



May 25, 2017

VIA ELECTRONIC FILING

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

Re: Ex Parte Presentation, Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, GN Docket No. 14-177; IB Docket No. 15-256; RM-11664; WT Docket No. 10-112; IB Docket No. 97-95.

Dear Ms. Dortch,

In past filings, CTIA has highlighted for the Commission the imbalance in spectrum available for licensed mobile use, as compared with spectrum available for satellite or unlicensed providers. CTIA respectfully submits this response to an April 17, 2017 filing made by the Satellite Industry Association ("SIA") in the above-referenced proceedings.¹ SIA asserts that its letter was submitted to "correct the record" regarding the spectrum that has been made available for fixed satellite ("FSS") and terrestrial mobile services. CTIA respectfully submits that SIA incorrectly characterizes the amount of licensed spectrum to which mobile wireless providers have access, and we write to dispel that confusion. As explained below, nothing in the SIA Letter undercuts the basic observation that there is significantly more spectrum available today for satellite or unlicensed use than there is for licensed mobile broadband. As such, CTIA urges the Commission to take steps to make additional spectrum available for licensed mobile broadband, including: 1) adopting an investment-friendly sharing approach for the 37.0-37.6 GHz band; 2) reconsidering its decision to make the 66-71 GHz band available on an unlicensed basis; and 3) moving swiftly to make the spectrum bands proposed in the FNPRM for licensed mobile use.

In its filing, SIA challenges CTIA's assertion that there is 3.85 gigahertz of spectrum available to terrestrial wireless as compared to 16.5 gigahertz of spectrum available to satellite systems. In support of its position, SIA provides a spreadsheet that compares the

¹ *Ex Parte* Presentation of the Satellite Industry Association, GN Docket No. 14-177, *et al.* (filed April 17, 2017) ("SIA Letter").



allocated spectrum for terrestrial and satellite uses and claims that terrestrial services have a significant spectrum advantage in *allocations*. Rather than setting the record straight, however, this representation instead inaccurately counts the spectrum available for access for both satellite and terrestrial providers. In other words, there is a difference between spectrum allocations and spectrum availability for satellite and terrestrial providers.²

This distinction is important. Satellite providers may file for a satellite authorization as soon as the Commission adopts an allocation. For example, satellite parties have either been granted satellite authorizations or have pending applications that have been accepted for filing by the Commission for the spectrum bands that CTIA has suggested are available for satellite access.³ In contrast, as the Commission has recognized in a number of instances, terrestrial mobile services cannot access spectrum until service and auction rules are adopted.⁴ Thus, although satellite providers are able to immediately file an application requesting licensing once a frequency allocation has been provided by the Commission, terrestrial operators cannot immediately act once an allocation is made. Instead, they must await the adoption of service rules that would allow terrestrial operations in that allocated spectrum, and they must also participate in competitive bidding prior to obtaining access to the allocated bands.

² See *Ex Parte* Presentation of CTIA, GN Docket No. 14-177, *et al.*, at Attachment at 2 (filed Mar. 30, 2017). Although the filing refers at a high level to the apportionment of high-band spectrum as an “allocation,” the text of the document makes the distinction clear, consistent with CTIA’s previous advocacy on this issue. See, *infra*, note 6.

³ See e.g., EchoStar Corporation, Call Sign S2441, IBFS File No. SAT-LOA-20020328-00051 (requesting a license for use of the 24.75-25.25 GHz band); *OneWeb Petition Accepted for Filing*, IBFS File No. SAT-LOI-20160428-00041, Public Notice, 31 FCC Rcd 7666 (2016) (discussing application requesting use of the 27.5-29.1 GHz and 29.5-30.0 GHz bands, among others); *Boeing Application Accepted for Filing*, IBFS File No. SAT-LOA-20160622-00058, Public Notice, 31 FCC Rcd 11957 (2016) (discussing application requesting use of the 37.5-42 GHz, 47.2-50.2 GHz, and 50.4-51.4 GHz bands); Hughes Network Systems, LLC, Call Sign S2834, IBFS File No. SAT-LOA-20160624-00061 (requesting a license for use of the 27.85-29.1 GHz and 29.25-30 GHz bands, among others).

