



The Internet & Television Association  
25 Massachusetts Avenue, NW | Suite 100  
Washington, DC 20001  
(202) 222-2300

**Danielle Piñeres**  
Vice President & Associate General Counsel  
o (202) 222-2459 e dpineres@ncta.com

July 2, 2018

**Ex Parte**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

**Re: *Expanding Flexible Use of the 3.7 GHz to 4.2 GHz Band, GN Docket No. 18-122***

Dear Ms. Dortch:

On June 29, 2018, Brian Josef of Comcast Corporation, Kara Azocar of General Communication, Inc., and Jacqueline Clary and myself of NCTA – The Internet & Television Association (NCTA) met with the Commission staff listed below regarding the above-referenced proceeding. Brian Josef and I also discussed these issues by telephone with Will Adams on the same date.

During the meetings, NCTA and its member companies urged the Commission to adopt several changes to the draft 3.7-4.2 GHz Notice of Proposed Rulemaking and Order (Draft Item).<sup>1</sup> The proposed changes generally fall within three categories: (1) changes relating to the order that would require earth station operators, among others, to submit new, detailed information about their earth station operations; (2) changes to the NPRM relating to safeguards that are necessary for earth station operators and satellite customers; and (3) additional questions that will help the Commission and stakeholders more thoroughly detail the impact and cost of the various proposals to earth station operators and satellite customers and the process for reimbursing such costs.

NCTA and its members respectfully request that the Commission seek comment in the NPRM on requiring earth station operators to submit additional, detailed information about their operations, rather than require this information by Order at this time. This additional information collection was not properly noticed under the Administrative Procedure Act (APA) and the proposed process is burdensome and inconsistent with past Commission precedent. In addition,

---

<sup>1</sup> *Expanding Flexible Use of the 3.7-4.2 GHz Band, et al.*, Notice of Proposed Rulemaking and Order, GN Docket No. 18-122, FCC-CIRC1807-01 (draft adopted June 21, 2018) (Draft Item).

the data collection may ultimately be of limited utility, given that the Commission is unsure which path it will take to enable more robust terrestrial wireless use of the band. The Commission should be wary of ordering spectrum users to comply with new information collection requirements that may have no practical use.<sup>2</sup>

Under the APA, when an agency seeks to promulgate a rule, it generally must provide notice and give interested parties an opportunity to comment.<sup>3</sup> The APA defines “rule” broadly as “the whole or part of an agency statement of general or particular applicability and future effect,” and the term includes any agency prescription of law or policy outside of an adjudication.<sup>4</sup> Although procedural rules are exempted from the APA’s notice-and-comment requirements,<sup>5</sup> the rule at issue here is substantive in nature because it imposes a substantial impact on regulated parties. In particular, it imposes brand new information collection obligations on receive-only earth station operators who are not currently required by the Commission’s rules to submit *any* information prior to operation, and would require new classes of information from licensed and registered earth station operators. The Commission “directs” earth station operators to provide the data, and says that earth station operators “will be required” to file the additional information.<sup>6</sup> Moreover, the Commission makes clear in both the Order and the NPRM portions of the Draft Item that failure to comply with these new obligations will likely lead to forfeiting certain rights and protections. The Order acknowledges that, in the NPRM, it proposes “to protect only those earth stations licensed or registered in IBFS for which the licensee/registrant timely files the information required in this *Order*.”<sup>7</sup>

The Commission has typically acknowledged the need for notice-and-comment for similar new information collection burdens, including when it amended Form 477 to collect additional, more detailed data about broadband deployment,<sup>8</sup> and when it imposed information

---

<sup>2</sup> See 5 C.F.R. § 1320.5(d)(1)(iii).

<sup>3</sup> 5 U.S.C. § 553(b)-(c).

<sup>4</sup> 5 U.S.C. § 551(4); *see id.* § 551(6), (7).

