

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of:	)	
	)	
Expanding Flexible Use of the	)	GN Docket No. 18-122
3.7 to 4.2 GHz Band	)	

**COMMENTS OF  
NATIONAL PUBLIC RADIO, INC.**

**I. Introduction and Summary**

National Public Radio, Inc. (“NPR”) hereby submits its comments in response to the Public Notice in the above-captioned proceeding.<sup>1</sup> These comments are offered on behalf of the public radio system, a national, nonprofit media enterprise consisting of more than 1000 independently owned local public radio stations that broadcasts to almost forty-one million Americans weekly and which collectively creates and distributes content through the Public Radio Satellite System (“PRSS”). Programs distributed over the PRSS span a variety of formats, including national and local news, cultural information, public affairs, and music, and come from a wide variety of producers and distributors in addition to NPR, including American Public Media (APM), Public Radio International (PRI), and more than 100 others. By enabling its interconnected stations to receive and send programming across the satellite interconnected network, the PRSS is able to bring important voices to listeners throughout a state, a region, or the country. In addition, the PRSS and C-band satellite service transmit FEMA emergency

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<sup>1</sup>International Bureau and Wireless Telecommunications Bureau Seek Focused Additional Comment in 3.7-4.2 GHz Band Proceeding, Public Notice, GN Docket No. 18-122 (rel. May 3, 2019) (“Public Notice”).

alerting and other public safety information, and provide bandwidth for in-state and regional public radio and emergency networks.

PRSS-interconnected public radio stations, including both NPR and non-NPR stations, maintain and operate 475 receive-only earth stations. Public radio programming ultimately reaches 98.5% of the U.S. population, including in rural and underserved areas of the country. Rural communities in particular rely on their local public radio station and, in turn, the PRSS, as an important and sometimes exclusive source of news, public safety information, and unique community and cultural programming. The PRSS relies on C-band satellite technology because it is the most cost-effective, most reliable, most ubiquitous, and in some areas the only means of delivering high-quality and live audio programming to a national network of public radio stations serving hard to reach and geographically diverse communities.

As manager of the PRSS, NPR specifically responds to the Bureaus' questions on the rights of receive-only earth stations to protection against interference and the Commission's obligations and authority to authorize payments to earth stations if the Commission permits new terrestrial operations in the C-band. The PRSS and the public radio system are completely dependent on low-power satellite-to-earth station C-band downlinks that are particularly susceptible to interference. Any reallocation to permit additional terrestrial C-band use must provide adequate C-band spectrum for incumbent use and protect the public radio earth station downlinks from interference, a goal that is especially important given Congress's substantial, ongoing long-term investment in the PRSS. Public radio stations have long depended on the Commission's policy of protecting receive-only earth stations from interference. NPR and the

public radio system therefore appreciate the Commission's stated goal in this proceeding of protecting incumbent users of the C-band from harmful interference and other disruption.<sup>2</sup>

NPR welcomes this opportunity to explain the basis and ongoing need for receive-only earth stations' rights to protection from interference and their rights to participate in any spectrum reallocation procedure, including an incentive auction. These Comments respond to the focused legal questions raised in the Public Notice, and do not necessarily support the various approaches for which questions are posed. Rather, the point is that regardless of which approach the Commission may adopt to clear part of the C-band, incumbent earth stations have rights to use C-band spectrum free from harmful interference and the Commission has the obligation and authority to address the immediate and ongoing harm to incumbent earth station users caused by any transition.

## **II. Discussion**

### **A. Receive-only Earth Stations Have the Same Rights as Licensees.**

For over five decades, the Commission's position on the rights of receive-only earth stations has been consistent and clear: they possess the same rights as any other licensed spectrum user, including the right to use the spectrum free from interference.<sup>3</sup> In 1991, the Commission transitioned receive-only earth stations from a licensing procedure to a voluntary registration system. But as the Commission made clear in the 1991 Order, and as the Bureaus reiterated in the Public Notice, this transition did not alter receive-only earth stations' substantive

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<sup>2</sup> *In the Matter of Expanding Flexible Use in Mid-Band Spectrum Between 3.7 to 24 GHz*, Notice of Proposed Rulemaking, GN Docket No. 18-122, at para. 17. (rel. July 13, 2018).

