PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-643
Released: July 3, 2024

WIRELESS TELECOMMUNICATIONS BUREAU AND OFFICE OF ENGINEERING AND TECHNOLOGY APPROVE CERTIFIED SAS ADMINISTRATORS TO USE MODIFIED AGGREGATE INTERFERENCE MODEL

GN Docket Nos. 17-258 and 15-319

With this Public Notice, the Wireless Telecommunications Bureau (WTB) and the Office of Engineering and Technology (OET) of the Federal Communications Commission (Commission or FCC) notify five certified Spectrum Access System (SAS) administrators[1]—Federated Wireless, Google, Key Bridge, RED Technologies, and Sony[2]—that they are now authorized to implement the changes to the existing aggregate interference model used to protect federal operations in the 3.55-3.7 GHz (3.5 GHz) band from Citizens Broadband Radio Service operations described in the National Telecommunications and Information Administration's (NTIA's) June 11, 2024 letter and the Commission's June 12, 2024 Public Notice.[3] Each of these five SAS administrators has demonstrated the ability to successfully implement the modified aggregate interference model, including system testing in a non-operational

[1] On January 27, 2020, WTB and OET approved four SAS administrators for full scale commercial deployment in the 3.5 GHz band. *See WTB And OET Approve Four Spectrum Access System Administrators For Full Scale Commercial Deployment In The 3.5 GHz Band And Emphasize Licensee Compliance Obligations In The 3650-3700 MHz Band Under Part 96*, GN Docket No. 15-319, Public Notice, 35 FCC Rcd 117 (WTB/OET 2020). WTB and OET subsequently approved three more SAS administrators for commercial operations. *See Wireless Telecommunications Bureau and Office of Engineering and Technology Approve Spectrum Access Administrator Amdocs for Full Scale Commercial Deployment in the 3.5 GHz Band*, GN Docket No. 15-319, Public Notice, 35 FCC Rcd 3687 (WTB/OET 2020); *Wireless Telecommunications Bureau and Office of Engineering and Technology Approve Key Bridge Wireless for Full Scale Commercial Deployment in the 3.5 GHz Band*, GN Docket No. 15-319, Public Notice, 36 FCC Rcd 4880 (WTB/OET 2021); *Wireless Telecommunications Bureau and Office of Engineering and Technology Approve Spectrum Access System Administrator Red Technologies for Full Scale Commercial Deployment in the 3.5 GHz Band, to Support Spectrum Manager Leasing, and to Use Key Bridge Wireless LLC's Environmental Sensing Capability*, GN Docket No. 15-319, Public Notice, DA 23-893, 2023 WL 6263552 (WTB/OET 2023).

[2] Federated Wireless, Google, Key Bridge, RED Technologies, and Sony submitted test reports and supporting documentation in GN Docket No. 15-319 between June 14 and July 1, 2024. Federated Wireless, Google, Sony, and RED Technologies requested confidential treatment for portions of their submissions. On July 2, 2024, Nokia Innovations LLC also submitted test reports and supporting documentation that will be addressed as part of WTB and OET's consideration of Nokia's Initial Commercial Deployment proposal. Amdocs did not submit a test report.

[3] *Wireless Telecommunications Bureau and Office of Engineering and Technology Announce Modified Aggregate Interference Model Used by Spectrum Access System Administrators*, GN Docket Nos 15-319 and 17-258, Public Notice, DA 24-553 (WTB/OET 2024) (WTB/OET Aggregate Interference Model Public Notice); Letter from Charles Cooper, Associate Administrator, Office of Spectrum Management, NTIA, to Ronald T. Repasi, Chief, OET, FCC, and Joel Taubenblatt, Chief, Wireless Telecommunications Bureau, FCC (June 11, 2024) (NTIA June 11, 2024 Letter) (footnotes excluded).

environment, as required by WTB and OET's Aggregate Interference Model Public Notice and described in NTIA's letter.[4]

Specifically, consistent with WTB and OET's Aggregate Interference Model Public Notice and NTIA's letter, WTB and OET authorize Federated Wireless, Google, Key Bridge, RED Technologies, and Sony to apply the following specific changes to the aggregate interference model used to protect federal operations in the 3.5 GHz band:

- The SAS administrators may assume an 80% TDD activity factor and 20% network loading factor for each CBSD in the aggregate interference calculation. The total impact will reduce, by 8 dB, the equivalent isotopically radiated power (EIRP) used in the aggregate interference calculations for each CBSD.
- The SAS administrators may use median Irregular Terrain Model (ITM) terrain dependent propagation loss (in dB)—using reliability and confidence factors of 0.5—to calculate the aggregate received power levels within a DPA.
- The SAS administrators may apply median clutter loss—calculated using the methodology described in Recommendation ITU-R P.2108,[5] section 3.2 —for any CBSD with an antenna height Above Ground Level (AGL) of less than or equal to six meters, that is operating at a distance of at least 250 meters from a DPA boundary.[6]

WTB and OET, in close collaboration with NTIA and Department of Defense, have reviewed the submissions made by Federated Wireless, Google, Key Bridge, RED Technologies, and Sony, and find that these five SAS administrators have demonstrated the capability to effectively implement the modified aggregate interference model parameters. Accordingly, Federated Wireless, Google, Key Bridge, RED Technologies, and Sony are authorized to provide commercial service using the revised aggregate interference model.

By the Chief, Wireless Telecommunications Bureau, and the Chief, Office of Engineering and Technology.

- FCC –

[4] WTB/OET Aggregate Interference Model Public Notice at 2-3; NTIA June 11, 2024 Letter.

[5] ITU, Recommendations, Rec. P.2108, "Prediction of Clutter Loss" (Sept. 2021), https://www.itu.int/rec/R-REC-P.2108/en.

[6] WTB/OET Aggregate Interference Model Public Notice at 2; NTIA June 11, 2024 Letter at 2.