<sup>5</sup> 5 U.S.C. § 553(b)(A); *See Chamber of Commerce of U.S. v. DOL*, 174 F.3d 206, 211 (D.C. Cir. 1999) (defining a procedural rule as a “rule[] of agency organization, procedure, and practice,” that “does not itself alter the rights of interests of parties, although it may alter the manner in which the parties present themselves or their viewpoints to the agency.” (internal quotation marks omitted)).

<sup>6</sup> Draft Item ¶¶ 19-20.

<sup>7</sup> Draft Item ¶ 19; *see also id.* ¶ 26. The Commission cannot evade the APA’s notice-and-comment requirements by divorcing the new obligation (which appears in the Order) from the consequences of non-compliance, which appear in the NPRM.

<sup>8</sup> *Deployment of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americas, Improvement of Wireless Broadband Subscribership Data, and Development of Data and Interconnected Voice Over Internet Protocol (“VoIP”) Subscribership*, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd. 9691, ¶¶ 8-9 (2008); *Development of Nationwide Broadband Data to Evaluate Reasonable*

collection requirements on broadcast licensees transitioning to ATSC 3.0.<sup>9</sup> Because this new information collection may ultimately have no practical utility to the Commission, and because its adoption without opportunity for notice-and-comment runs contrary to APA requirements and Commission precedent, NCTA requests that the Commission seek comment on such new burdens in the NPRM, rather than impose those burdens this month in an Order.

Second, NCTA and its members suggest changes to the draft NPRM to ensure parties can properly comment on appropriate safeguards for incumbent operations, including:

- Seeking comment on its full-band, full-arc licensing policy, rather than proposing to end it.<sup>10</sup> As NCTA and others have described elsewhere in this docket and in response to the mid-band Notice of Inquiry, full-band, full-arc licensing remains critical both to meeting the flexibility and business continuity needs of satellite customers and earth station operators and to the coverage of live news, sports, and other events.<sup>11</sup> Elimination of the policy could prevent rapid response to transmission anomalies and emergencies, while burdening the Commission with frequent, urgent requests for modification or Special Temporary Authority to authorize new frequencies and antenna pointings. Moreover, the antennas used for covering live events have no fixed location. In addition, the satellites and frequencies used for live programming are determined close to the time of event and may need to shift quickly based on changes in the interference environment on the ground. Neither other stakeholders nor the Commission have offered an adequate alternative to full-band, full-arc licensing that would meet our industry's business continuity and live programming needs. Consequently, we urged the Commission to develop the record on the current policy and potential alternatives by specifically inquiring:

---

*and Timely Deployment of Advanced Services to all Americas, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice Over Internet Protocol ("VoIP") Subscribership*, Notice of Proposed Rulemaking, 22 FCC Rcd. 7760, ¶¶ 10-22, 31 (2007).

<sup>9</sup> See *Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard*, Notice of Proposed Rulemaking, 32 FCC Rcd 1670, ¶¶ 15-22 (2017); *Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd. 9930, ¶¶ 53-59 (2017); see also *Streamlining Licensing Procedures for Small Satellites*, Notice of Proposed Rulemaking, IB Docket No. 18-86, FCC 18-44, ¶¶ 47-48 (Apr. 17, 2018) (seeking comment on which information should be required to be submitted in connection with satellite applications, including whether they are "unduly burdensome or undermine the objectives of [the] Notice").

<sup>10</sup> See Draft Item ¶ 38.

<sup>11</sup> Comments of NCTA – The Internet & Television Association, GN Docket No. 18-122, at 9-10 (filed May 31, 2018); Comments of the Content Companies, GN Docket No. 17-183, at 3-4 (filed Oct. 2, 2017); Comments of the Satellite Industry Association, GN Docket No. 17-183, at 26-28, 31 (filed Oct. 2, 2017).

