



April 17, 2017

**VIA ECFS**

Ms. Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, D.C. 20554

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

Dear Ms. Dortch:

The Satellite Industry Association (“SIA”)<sup>1</sup> submits this *ex parte* in response to a series of filings in which CTIA has asserted that far more spectrum is allocated to satellite fixed and mobile services than are allocated to terrestrial fixed and mobile services. For example, in a recent *ex parte*, CTIA claimed that, in the spectrum between 24 GHz and 86 GHz, 3.85 GHz has been allocated for terrestrial wireless compared to 16.5 GHz allocated to satellite.<sup>2</sup> CTIA has not, however, described in any of those filings the methodology used to come up with such figures.

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<sup>1</sup> SIA is a U.S.-based trade association providing representation of the leading satellite operators, service providers, manufacturers, launch services providers, and ground equipment suppliers. Since its creation twenty years ago, SIA has advocated on behalf of the U.S. satellite industry on policy, regulatory, and legislative issues affecting the satellite business. For more information, visit [www.sia.org](http://www.sia.org). SIA Executive Members include: The Boeing Company; AT&T Services, Inc.; EchoStar Corporation; Intelsat S.A.; Iridium Communications Inc.; Kratos Defense & Security Solutions; Ligado Networks; Lockheed Martin Corporation; Northrop Grumman Corporation; OneWeb; SES Americom, Inc.; Space Exploration Technologies Corp.; SSL; and ViaSat, Inc. SIA Associate Members include: ABS US Corp.; Artel, LLC; Blue Origin; DigitalGlobe Inc.; DataPath Inc.; DRS Technologies, Inc.; Eutelsat America Corp.; Global Eagle Entertainment; Glowlink Communications Technology, Inc.; Hughes; Inmarsat, Inc.; Kymeta Corporation; L-3 Electron Technologies, Inc.; O3b Limited; Panasonic Avionics Corporation; Planet; Semper Fortis Solutions; Spire Global Inc.; TeleCommunication Systems, Inc.; Telesat Canada; TrustComm, Inc.; Ultisat, Inc.; and XTAR, LLC.

This submission is supported by all SIA members except for AT&T, which abstains from participation.

<sup>2</sup> See Letter from Scott K. Bergmann (CTIA) to Marlene H. Dortch, GN Docket No. 14-177, *et al.*, Attachment at 2 (Mar. 30, 2017). See also, *e.g.*, Reply Comments of CTIA, GN Docket No. 14-177, *et al.*, at 2 (Oct. 31, 2016)(asserting that satellite has five times more allocated spectrum than wireless (22 GHz vs. 3.85 GHz)).



The reason for this apparent oversight is simple: CTIA's assertion is demonstrably false, as a review of the Commission's table of allocations reveals. Attached hereto is a spreadsheet that compares the spectrum between 24 GHz and 86 GHz allocated to Fixed-Satellite Service ("FSS") and Mobile-Satellite Service ("MSS") versus the spectrum allocated to terrestrial Fixed Service ("FS") and Mobile Service ("MS"), for non-government use. The first portion of the spreadsheet reflects international spectrum allocations for ITU Region 2, while the second reflects the Commission's domestic allocation table. As the spreadsheet shows, at both a domestic and international level, the terrestrial services have been allocated more spectrum over this range of frequencies. Specifically, terrestrial services enjoy a nearly 15.5 GHz advantage under the international allocation table (48.57 GHz vs. 33.1 GHz) and more than 12 GHz under the domestic allocation table (40.12 GHz vs. 28 GHz).<sup>3</sup>

To be clear, not all of the spectrum allocated to terrestrial and satellite services has been made available domestically for immediate and unrestricted use. In addition, as the spreadsheet shows, a large majority of the spectrum in this range is allocated to both terrestrial and satellite services. Such a dual allocation will require the Commission to sort through a variety of complex policy and technology issues, including the significant potential for terrestrial and satellite services to share spectrum on a co-primary basis in certain higher frequency bands. CTIA's misleading and repeated assertion that satellite services have been allocated more spectrum than wireless services - when just the opposite is true - can only inhibit that effort. Accordingly, SIA submits this letter to correct the record.

Respectfully submitted,

**SATELLITE INDUSTRY ASSOCIATION**

By: */s/ Tom Stroup*

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<sup>3</sup> CTIA's motto is "Everything Wireless." It would appear, however, that CTIA does not include unlicensed wireless within its purview, at least for purposes of its analysis in this proceeding. Yet, even adjusting this analysis by removing the spectrum from 57-71 GHz that has been assigned in this proceeding for unlicensed operations, terrestrial services would still enjoy an advantage over satellite services - by 6.47 GHz internationally and 3.12 GHz domestically.



cc:

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Attachment:



**INTERNATIONAL (ITU Region 2)**  
**FSS & MSS**

**Fixed & Mobile**

<b>Begin (GHz)</b>	<b>End (GHz)</b>	<b>GHz Allocated</b>	<b>Begin (GHz)</b>	<b>End (GHz)</b>	<b>GHz Allocated</b>
24.65	25.25	0.6	24.25	29.5	5.25
27	31	4.0			
			31	31.3	0.3
			31.8	33.4	1.6
			36	37.5	1.5
37.5	43.5	6.0	37.5	43.5	6.0
43.5	47	3.5	43.5	47	3.5
47.2	50.2	3.0	47.2	50.2	3.0
50.4	51.4	1.0	50.4	51.4	1.0
			51.4	52.6	1.2
66	76	10.0	55.78	76	20.22
81	86	5.0	81	86	5.0

**TOTAL GHz ALLOCATED** 33.1  
Shared FSS/MSS/FS/MS 29.1

**TOTAL GHz ALLOCATED** 48.57

**DOMESTIC**

**FSS & MSS**

**Fixed & Mobile**

<b>Begin (GHz)</b>	<b>End (GHz)</b>	<b>GHz Allocated</b>	<b>Begin (GHz)</b>	<b>End (GHz)</b>	<b>GHz Allocated</b>
			24.25	24.45	0.2
24.75	25.25	0.5	25.05	25.25	0.2
27.5	30	2.5	27.5	29.5	2.0
			31	31.3	0.3
			36	37.5	1.5
37.5	42	4.5	37.5	40	2.5
			41	42.5	1.5
45.5	47	1.5	45.5	47	1.5
47.2	50.2	3.0	47.2	50.2	3.0
50.4	51.4	1.0	50.4	51.4	1.0
			51.4	52.6	1.2
66	76	10.0	55.78	76	20.22
81	86	5.0	81	86	5.0

**TOTAL GHz ALLOCATED** 28  
Shared FSS/MSS/FS/MS 26.7

**TOTAL GHz ALLOCATED** 40.12