

What's New in 5G - October 2022

Article By:

Angela Y. Kung

Christen B'anca Glenn

The next-generation of wireless technologies – known as 5G – is expected to revolutionize business and consumer connectivity, offering network speeds that are up to 100 times faster than 4G LTE, reducing latency to nearly zero, and allowing networks to handle 100 times the number of connected devices, enabling the “Internet of Things.” Leading policymakers – federal regulators and legislators – are making it a top priority to ensure that the wireless industry has the tools it needs to maintain U.S. leadership in commercial 5G deployments. This blog provides monthly updates on FCC actions and Congressional efforts to win the race to 5G.

Regulatory Actions and Initiatives

Spectrum

Low-Band

- NTIA releases a report on the potential for sharing spectrum between new commercial wireless services and federal users and the impact on the weather community.
 - On September 6, 2022, the National Telecommunications and Information Administration (“NTIA”) submitted a [letter](#) and associated Spectrum Pipeline Reallocation Engineering Study [report](#) prepared by the National Oceanic and Atmospheric Administration (“NOAA”) to the FCC regarding the potential for sharing of spectrum at 1675-1680 MHz between incumbent Federal and new non-Federal operations. The FCC previously issued a Notice of Proposed Rulemaking to consider sharing of the band, and Ligado Networks LLC (“Ligado”) has been advocating that the spectrum should be auctioned for commercial mobile services. The report finds that there is a significant risk of harmful interference for some systems but, given time, NOAA may be able to establish sufficient redundancy and alternative means of distributing key data to preserve its ability to carry out its critical missions.
- NTIA releases a report on the potential use of spectrum by Ligado for commercial wireless services and the impact on adjacent GPS operations.

-
- On September 9, 2022, the National Academies of Sciences, Engineering, and Medicine (“NAS”) released a [report](#) on the potential impact to GPS operations by Ligado’s proposed use of spectrum adjacent to GPS in the 1526-1536 MHz, 1627.5-1637.5 MHz, and 1646.5-1656.5 MHz bands (together the “L-band”) for commercial mobile services. The FCC previously permitted Ligado to proceed with its proposed network in an [Order](#) released in April 2020, and the NAS was directed by Congress to conduct an independent study on whether there would be harmful interference. Without concluding whether the FCC made the correct decision, the NAS finds that while Ligado’s network will not cause harmful interference to most GPS devices, some high precision receivers will be vulnerable. It also includes suggestions for approaching spectrum policy and how disputes regarding spectrum use may be resolved in the future, including, for example, through the establishment of receiver standards.
 - A [News Release](#) issued by the NAS quotes J. Michael McQuade, who chaired the committee responsible for the report, as saying “spectrum real estate should be seen as a living asset that evolves alongside new technologies,” and “to ensure stability, approaches must also allow for a degree of confidence that a deployed system will not be compromised, for a time, by harmful interference from new entrants.”

Mid-Band

- The FCC reminds incumbents in the 3.5 GHz band to file for protection, permits the NFL to continue to use the band for wireless coverage at stadiums, and grants relief to those impacted by inclement weather.
 - On September 16, 2022, the FCC’s Wireless Telecommunications Bureau (“WTB”), Office of Engineering and Technology (“OET”), and International Bureau (together the “Bureaus and Office”) released a [Public Notice](#) reminding operators of grandfathered Fixed Satellite Service earth stations entitled to protection from Citizens Broadband Radio Service (“CBRS”) users in the 3.5 GHz band of their annual December 1 registration requirement. The Bureaus and Office also established a one-time, 30-day grace period ending on October 17, 2022 for meeting the deadline to complete the annual registration for 2022, which was December 1, 2021. After that date, registrations that have not been completed for 2022 may be deactivated or deleted, and the site will no longer merit protection by the Spectrum Access System (“SAS”) administrators. The Bureaus and Office reminded all registrants to remove or deactivate registrations for inactive sites, including those that were taken offline as a result of the 3.7 GHz band (or C-band) transition process.
 - On September 7, 2022, the WTB issued an [Order](#) granting the National Football League’s (“NFL’s”) request for an extension of its CBRS communications waiver through the 2022-2023 NFL season, subject to the same conditions discussed in the WTB’s [2021 Order](#). The NFL initially asked for a waiver of the rule that otherwise requires that CBRS communications go through a SAS, and the WTB granted the NFL’s request [last July](#). Although the NFL requested an extension of the waiver through the end of the 2024-2025 season, the WTB found that one additional season should be sufficient for the NFL to assess whether a tertiary level of ISP redundancy is required to support its coach-to-coach communications systems in the long-term.

-
- Finally, in the wake of Hurricane Fiona and Hurricane Ian, the WTB released separate Orders granting relief to certain SAS administrators. Specifically, on September 22, 2022, the WTB released an [Order](#) granting Federated Wireless a limited waiver of the requirement for Environmental Sensing Capabilities (“ESCs”) to detect and protect federal incumbent users in the 3550-3700 MHz band from harmful interference in the areas of Puerto Rico impacted by Hurricane Fiona. Similarly, on September 30, 2022, the WTB released an [Order](#) granting a limited waiver to Federated Wireless, CommScope, and Google of the ESC requirement for areas in Florida impacted by Hurricane Ian.