- *What new safeguards would be required to accommodate planned and unplanned satellite outages to ensure business continuity for satellite customers and earth station operators?*
- *What alternatives to full-band, full-arc licensing exist to accommodate itinerant users?*
- Rather than propose a mobile allocation throughout the full 500 megahertz of the C-band downlink,<sup>12</sup> NCTA suggests that the Commission propose a mobile allocation for only a portion of the band. That portion, rather than being fixed, should correspond to the amount of spectrum that ultimately is made available for mobile use. If, in the future, it becomes clear that more spectrum can be repurposed, the Commission could revisit the mobile allocation at that time and permit stakeholders another opportunity to comment before effectively eliminating satellite use of the band.
- The Draft Item proposes to adopt a -13 dBm/MHz out of band emissions (OOBE) limit at the authorized channel edge, while seeking comment on other OOBE limits, including the more protective limits adopted for the 3.5 GHz band where it abuts C-band spectrum today.<sup>13</sup> Given the recent record in the 3.5 GHz proceeding regarding the necessary OOBE protections for mobile uses operating adjacent to the C-band downlink, the Commission should propose the more stringent 3.5 GHz band OOBE limits, and seek comment on whether different characteristics could enable relaxation of those limits.
- The Commission defines “incumbent earth stations” early in the draft NPRM and proposes that only such earth stations will receive protection from new mobile entrants and, potentially, be entitled to reimbursement of transition costs.<sup>14</sup> However, the draft item uses inconsistent terminology throughout, which in some cases could result in a lapse of protection for operators that meet the Commission’s definition of “incumbent earth station” but do not fall within the definition of the other terms used. In other cases, this could leave an open question regarding which category of earth stations the Commission meant to address. NCTA requests that the Commission use the defined term “incumbent earth station” throughout, including as noted in the attached Appendix.

Finally, NCTA respectfully requests that the Commission include the following questions, which will help to ensure it receives a robust record on the impact of various proposals on earth station operators and satellite customers, and potential transition costs, methods for cost reimbursement, and dispute resolution.

- In ¶ 83, after “Should we make the plan available to comment, and what confidential information is likely to be included?,” add:
  - *What information should we require the Transition Facilitation Plan to include regarding the costs of and plan for compensating incumbent earth station*

---

<sup>12</sup> Draft Item ¶ 50.

<sup>13</sup> *Id.* ¶¶ 164-65.

<sup>14</sup> *Id.* ¶¶ 26-28.

***operators for expenses incurred in the transition? How would disputes relating to plans and compensation be resolved?***

- In ¶ 97, after “In particular, should the space station operators relinquishing spectrum or the overlay licensee be required to provide incumbent earth station operators comparable replacement facilities or media?,” add:
  - ***How would space station operators or overlay licensees compensate incumbent earth station operators for any costs incurred in the transition? How would disputes relating to cost reimbursement be resolved?***
- In ¶ 100, at the end of the paragraph, add:
  - ***If spectrum is repacked and auctioned by the FCC using an incentive auction, how should the FCC reimburse both incumbent earth station operators and customers who do not voluntarily relinquish spectrum for auction and for what costs. How would disputes relating to cost reimbursement be resolved?***
- In ¶ 110, after “If the Commission adopted a split-revenue approach, under which revenue would be split between the federal government and the satellite operators, under its incentive auction authority, how would those funds be distributed?,” add:
  - ***Who would be responsible for reimbursing the costs incurred by incumbent earth station operators and C-band customers for costs incurred in any transition, and how would such cost reimbursement be accomplished? How would disputes relating to cost reimbursement be resolved?***
- In ¶ 168, at the end of the paragraph, add:
  - ***Would new filters work with all the incumbent earth station equipment deployed in the field today, or would new equipment be required to accommodate filtering? What other costs would be associated with installing filters on earth stations? How would disputes relating to cost reimbursement be resolved? What remedies should exist if filtering is ineffective in preventing harmful interference?***
- In ¶ 172, at the end of the paragraph, add:
  - ***How much would it cost to relocate earth stations to less populated areas or to install RF shielding and how would reimbursement be provided to affected incumbent earth station operators? What would be the impact of relocation or RF shielding on reliability and resiliency of FSS service?***

Ms. Marlene H. Dortch

July 2, 2018

Page 6

Please address any questions regarding the foregoing to the undersigned.

