



June 17, 2016

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 et al.*

Dear Ms. Dortch,

CTIA® and its member companies have worked diligently and collaboratively with the Commission and Fixed-Satellite Service ("FSS") stakeholders to help establish new rules governing the millimeter wave bands. CTIA believes that there has been substantial progress in achieving this goal – enabling the Commission to stake out a leadership position globally in promulgating regulations governing next generation mobile broadband systems in the millimeter wave bands.

CTIA strongly supports the Commission's efforts to expeditiously adopt new rules. CTIA's member companies have, in good faith, provided extensive technical information on the public record that provides a reasonable record for FCC action. However, CTIA is concerned about a recent *ex parte* filing by the Satellite Industry Association ("SIA") suggesting the FCC delay its efforts to move forward with new rules governing the millimeter wave bands and advancing incorrect information regarding the legal status of FSS incumbents in the 28 GHz band. Moreover, last minute efforts by FSS proponents to elevate the rights of secondary satellite services should be rejected as thinly-veiled attempts to confuse and delay the Commission's deliberative process. Instead, CTIA urges the Commission to:

- Decline eleventh hour calls to forego Commission action to adopt new technical and licensing rules for the 28 GHz and 37 to 40 GHz bands at the July Open Meeting;



- Promulgate spectrum sharing technical requirements as part of this decision, reflecting the thorough record provided by the terrestrial wireless industry that facilitates the rapid introduction of 5G services while permitting the continued operation and expansion of satellite services; and
- Affirm that terrestrial fixed and mobile services have primary status vis-à-vis satellite operations in the 27.5-28.35 GHz band and reject FSS arguments seeking to elevate their spectrum rights.

CTIA and its member companies have provided a comprehensive amount of technical data concerning the interference environment between terrestrial mobile and FSS operations. For example, on May 6, a coalition of wireless companies (the “Wireless Joint Filers”) submitted to the Commission the results of a detailed simulation performed by Nokia that models co-existence between FSS and UMFU in the 28 GHz band, as well as engineering analyses refuting many unrealistic claims regarding the potential for UMFU to FSS interference.¹ While the Wireless Joint Filers continued to supplement this study by adding additional material from 5G standards organizations and refining included assumptions,² information regarding FSS systems has not been as forthcoming. As the Wireless Joint Filers noted in a recent *ex parte* letter, they have requested additional detail on the FSS systems at 28 GHz on numerous occasions, but have not been given any additional data.³ Thus, the Commission has ample reason to decline SIA’s eleventh hour call for the Commission to convene a tripartite technical meeting “to allow both terrestrial and satellite stakeholders to present data” before “any decisions are made.”⁴ While CTIA does not oppose any additional meetings or discussions between affected stakeholders and the Commission, there is no reason that such efforts should delay the ongoing rule making process.

¹ Letter from the Joint Filers to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 14-177 et al. (filed May 6, 2015) (“*May 6 Joint Letter*”) at Attachment 1, “FSS and UMFU Coexistence Simulations,” Nokia (May 6, 2016) (“*Nokia Simulation*”).

² Letter from Stacey Black, AT&T *et. al* to Marlene H. Dortch, FCC, GN Docket No. 14-177, at 1-2 (filed June 1, 2016).

³ *Id.* at 2.

⁴ Letter from Tom Stroup, SIA to Marlene H. Dortch, FCC, GN Docket No. 14-177, at 2 (filed June 1, 2016) (“*June 1 SIA Ex Parte*”).



The wireless industry is eager to continue to collaborate with their satellite counterparts on a co-existence solution. The licensing framework and protections that CTIA has previously outlined would still permit satellite services to serve the public in the majority of the country, especially in rural areas.⁵ However, even though additional technical data may help to refine the co-existence environment, CTIA strongly believes that the record contains sufficient information for a final Commission decision. The Commission should not allow the withholding of information to delay the adoption of licensing and service rules for UMFU spectrum. Conceding to SIA's requests for delay would unjustly reward FSS stakeholders who have failed, given several opportunities, to provide this information to the Commission. Instead, the FCC should move forward on its current path to adopt new rules governing the millimeter wave spectrum bands at its July Open Meeting.

