



NOV 25 2013

Mr. Julius P. Knapp
Chief, Office of Engineering and Technology
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

RE: Amendment of the Commission's Rules with Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz bands (GN Docket No. 13-185)

Dear Mr. Knapp:

The National Telecommunications and Information Administration (NTIA) appreciates that the Federal Communications Commission (FCC) has commenced the above-referenced rulemaking proceeding to repurpose the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz bands for additional Advanced Wireless Services (AWS-3).¹ This rulemaking represents a critical step to meet U.S. spectrum needs for wireless broadband while ensuring that federal agencies can continue to perform their essential missions. In this letter, NTIA responds to the *AWS-3 NPRM* for purposes of: (1) supplementing the information NTIA submitted to the FCC in July and April 2013 prior to adoption of the *NPRM*;² (2) proposing specific changes to the U.S. Table of Frequency Allocations for the 2025-2110 MHz band that are necessary to implement the alternative proposal of the Department of Defense (DoD) to relocate key operations from the 1755-1780 MHz band;³ and (3) addressing other important issues raised in the *NPRM*.

First, NTIA transmits for inclusion in the record of the AWS-3 proceeding the enclosed reports that have been approved by NTIA's Commerce Spectrum Management Advisory Committee (CSMAC) pertaining to the 1695-1710 MHz and 1755-1850 MHz bands.⁴ NTIA endorses the recommendations contained in these reports. The dialog and

¹ See Amendment of the Commission's Rules with Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz Bands, *Notice of Proposed Rulemaking* in GN Docket No. 13-185, 28 FCC Rcd 11479 (Jul. 23, 2013) (*AWS-3 NPRM*), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-13-102A1_Red.pdf.

² See Letter from Karl B. Nebbia, Associate Administrator, Office of Spectrum Management, to Julius P. Knapp, Chief, Office of Engineering and Technology (July 22, 2013) (*NTIA July 2013 Letter*), available at <http://apps.fcc.gov/ecfs/document/view?id=7520933143>; Letter from Lawrence E. Strickling, Assistant Secretary for Communications and Information, U.S. Dept. of Commerce, to Julius Genachowski, Chairman, FCC (Apr. 19, 2013) (*NTIA April 2013 Letter*), available at <http://go.usa.gov/WcEz>.

³ See *NTIA July 2013 Letter* at Enclosure 1, Letter from Teresa M. Takai, Chief Information Officer, DoD, to Lawrence E. Strickling, Assistant Secretary for Communications and Information, U.S. Dept. of Commerce (Jul. 17, 2013).

⁴ NTIA previously transmitted to the FCC two CSMAC reports with the *NTIA April 2013 Letter*, including recommendations developed in CSMAC Working Groups 1 and 2. On July 24, 2013, the CSMAC approved a revised version of the Working Group 1 report, which is enclosed. See CSMAC, "1695-1710 MHz

information exchanges conducted within the CSMAC's five working groups serve as an excellent example of government/industry collaboration that NTIA plans to formalize and draw upon in the future. In a recent executive memorandum, President Obama stated that these discussions between agencies and non-federal entities have "produced an unprecedented level of information-sharing and collaboration to identify opportunities for agencies to relinquish or share spectrum."⁵ These discussions also led directly to the industry roadmap and alternative DoD proposal referenced in the *AWS-3 NPRM*. NTIA continues to encourage and facilitate further collaboration between federal and industry stakeholders, which NTIA believes will lead to further improvement in the analysis in support of greater wireless broadband access and reliable relocation and sharing approaches.

Second, NTIA fully supports DoD's proposal for the 1755-1780 MHz band transmitted to the FCC in July. As NTIA noted then, the proposal would reduce estimated costs and eliminate the need to displace any non-federal incumbents. Implementation of this proposed approach requires a change to the U.S. Table of Frequency Allocations for the 2025-2110 MHz band.⁶ Specifically, NTIA proposes in Enclosure (1) that the FCC and NTIA: (a) add primary FIXED and MOBILE allocations in this band to the Federal Table of Frequency Allocations in column 4, 47 C.F.R. §2.106; (b) include two new footnotes limiting federal operations to the military and specifying coordination requirements⁷ for new military operations, providing protection and priority to non-federal operations specified in the proposed US footnote; and (c) delete current footnote US393 from the table. Under these changes, DoD would use this spectrum efficiently, taking into account national security requirements and the need to have the flexibility to share with non-federal fixed and mobile operators in the Television Broadcast Auxiliary Service, the Cable Television Relay Service, or the Local Television Transmission Service. These changes would provide DoD additional spectrum access to a band with comparable technical characteristics to restore essential military capabilities that will be lost as a result of relocating systems out of 1755-1780 MHz, a statutory requirement under the Secretary of Commerce's, DoD's, and the Chairman of the Joint Chiefs of Staff's joint certification to Congress under the National Defense Authorization Act for Fiscal Year 2000.⁸

Meteorological-Satellite," Final Report of Working Group 1, Rev. 1 (July 23, 2013), *available at* <http://go.usa.gov/DfIR>. This report includes, in Table 2 in Appendix 1.1, a revised list of federal sites that require protection.