<sup>3</sup> *See*, Regulation of Domestic Receive-Only Satellite Earth Stations, 74 FCC 2d 205 (1979) ("1979 Order"); Deregulation of Domestic Receive-Only Satellite Earth Stations, 104 FCC 2d 348 (1986) ("1986 Order"); Amendment of Part 25 of the Commission's Rules and Regulations to Reduce Alien Carrier Interference Between Fixed-Satellites at Reduced Orbital Spacings and to Revise Application Processing Procedures for Satellite Communications Services, First Report and Order, 6 FCC Rcd 2806 (1991) ("1991 Order").

rights, which were to remain the same as other spectrum licensees.<sup>4</sup> The change from licenses to registration was intended only to streamline the process for receiving the rights as well as to make registration optional.<sup>5</sup>

## **B. Receive-only Earth Stations Are Entitled to Complete Protection from Interference.**

The Commission's commitment to protecting receive-only earth stations from harmful interference dates from the dawn of the satellite industry. In its 1970 Order considering the question, the Commission concluded that such stations needed to be licensed in order to effectuate such protection.<sup>6</sup> The Commission's view on the need for receive-only earth stations to apply for licenses evolved over the ensuing years, culminating in the 1991 Order, which shifted to a voluntary registration system. However, the Commission's position on interference protection remained consistent: receive-only earth stations are entitled to complete protection from RF interference.<sup>7</sup> As the Commission has said, this protection is an enforceable right.<sup>8</sup> Until now, the potential for interference in the C-band came from a single source: point-to-point microwave transmissions and, consequently, that is where the Commission has focused its efforts on frequency coordination. With the potential introduction of new, possibly more disruptive

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<sup>4</sup> Public Notice at 6 (“[A] registration program will afford the same protection from interference as would a license issued under our former [licensing] procedure.”) (quoting the 1991 Order at 6 FCC Rcd. at 2807, para.7).

<sup>5</sup> 1991 Order at 6 FCC Rcd 2806, 2807 (“[A] registration program would provide receive-only operators with interference protection while offering a simpler regulatory procedure.”).

<sup>6</sup> See 22 FCC 2d 86, 99, (1970) (“We think that receive/only stations must be licensed by the Commission if they are to be protected from interference, and also to assure the quality of service intended for end use by the public. Our authority to do so stems from the fact that facilities would be an integral link in interstate radio communication.”) (citing sections 2(a), 3(b), and 301 of the Communications Act).

<sup>7</sup> See 1986 Order at 104 FCC 2d 349 (“A fundamental part of the licensing program is the frequency coordination process which provides the means for protecting proposed earth station sites from interference”); 1979 Order at 74 FCC 2d 206 (noting “that potentially serious interference problems might arise between satellite earth station facilities and terrestrial systems” and reviewing Commission efforts to use alternative frequency bands to “avoid or ameliorate this problem”).

<sup>8</sup> See 1979 Order at 74 FCC 2d 205, 215 (“Moreover, an optional licensing program would enable those who need and/or wish to have protection to obtain an enforceable right to a particular level of interference free reception”).

interference entering the band in the form of mobile wireless services, NPR expects the Commission to continue its critical role in protecting existing users.

**C. Section 316 of the Communications Act Requires Due Process for any Modification of Receive-only Earth Stations' Rights.**

Because receive-only earth stations are “licensees” in all material respects, the Commission may not modify their registrations or rights without notice and an opportunity to be heard under Section 316.<sup>9</sup> An act by the Commission to revoke its longstanding protection from interference would constitute such a modification, which has been defined by the Court of Appeals for the D.C. Circuit as an action that substantially affects an unconditional right.<sup>10</sup> Such procedural safeguards are especially important in these circumstances, where the public radio system and other incumbent users have invested in satellite distribution technology, built their infrastructure and based their business planning on the Commission’s repeated assurances over decades that it will protect their spectrum use from interference.

**D. Receive-only Earth Stations Are Eligible to Voluntarily Relinquish Rights as Licensees Under Section 309 of the Communications Act.**

If the Commission decides to proceed with an auction-based approach, receive-only earth stations have the same right as any other licensee to participate in the reverse phase of an incentive auction. As the Public Notice acknowledges, section 309(j)(8)(G) does not define the word “licensee” for purposes of specifying which spectrum users are eligible to participate in

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<sup>9</sup> 47 USC 316(a)(1) (“Any station license...may be modified by the Commission...if in the judgment of the Commission such action will promote the public interest, convenience, and necessity,” but “[n]o such order of modification shall become final until the holder of the license or permit shall have been notified in writing of the proposed action and the grounds and reasons therefor, and shall be given reasonable opportunity, of at least thirty days, to protest such proposed order of modification”).

<sup>10</sup> See, *P & R Temmer v. FCC*, 743 F.2d 918, 927-928 (D.C. Cir. 1984) (“[A] license is modified for purposes of section 316 when an unconditional right conferred by the license is substantially affected.”).

auctions. As such, Section 309 itself does not directly address how registered earth stations should be treated in such a procedure. However, as other participants in this proceeding have noted, Commission treatment of related technology, as well as common logic, supports the proposition that receive-only earth stations are licensees under the Communications Act.<sup>11</sup> The Commission decisions cited above related to receive-only earth stations make clear that they have all the substantive rights of other spectrum users. Therefore, receive-only earth stations have, through their registrations, the same right as other licensees to participate in a reverse auction or any other procedure through which the FCC effects or enables another party to effect reallocation of C-band spectrum. This right to participate is connected to the right to be protected from interference, which may be voluntarily relinquished but not otherwise modified without due process under Section 316.