Sincerely,

**/s/ Danielle J. Piñeres**

Danielle J. Piñeres

Encl.

cc: Will Adams (by telephone)  
Jose Albuquerque  
Chris Bair (by telephone)  
Rachael Bender  
Peter Daronco (by telephone)  
Diane Garfield (by telephone)  
Anna Gentry (by telephone)  
Umair Javed  
Joyce Jones  
Julius Knapp  
Matthew Pearl  
Becky Schwartz  
Jeff Tignor  
Brian Wondrack (by telephone)

## APPENDIX

NCTA suggests that the Commission make the following changes to ensure consistent use of the term “incumbent earth station” throughout the document:

- ¶ 45: “For example, frequency coordination allows FSS and terrestrial fixed microwave to share the band on a co-primary basis, but coordination of mobile systems would be more complicated because the movement of the devices would require analyses and interference mitigation to ~~FSS~~ incumbent earth stations in this band spread over many locations within any given geographic area.”
- ¶ 47: “We recognize that the affected population would likely be less if we were to only protect the incumbent earth stations based on the transponder frequencies received at each site and actual antenna azimuth and elevation, but the overall assessment that mobile service would not be viable for much of the population would remain the same.”
- ¶ 59: “We therefore seek comment on whether we should repurpose a minimum amount of spectrum nationwide, and make additional fully unencumbered spectrum available in any areas where it is less costly to transition incumbent Earth Stations to other forms of transmission. . . . We seek comment on whether any flexible-use licenses should also be overlay licenses, for which the terrestrial licensee is obligated to protect ~~licensed or registered~~ incumbent earth stations and can use any spectrum that becomes available by clearing earth stations.”
- ¶ 60: “Another consideration in the geographical division of spectrum involves the parties to compensate. Instead of paying FSS operators for relinquishing spectrum usage rights nationwide or in specific geographic regions a mechanism instead might pay ~~licensed (transmit-receive)~~ incumbent earth stations for relinquishing access to C-band spectrum in specific geographic areas. . . . Would such a mechanism present an alternative supplier of spectrum—with either the FSS operators or the incumbent earth stations effectively releasing spectrum rights? . . . The Commission seeks comment on the practicality and social value of compensating ~~licensed~~ incumbent earth stations in exchange for agreeing to no longer be ~~licensed~~ authorized to receive in the 3.7-4.2 GHz band. ~~In particular, would such a mechanism protect those earth stations but not unlicensed earth stations?~~ Also, how would satellite operators be compensated for loss of revenues after the expiration of their contracts with content providers serving the ~~licensed~~ incumbent earth stations that discontinued their reliance on satellite delivery of content?”
- ¶ 61: “Under such an approach, satellite operators could be responsible for clearing the portion of the band that would be made available for flexible use, including notifying incumbent earth stations of the need to modify their operations and compensating them for any costs associated with that transition.”
- ¶ 72: “If there are incumbent earth station ~~operators registrants or licensees~~ that have no contractual relationship with any of the members of the Transition Facilitator or any FSS space station operators, will that create difficulties in clearing the band during later steps in the process? . . . Is there any reason that the Transition Facilitator would not able

to negotiate with **incumbent** earth stations that don't have contractual relationships with any of the Transition Facilitator's members?"