⁵ Memorandum for Heads of Executive Departments and Agencies, *Expanding America's Leadership in Wireless Innovation* (June 14, 2013), 78 Fed. Reg. 37431, 37433 at § 2(a) (June 20, 2013), *available at* <http://www.gpo.gov/fdsys/pkg/FR-2013-06-20/pdf/2013-14971.pdf>.

⁶ See *AWS-3 NPRM* at ¶¶ 82, 175. In addition to seeking comment on any changes to the Table of Frequency Allocations that would be necessary to effectuate DoD's proposal for increased federal access to the 2025-2110 MHz band, the *AWS-3 NPRM* sought comment on a study conducted by the National Aeronautics and Space Administration (NASA) that assessed potential harmful interference from potential new commercial transmitters in the 2025-2110 MHz band to federal non-geostationary satellite stations. See *id.* at ¶ 21. Enclosed please find for inclusion in the record of GN Docket No. 13-185 NASA's response to comments from three parties that addressed the NASA study.

⁷ As stated in the proposed US footnote, coordination should occur via a memorandum of understanding between the federal and non-federal fixed and mobile operators in the Television Broadcast Auxiliary Service, the Cable Television Relay Service, or the Local Television Transmission Service. A disclosure process similar to 47 C.F.R. § 27.1134 (e)(2) (agreements between AWS-4 operators and federal entities) would be appropriate and should be incorporated into the FCC rules.

⁸ See *AWS-3 NPRM* at ¶ 178 (*citing* Sec. 1062(b) of Public Law No. 106-65).

As stated in the proposed US footnote, all new fixed and mobile military operations would protect the Television Broadcast Auxiliary Service, the Cable Television Relay Service, and the Local Television Transmission Service and would not constrain the activities of these non-federal services. Non-federal operations in the band would make all reasonable efforts to accommodate military mobile and fixed operations in the band. The proposed coordination requirements may result in improved processes over those currently employed pursuant to footnote US393, which would be deleted. Operations authorized under the current footnote US393 will need to be accounted for under the new fixed and mobile allocation. The proposed G footnote would require, to the extent practicable, new fixed and mobile military stations to employ frequency agile technologies and techniques, including the capability to tune to other frequency bands.⁹ This overall approach will increase spectrum efficiency and utilization while freeing up valuable frequencies in the 1755-1780 MHz band.¹⁰ In addition, the proposal would remove from future consideration the 5150-5250 MHz band as a comparable destination band for DoD aeronautical mobile telemetry systems,¹¹ which should allow greater flexibility in FCC decisions with respect to improving access to the 5 GHz band for unlicensed broadband devices.

Third, NTIA appreciates the FCC seeking comment on options for preserving federal users' access to the AWS-3 bands on federal lands and military training ranges in unpopulated areas that are generally unserved by commercial wireless networks.¹² NTIA agrees that expanding opportunities for federal access to this spectrum, including bands not specifically allocated for federal use (e.g., 2155-2180 MHz), may allow federal agencies greater flexibility to meet tactical, training, and other requirements.¹³ Federal agency domestic spectrum needs, particularly DoD's, sometimes require intermittent or geographically limited tactical and training operations that may not hinder the nationwide implementation of wireless broadband services.

⁹ For example, a modular retrofit band capability could facilitate non-military or other use of similar equipment in other allocated bands.

¹⁰ Although the federal systems in question are relocating from 25 megahertz of spectrum into 85 megahertz of spectrum, the conditions described in the footnote are intended solely to ensure that DoD can maintain comparable capability of current activities utilizing the 1755-1780 MHz band following relocation. Providing federal systems access to the wider swath of spectrum in the 2025-2110 MHz band follows from the fact that in the band, unlike the 1755 MHz band, the federal systems will share with non-federal systems. Thus, the federal systems will have the flexibility they need to operate without limiting the existing non-federal users.

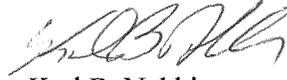
¹¹ See *NTIA July 2013 Letter* at Enclosure 1. See also *NTIA April 2013 Letter* at 3; Letter from Lawrence E. Strickling, Assistant Secretary for Communications and Information, U.S. Dept. of Commerce, to Julius Genachowski, Chairman, FCC, in ET Docket No. 13-49 (Feb. 19, 2013) at 3-4, available at <http://apps.fcc.gov/ecfs/document/view?id=7022126657>; FCC, Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band, *Notice of Proposed Rulemaking* in ET Docket No. 13-49, 28 FCC Rcd 1769, 1781 n.45 (2013), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-13-22A1_Red.pdf.

¹² See *AWS-3 NPRM* at ¶ 81.

¹³ The NTIA Manual of Regulations and Procedures for Federal Radio Frequency Management already authorizes access to a wide range of non-federal bands for military tactical and training operations, including the 2155-2180 MHz band. See, e.g., *NTIA Manual* at § 7.15.3.5.d, available at http://www.ntia.doc.gov/files/ntia/publications/redbook/2013/7_13.pdf.

NTIA looks forward to our further collaborative efforts in this important proceeding. If you have any questions, please contact me or Byron Barker, Chief, Strategic Planning Division, Office of Spectrum Management at bbarker@ntia.doc.gov or (202) 482-5526.

Sincerely,



Karl B. Nebbia
Associate Administrator
Office of Spectrum Management

Enclosures (6)