High-Band

- The FCC to consider potential use of the 12.7-13.25 GHz band for commercial wireless services.
 - On September 21, 2022, FCC Chairwoman Rosenworcel [announced](#) at the [NTIA Spectrum Policy Symposium](#) that the FCC intends to include a Notice of Inquiry on potential use of the 12.7-13.25 GHz band for commercial mobile services on the agenda for its October meeting.
 - Subsequently, on September 19, 2022, the WTB, Public Safety and Homeland Security Bureau (“PSHSB”), and International Bureau issued a [Public Notice](#) freezing, for 180 days, most applications for use of the 12.7-13.25 GHz band to create a stable regulatory environment for the band. The freeze affects applications for space, earth, broadcast auxiliary, cable relay, and fixed microwave stations.
- NTIA releases a report that will be used to evaluate the use of millimeter wave spectrum for 5G wireless services.
 - On September 12, 2022, NTIA [announced](#) that its research laboratory – the Institute for Telecommunication Sciences – released [Technical Report TR-22-561](#) last month on outdoor millimeter wave propagation measurements in the 37-40 GHz band in Boulder, Colorado. The purpose of study was to better understand the radio propagation environment in millimeter wave bands, which, in turn, will support the development and deployment of 5G networks in that spectrum. The data summarized in the report will be provided to NTIA’s Office of Spectrum Management to be used to validate 3GPP and other millimeter wave propagation prediction models and may be used to develop more accurate models in the future.

5G Networks and Infrastructure

- NTIA works with Australia to collaborate on strengthening networks and the potential use of Open RAN.
 - On September 14, 2022, NTIA released a [blog](#) announcing that the agency signed a [statement](#) with the Australian Department of Home Affairs to cooperate in the development and strengthening of open, interoperable and disaggregated telecommunications approaches, such as Open RAN. NTIA agreed to, among other

things, regular information sharing on 5G testing-related efforts.

- The FCC adds several entities to its list of companies that produce equipment and services that pose a national security risk and reminds companies receiving reimbursement for removing such services and equipment of their reporting obligations.
 - On September 20, 2022, the FCC released a [Public Notice](#) announcing that Pacific Networks Corp., ComNet (USA) LLC, and China Unicom (Americas) Operations Limited have been added to its list of “covered communications equipment or services” that pose a national security risk. The FCC added the companies to its list in response to two letters released on September 16, 2022, from the U.S. Department of Justice (with the concurrence of the Department of Defense) – one available [here](#) and another available [here](#) – directing the FCC to do so.
 - In the FCC’s [News Release](#) about the addition of the companies, FCC Chairwoman Rosenworcel commented that “[t]oday’s actions are part of our ongoing effort to protect and strengthen the integrity of our nation’s critical communications network.”
 - On September 16, 2022, the FCC’s Wireline Competition Bureau released a [Public Notice](#) reminding parties that have been allocated funding under the Secure and Trusted Communications Networks Reimbursement Program to remove insecure equipment and services to submit status updates every 90 days, beginning on the date their funding was approved, until a final certification that removal and replacement is complete is filed. Because applications were approved on July 15, 2022, initial status updates are due on October 13, 2022.

Other Agency Actions

- NTIA announces that it will coordinate more closely with the FCC on spectrum issues.
 - On September 13, 2022, Charles Cooper, Associate Administrator of the Office of Spectrum Management at NTIA, issued a [blog](#) on the [Memorandum of Understanding](#) (“MOU”) between the FCC and NTIA on spectrum coordination in the future. Among other things, Mr. Cooper explains that, consistent with the MOU, NTIA is working to file more comments with the FCC to transparently communicate and help stakeholders identify potential issues early in the rulemaking process.
- The FCC extends filing and regulatory deadlines for wireless service providers impacted by inclement weather.
 - On September 20, 2022, the WTB, PSHSB, and Office of Economics and Analytics (“OEA”) released a [Public Notice](#) extending certain deadlines occurring from September 18, 2022, to October 18, 2022, for licensees and applicants in the areas affected by Hurricane Fiona. Among other things, the Public Notice grants an extension until October 19, 2022, for applicants that were winning bidders in the auction of 2.5 GHz band spectrum to submit their final payments for the spectrum.
 - Similarly, on September 30, 2022, the WTB and PSHSB released a [Public Notice](#) extending the filing and regulatory deadlines for the State of Florida and the State of

South Carolina in light of the damage caused by Hurricane Ian. This is an additional extension to their [prior grant](#) to the State of Florida on September 29, 2022, which extended certain deadlines occurring from September 24, 2022, to October 24, 2022, for affected licensees and applicants in the affected areas.

Legislative Efforts

- President Biden signs into law legislation that extends the FCC's auction authority.
 - On September 30, 2022, President Biden signed into law the [Continuing Appropriations and Ukraine Supplemental Appropriations Act, 2023](#) ("Continuing Resolution"), which, among other things, extends the FCC's general auction authority, which was set to expire the day the Continuing Resolution was signed, to December 16, 2022.
 - Relatedly, the FCC's OEA released a Congressionally-mandated [Public Notice](#) on September 30, 2022, which estimates that no auctions will be initiated between now and December 16, 2022. In addition, OEA notes that auction authority for the 3.1-3.45 GHz band does not expire by December 16, and that an auction for the band cannot occur until at least November 30, 2024. Accordingly, it concludes that this spectrum will not be auctioned in the 2023 Fiscal Year. OEA also notes that auction authority for the 30 megahertz specified in the [2015 Spectrum Pipeline Act](#) does not expire on December 16, 2022, and because NTIA has not identified the 30 megahertz to be auctioned, that 30 megahertz will not be auctioned during the 2023 Fiscal Year either. Finally, OEA notes that the FCC has several active proceedings that may lead to auctions in the future, including the 12.7 GHz band, and that it may "examine for potential re-auction its inventory of licenses in services well-suited for 5G that were previously offered at auction, such as 600 MHz and AWS-3."

©1994-2025 Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. All Rights Reserved.

National Law Review, Volume XII, Number 278

Source URL: <https://natlawreview.com/article/what-s-new-5g-october-2022>