SIA also continues to advance incorrect information regarding the legal status of FSS incumbents in the 28 GHz band.⁶ Specifically, SIA persists in arguing that FSS operations are co-primary to mobile broadband operations at 28 GHz.⁷ As the Commission has explained, this is simply not the case. Indeed, the secondary status of FSS incumbents is a bedrock principle of this proceeding. The Commission made clear in the *Spectrum Frontiers NPRM* that FSS incumbents have no more than secondary status.⁸ History

⁵ *Ex Parte* Presentation of CTIA to Marlene H. Dortch, GN Docket No. 14-177, et al, at 1-3 (May 20, 2016).

⁶ CTIA notes that SIA is basing its intransigence with respect to technical meetings on this flawed argument, and has used this belief (which is contrary to the *NPRM* and prior Commission precedent) as justification to hamper industry efforts to devise a co-existence framework. See *June 1 SIA Ex Parte* at 2-3 ("This fundamental misunderstanding of the current spectrum allocation is making it difficult to reach a technical agreement on sharing of the 28 GHz band. When the basic tenet of FSS' co-primary status is not recognized by terrestrial service providers, it is not possible to achieve agreement on important technical requirements to ensure protection from harmful interference for both in-orbit and planned space stations.").

⁷ *June 1 SIA Ex Parte* at 1-2.

⁸ *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services*, Notice of Proposed Rulemaking, 81 FR 1802, ¶ 31 (2015) ("*NPRM*") ("We have carefully considered the opposition from certain satellite interests to allowing mobile use in this band, but tentatively conclude that those parties have not presented a valid basis for rejecting mobile use in this band. While those parties argue that they need regulatory certainty in order to invest in their systems, authorizing mobile use would not deprive FSS operators of any reasonable expectations they had of access to spectrum. Under our current rules, FSS use of this band is secondary to LMDS.").



supports this finding. In 1996, the Commission allocated the 27.5-28.35 GHz band to terrestrial LMDS on a primary basis, with FSS secondary.⁹ SIA's argument is predicated on the notion that the Commission is adopting an entirely new service in this band and, as such, UMFU constitutes a "third service allocated domestically or internationally in the band."¹⁰ However, as the Commission explains, UMFU is an outgrowth of the Commission's original primary fixed/mobile LMDS in this band, and thus retains primary rights. As the Commission stated when it adopted service rules for LMDS, this spectrum was allocated "under . . . a broad and flexible service definition" with the intent of permitting mobile use of the band once technological developments supported it.¹¹ Further, it was the Commission's belief that "it is in the public interest to provide terrestrial licensees in the 28 GHz band with the flexibility to offer a variety of services and to develop innovative new services."¹²

⁹ *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, First Report and Order and Fourth Notice of Proposed Rulemaking, 11 FCC Rcd 19005, ¶ 44 (1996).

¹⁰ *June 1 SIA Ex Parte* at 1-2.

¹¹ *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 12545, ¶ 207 (1997) ("We conclude that, for now, our significant allocation of spectrum under such a broad and flexible service definition should permit licensees to satisfy a broad array of their customers' communications needs, whether through one or multiple service offerings. Although LMDS is allocated as a fixed service, we know of no reason why we would not allow mobile operations if they are proposed and we obtain a record in support of such an allocation. We believe this would be consistent with our goal of providing LMDS licensees with maximum flexibility in designing their systems. We have authorized other wireless services to include mobile and fixed services, depending on whether developments in the service and related equipment demonstrate a need for changing the rules and a capability for mobile and fixed services to coexist in these bands.") (footnotes omitted).

¹² *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, Third Notice of Proposed Rulemaking and Supplemental Tentative Decision, 11 FCC Rcd 53, ¶ 52 (1995).