**E. Spectrum Incumbents, Including Receive-only Earth Stations, Are Entitled to Protection from Interference Caused by New Entrants**

The Commission's policy of protecting receive-only earth stations from interference is grounded on a larger principle of shielding existing spectrum users from harmful activities of new users.<sup>12</sup> This requirement is based on more than 70 years of Commission precedent requiring spectrum "newcomers" to bear responsibility for resolving interference caused to an

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<sup>11</sup> See, Letter from Russell Fox, Counsel to T-Mobile USA, Inc., to Marlene Dortch, FCC, GN Docket No. 18-122, at 2 (filed Mar. 19, 2019) (explaining why earth stations are licensees under Section 153 of the Communications Act).

<sup>12</sup> See, e.g., *In the Matter of An Inquiry Into the Commission's Policies and Rules Regarding AM Radio Service Directional Antenna Performance Verification*, Third Report and Order and Second Order on Reconsideration, 28 FCC Rcd 12555, 12556 (2013) ("The Commission's longstanding 'newcomer' policy mandates that a newcomer (i.e., a party constructing a new or modified facility) is responsible, financially or otherwise, for taking steps necessary to eliminate objectionable interference to existing stations.")

incumbent spectrum user.<sup>13</sup> This longstanding policy is of particular importance in this proceeding, where the potential for interference from incompatible uses of C-band spectrum threatens users like the PRSS, whose entire distribution model is dependent on reliable earth-station downlinks that are particularly susceptible to interference. As NPR noted in its comments and reply comments in response to the Commission’s Notice of Inquiry and Notice of Proposed Rulemaking in this proceeding,<sup>14</sup> allowing additional terrestrial use of the C-band spectrum, particularly for mobile broadband, without adequate interference protection would threaten the public’s access to public radio station broadcasts of *Morning Edition*, *All Things Considered*, *Marketplace*, and other popular public radio programming that reaches 98.5% of the U.S. population.

Accordingly, even if a receive-only earth station were deemed not to constitute a “licensee” for purposes of Section 309(j)(8)(G), such earth stations would be entitled to protection from harmful interference under longstanding Commission precedent. The protection right also does not vary whether the Commission introduced additional terrestrial C-band spectrum use by employing a spectrum auction, adopting the C Band Alliance proposal, or any other mechanism. Given the important public service enabled by the PRSS, the right of receive-only earth stations to continued interference protection is not only legally compelled—it is

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<sup>13</sup> See, e.g., *In the Matter of Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, Memorandum Opinion And Order On Reconsideration Of The Sixth Report And Order, 13 FCC Rcd 7418, 7437 (1998); *Midnight Sun Broadcasting Co.*, 11 FCC 1119 (1947); see also Amendment of Parts 21 and 74 of the Commission’s Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act - Competitive Bidding, 10 FCC Rcd 13821, at 13829 (1995) (interference between co-equal services); *In re Resolution of Interference between UHF Channels 14 and 69 and Adjacent Channel Land Mobile Operations*, 2 FCC Rcd 7328, at 7328 (1987) (cross-service interference).

<sup>14</sup> *In the Matter of Expanding Flexible Use in Mid-Band Spectrum Between 3.7 to 24 GHz*, Notice of Inquiry, GN Docket No. 17-183 (“NOI”), Comments of National Public Radio, Inc. (filed. Oct. 2, 2017); Reply Comments of National Public Radio, Inc. to NOI (filed Nov. 15, 2017); *In the Matter of Expanding Flexible Use in Mid-Band Spectrum Between 3.7 to 24 GHz*, Notice of Proposed Rulemaking, GN Docket No. 18-122, Comments of National Public Radio, Inc. (filed. Oct. 29, 2018).

essential to maintaining public access to public radio programming. Therefore, the Commission must ensure that any new terrestrial use of the C-band spectrum fully protects incumbent receive-only earth station users, including by assuring access to sufficient spectrum for traditional fixed satellite service, adopting technical standards that avoid unintended RF emissions and interference, and compensating incumbent users for immediate and ongoing transition costs.

### **III. Conclusion**

For these reasons, the Bureaus should conclude that receive-only earth stations possess enforceable rights to be protected from harmful interference and to participate in any reverse auction or other re-allocation procedure that would affect their existing use of C-band spectrum.

Respectfully submitted,

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