- ¶ 79: "For example, should the Commission allow some flexibility for the negotiators to make more spectrum available in some markets than others, potentially allowing a limited number of **incumbent** earth stations to continue to operate using wider bandwidths in certain areas where wireless operators are less interested in deploying (e.g., remote rural areas)?"
- ¶ 80: "For example, should we require FSS space station licensees that are going to cease transmitting on primary basis to notify **incumbent** earth stations receiving those signals?"
- ¶ 100: "We also seek comment on whether provision of supply by ~~licensed~~ **incumbent** earth stations can substitute for provision by FSS operators."
- ¶ 101: "At the time of any incentive auction, could satellite customers or **incumbent** earth stations in their own right be eligible to offer capacity?"
- ¶ 116: "We also seek comment on whether there are interference protection criteria set forth in other parts of our rules that may be adapted to protect ~~FSS~~ **incumbent** earth stations from interference by point-to-multipoint operations in the portion of the 3.7-4.2 GHz band that does not become available for flexible use. Are there technical operating characteristics of point-to-multipoint equipment, such as power levels, that would require us to adopt different values to protect ~~FSS~~ **incumbent** earth stations from interference by point-to-multipoint operations?"
- ¶ 169: "Should the protection limit of the ~~FSS~~ **incumbent** earth stations be based solely on interference-to-noise ratio (I/N) regardless of the actual FSS carrier power and/or earth station configuration? Should we establish a baseline ~~FSS~~ **incumbent** earth station configuration (antenna, LNB, receiver) for any interference and protection assumptions? Given the signal strength differential between the terrestrial and satellite systems, can terrestrial wireless base or mobile stations cause saturation of the LNB of ~~FSS~~ **incumbent** earth stations? . . . Will there be a minimum distance separation required between MBX transmitters and **incumbent** earth station receivers? What are the tradeoffs among filter performance, required guard band, level of protection, and cost of such filter? We request commenters to provide details of assumptions and analysis including MBX transmit power level, **incumbent** earth station protection limit, propagation model, antenna aperture and off-axis isolation."
- ¶ 170: "Alternatively, should the Commission define the MBX transmit power limit, out of band emission limits, and guard band and allow the satellite service providers to determine how to protect the **incumbent** earth station receivers?"
- ¶ 171: "We seek comment on the out of band emission limit necessary at the upper end of guard band in order to ensure coexistence with **incumbent** earth station receivers. Does this out of band emission limit allow ubiquitous operation of base stations and mobile stations or does it require a minimum distance separation from **incumbent** earth station receivers? We request commenters to include proposed out of band emission at



the upper end of guard band, propagation model, antenna gains and off- axis isolation between MBX transmitters and **incumbent** earth station receivers in their analysis.”

- ¶ 172: “We seek comment on the coexistence challenges between terrestrial mobile services and the **FSS incumbent** earth stations that may remain in the cleared spectrum and on any specific rules that should be adopted to ensure effective coexistence between these services. . . . Would exclusion zones or coordination zones be appropriate to protect any existing **FSS incumbent** earth stations in the MBX spectrum? . . . Should we instead specify interference protection limits that the terrestrial systems must meet to protect the **incumbent** earth stations? . . . Should we require that **incumbent** earth stations remaining in the band be moved to less populated areas or can RF shielding of earth stations be employed to reduce the size of exclusion or coordination zones?”
- ¶ 176: “**FSS Incumbent** Earth stations that are used for telemetry, tracking and command of satellites have assignments near 3700 MHz, 3950 MHz, and 4200 MHz. . . . Since there are a limited number of telemetry, tracking and command **incumbent** earth stations, should we consider protection on a case-by-case basis through coordination between MBX-spectrum licensees and **FSS incumbent** earth station operators? . . . What interference mitigation techniques could be used to protect telemetry, tracking and command **incumbent** earth stations? For example, could RF shielding effectively reduce the interference to the telemetry, tracking and command **incumbent** earth stations? We also seek comment on whether telemetry, tracking and command **incumbent** earth stations located in or near densely populated areas could be relocated to more remote locations and, if so, how much such relocations would cost. Because telemetry, tracking and command transmissions are a function of satellite design and cannot be changed following launch, we recognize that **incumbent** earth stations receiving telemetry, tracking and command transmissions in the MBX spectrum will require protection for the lifetime of the satellite. We seek comment on if protection of these operations would require a different approach depending on whether telemetry, tracking and command **incumbent** earth stations are within or outside of the MBX spectrum.”