The Commission has now taken steps to allow LMDS (and other new entrants) to provide mobile service on a primary basis as has always been contemplated for this spectrum.¹³ And, it is clear from the Commission's treatment of LMDS in this band that terrestrial fixed and mobile services have primary status vis-à-vis satellite operations in the 27.5-28.35 GHz band. The fact that the Commission has adopted a new *name* for the services to be offered in this band (and others) – UMFU – does not mean that it has introduced an entirely new service. Indeed, the Commission's policy is to change the name of existing services when such a change would better describe the contemplated future use of a band.¹⁴ And, as has been the case in the past, "[t]he change in the name of the service does not affect the substantive rights of current . . . licensees, permittees, and applicants."¹⁵ The Commission has made clear that while it proposes to enhance the rights of existing LMDS licensees by permitting mobile operation, it intends to extend the rights of current LMDS licensees to provide UMFU services using their licensed spectrum.¹⁶ This is, as the Commission notes, an approach entirely consistent with the Commission's decision to grant existing MDS and ITFS licensees blanket authority to engage in mobile operations when the Commission instituted geographic area licensing for those services in the 2.5 GHz band and, in the same proceeding, renamed

¹³ *NPRM* at ¶ 31 ("Under our current rules, FSS use of this band is secondary to LMDS. . . The primary reason there has been little discussion of mobile use in this band is that there has not been any technology that would allow for mobile use of the millimeter wave bands such as this one. As that technology develops, it is unreasonable for us to preclude mobile use of this band solely because of pre-existing secondary use.").

¹⁴ *Provision of Fixed and Mobile Broadband Access (Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 14165, ¶ 164 (2004)* ("We take this opportunity to rename the Instructional Television Fixed Service as the Educational Broadband Service. In light of the fact that the service is not limited to either video or fixed services, we believe that it is appropriate to update the name of the service. While we understand that video-based services will continue to operate in the new EBS, we believe that the EBS name better describes the contemplated future use of the band.").

¹⁵ *Id.* See also, e.g., *NPRM* at n. 241 ("We do not believe that subdividing the existing LMDS and 39 GHz licenses would constitute a modification of license within the meaning of Section 316 of the Communications Act because the change would not affect the substantive operating rights of the existing licensee.").

¹⁶ See, e.g., *NPRM* at ¶ 95 ("We propose to permit existing LMDS and 39 GHz licensees to exercise the full extent of these rights – including mobile rights – for geographic areas and bands in which they currently hold licenses.")



those services to better reflect future use of the band.¹⁷ Thus, the UMFU service to be offered in the 28 GHz is a terrestrial fixed/mobile service that, as with its predecessor-in-interest LMDS, is primary to satellite operations in the band.

Fundamentally, the Commission has for the past 20 years determined that terrestrial fixed and mobile services should be the primary service in the 28 GHz band. This determination should not be reversed based upon unsupported concerns raised by FSS stakeholders. CTIA instead urges the Commission to maintain the path initiated in 1996 – that terrestrial use of the 28 GHz band is the primary, protected service, while permitting FSS secondary operating rights.¹⁸

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/ Brian M. Josef

Assistant Vice President – Regulatory Affairs
CTIA®

¹⁷ *NPRM* at ¶ 96.

¹⁸ Should the FCC inadvisably determine that enhancing the rights of LMDS providers to allow mobile operations is a “new” service, there still is no rational basis for rejecting well-settled allocation rights within the 28 GHz band. Moreover, any unraveling of the FCC’s earlier allocation decision would lead to a nonsensical outcome. LMDS licensees (who received their licenses via competitive bidding and with the full understanding that they would receive both fixed and mobile rights on a primary basis) would be better positioned than new UMFU licensees who could potentially be subordinated to FSS new entrants. CTIA strongly urges the Commission to maintain the allocation framework established nearly two decades ago – primary rights for terrestrial fixed and mobile services and secondary rights for FSS operations.