Dynamic Spectrum Alliance Limited

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May 31, 2023

National Telecommunications and Information Administration 1401 Constitution Ave., NW Washington, DC 20230

Re: NTIA Technical Report TR-23-567;
An Analysis of Aggregate CBRS SAS Data from April 2021 to January 2023

Dear NTIA-

The Dynamic Spectrum Alliance (DSA)¹ respectfully submits these comments to the National Telecommunications and Information Administration (NTIA) request for feedback on the above-referenced Technical Report and on ways to improve the Citizens Broadband Radio Service (CBRS) spectrum sharing framework.² We appreciate the opportunity to offer our perspectives on the growth of CBRS and its role in expanding wireless connectivity for a variety of new user and use cases. We fully agree that "[i]nnovative spectrum sharing frameworks are key to unlocking additional bandwidth for wireless connectivity across the country,"³ and we encourage NTIA to work with other federal agencies and the Federal Communications Commission (FCC) to identify opportunities to implement similar sharing and licensing frameworks in other bands in the near future.

The DSA and our members work with regulatory authorities around the world to promote new and innovative approaches to spectrum management to increase spectrum access options and extend connectivity. Such innovative approaches include the adoption of new licensing frameworks that incorporate licensed, unlicensed, and license-by-rule access options. In addition, the DSA promotes the use of automated dynamic spectrum management systems (DSMS) to make more efficient use of spectrum and support a wide range of commercial services, including wide-area mobile and fixed broadband networks, as well as local and private networks, use cases and applications.

One of the most successful implementations of an automated DSMS and novel licensing framework is CBRS, which has been a shining example of the myriad benefits of automated spectrum sharing since its commercial launch three and a half years ago. Through the automation of spectrum access on a

¹ The DSA is a global, cross-industry, not for profit organization advocating for laws, regulations, and economic best practices that will lead to more efficient utilization of spectrum, fostering innovation and affordable connectivity for all. Our membership spans multinationals, small-and medium-sized enterprises, as well as academic, research and other organizations from around the world all working to create innovative solutions that will benefit consumers and businesses alike by making spectrum abundant through dynamic spectrum sharing. A full list of DSA members is available on the DSA's website at dynamicspetrumalliance.org/members.

² Available at https://its.ntia.gov/publications/details.aspx?pub=3311&_ga=2.176539301.1440700034.1685465094-510747474.1678912661 (Technical Report).

³ McClain-Delaney, April, "The innovative spectrum sharing framework connecting Americans across the country," available at https://ntia.gov/blog/2023/innovative-spectrum-sharing-framework-connecting-americans-across-country.

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shared basis, a whole host of new services has emerged. In addition to densification of the nationwide public mobile networks, and use of these frequencies by rural wireless Internet service providers (WISPs), a wide variety of private networks are also using the CBRS band. From business to leisure, hundreds of smart manufacturing, agriculture, healthcare, logistics, education, transportation, energy management, entertainment, hospitality, and retail private networks have been deployed using the CBRS band as the result of having access to spectrum without the need for an individual license.

The Technical Report provides valuable data regarding the growth of CBRS deployments during the study period.⁴ This growth continues with over 339,000 CBRS devices (CBSDs) operating today across the United States. Furthermore, as also noted in the Technical Report, the vast majority of these using CBSDs operate in the GAA tier.⁵ We believe this dramatic growth has occurred in part because a variety of public and private network users can access spectrum on a near real-time basis for the duration and location of their choosing through an automated DSMS. This streamlined spectrum access leads to a larger and more diverse set of spectrum users, as well as a larger and more diverse ecosystem of equipment, software and technology developers, which ultimately benefits competition, creates conditions for innovation, and spurs more rapid deployments of new wireless broadband networks and services.

In order to ensure that we continue to enjoy the benefits that have accrued from shared access to the CBRS band, the DSA recommends that NTIA, the FCC, and the Department of Defense (DoD) work together to identify opportunities to enhance the CBRS sharing framework in ways that will further increase commercial access to CBRS spectrum while continuing to protect incumbent users. Much has been learned from the three and a half years of commercial CBRS operations, including the fact that there have been zero reports of interference by incumbents. Given this successful track record, we encourage NTIA, the FCC, and DoD to actively study and periodically implement adjustments to the CBRS sharing parameters (e.g., relaxing protection criteria, updating propagation models, reducing protection area activation timers, etc.). We also encourage NTIA to leverage DSMS tools and advanced radio capabilities to collect and report real-world data on noise floor, propagation, spectrum usage, and interference, which can then be utilized to adjust the CBRS sharing parameters and lead to greater efficiency.

The DSA and our members are available to discuss these comments and provide any additional information and insights on dynamic spectrum management and opportunities for further enhancement to the CBRS sharing framework.

Respectfully submitted,

President, Dynamic Spectrum Alliance

⁵ Id. at xi.

⁴ Technical Report at 6.