enabled approach, which would: (1) significantly reduce the transaction costs associated with the negotiation and implementation of secondary markets agreements, thereby facilitating greater use of the Commission's secondary markets mechanisms; and (2) streamline the Commission's performance of its spectrum management, licensing, and oversight obligations. Federated Wireless stands ready to assist the Commission as it seeks to identify innovative ways to maximize spectrum access to support next-generation services and ensure ongoing U.S. leadership in the global wireless marketplace.

Respectfully submitted,

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