⁴ See, e.g., *Allocation and Designation of Spectrum for Fixed-Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz, and 48.2-50.2 GHz Frequency Bands; Allocation of Spectrum to Upgrade Fixed and Mobile Allocations in the 40.5-42.5 GHz Frequency Band; Allocation of Spectrum in the 46.9-47.0 GHz Frequency Band for Wireless Services; and Allocation of Spectrum in the 37.0-38.0 GHz and 40.0-40.5 GHz for Government Operations*, Report and Order, 13 FCC Rcd 24649, 24651, n.4 (1998) (“[W]e note that the bands designated today will be the subject of further proceedings to develop service, licensing and auction rules for the wireless services.”).



In calculating the amount of spectrum access for satellite and terrestrial services, CTIA kept this distinction in mind and counted spectrum as allocated on a primary basis to FSS and spectrum with a primary mobile allocation and service rules to reach its totals for spectrum availability. CTIA limited its satellite allocations to solely primary allocations for FSS (excluding other satellite services such as the Mobile-Satellite Service) and primary allocations for terrestrial mobile services that have service rules adopted to allow mobile operations.⁵ A detailed accounting of these spectrum bands is included as an attachment to this filing.

Thus, as CTIA previously stated, “[t]he satellite industry has access to 4 times the high band spectrum that terrestrial mobile services do today.”⁶ These facts show that there are significant disparities in the amount of spectrum available for FSS access and terrestrial mobile broadband.

Given the significant consumer demand for mobile broadband and policymakers’ desire to maintain U.S. leadership as we pursue 5G services, the Commission has the opportunity to remedy these disparities through the adoption of service and auction rules for spectrum bands above 24 GHz to allow more terrestrial mobile licensing. CTIA encourages the Commission to move forward expeditiously to complete its service rule proceeding in the above-referenced dockets to allow for mobile broadband services to be deployed in the spectrum above 24 GHz. Rapid action will help ensure U.S. leadership in the development and deployment of 5G networks.

⁵ SIA also suggests counting unlicensed spectrum bands as part of available spectrum for terrestrial services. However, unlicensed services have no allocation status and receive no interference protection from any other licensed service (whether that service has a primary or secondary allocation). CTIA focused on spectrum bands that have primary allocations and are available for licensed use.

⁶ *Ex Parte* Presentation of CTIA, GN Docket No. 14-177, *et al.*, at Attachment at 2 (filed Mar. 30, 2017) (emphasis added).



Pursuant to Section 1.1206 of the Commission's rules, a copy of this letter is being filed in ECFS. Please do not hesitate to contact the undersigned with any questions.

Sincerely,

/s/ Scott K. Bergmann

Scott K. Bergmann
Vice President, Regulatory Affairs
CTIA

Attachment



Spectrum Available For FSS and Terrestrial Mobile Access

| Spectrum Band | FSS Spectrum Access (gigahertz) | Terrestrial Mobile Access (gigahertz) | Terrestrial Mobile Notes |
|-----------------|---------------------------------|---------------------------------------|--|
| 24.75-25.25 GHz | 0.5 | 0 | No mobile allocation or service rules |
| 27.5-30 GHz | 2.5 | 0.85 | Mobile allocation for 2 gigahertz of the band but only service rules for 850 megahertz |
| 37.0-42 GHz | 4.5 | 3 | No mobile allocation for 40-41 GHz; only service rules for 3 gigahertz of the band (600 megahertz available only for shared use) |
| 47.2-50.2 GHz | 3 | 0 | No mobile service rules |
| 50.4-51.4 GHz | 1 | 0 | No mobile service rules |
| 71-76 GHz | 5 | 0 | No mobile service rules |
| Total | 16.5 | 3.85 | |