

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of )  
 )  
Fixed and Mobile Services in the Mobile ) ET Docket No. 10-142  
Satellite Service Bands at 1525-1559 MHz and )  
1626.5-1660.5 MHz, 1610-1626.5 MHz and )  
2483.5-2500 MHz, and 2000-2020 MHz and )  
2180-2200 MHz )

**REPLY COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®**

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**I. INTRODUCTION**

CTIA – The Wireless Association® (“CTIA”) respectfully submits these reply comments to the Federal Communications Commission’s (“FCC” or “Commission”) Notice of Proposed Rulemaking and Notice of Inquiry (individually, “MSS NPRM” and “MSS NOI” and collectively, the “*Notice*”) seeking to make additional spectrum available for new investment in mobile broadband networks, and urges the Commission to develop a comprehensive plan for reallocating 2 GHz Mobile Satellite Service (“MSS”) spectrum to terrestrial mobile broadband use.<sup>1</sup> The record in this proceeding confirms that MSS spectrum in general and the 2 GHz MSS spectrum in particular is ideally suited for terrestrial mobile broadband services. Making additional spectrum available for mobile broadband is key to America’s continued technology leadership, and CTIA believes the Commission’s proposals in the MSS NPRM represent a positive step towards this vital goal.

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<sup>1</sup> *Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz*, Notice of Proposed Rulemaking and Notice of Inquiry, FCC 10-126 (July 15, 2010) (“*MSS Notice*”).

As described in these reply comments, CTIA and the majority of commenters strongly support the Commission moving forward with the proposals in the MSS NPRM to establish primary Fixed and Mobile allocations for the 2000-2020 MHz and 2180-2200 MHz bands and to apply its secondary market rules to MSS spectrum. CTIA also encourages the Commission to explore alternatives, including incentive auctions, for bringing this spectrum to market in a manner that balances public interest considerations concerning unjust enrichment alongside the critical need for mobile broadband spectrum. Finally, CTIA agrees with the many commenters in this record who urge the Commission to take care to ensure that any redistribution of MSS spectrum makes available sufficiently large contiguous blocks of spectrum to be useful for mobile broadband.

## **II. COMMENTERS OVERWHELMINGLY SUPPORTED THE COMMISSION'S EFFORTS TO IDENTIFY AND ALLOCATE ADDITIONAL SPECTRUM FOR MOBILE BROADBAND SERVICES**

As detailed in this section, commenters across industries gave overwhelming support to the Commission's efforts to identify MSS spectrum for terrestrial mobile broadband use. In light of the ever-increasing demand for spectrum faced by broadband providers today, commenters applauded the Commission's examination of the MSS spectrum as it has many attributes well-suited for broadband.<sup>2</sup> Commenters also

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<sup>2</sup> See, e.g., Comments of CTIA – The Wireless Association, ET Docket No. 10-142 at 2-3 (filed Sept. 15, 2010) (“CTIA Comments”); Comments of CDMA Development Group, ET Docket No. 10-142 at 3-4 (“CDMA Development Group Comments”); Comments of the Telecommunications Industry Association, ET Docket No. 10-142 at 2 (filed Sept. 15, 2010) (“TIA Comments”); Comments of Terrestar Networks Inc., ET Docket No. 10-142 at 4 (filed Sept. 15, 2010) (“Terrestar Comments”); Comments of T-Mobile USA, Inc., ET Docket No. 10-142 at 3-4 (filed Sept. 15, 2010) (“T-Mobile Comments”); Comments of United States Cellular Corp., ET Docket No. 10-142 at 3-4 (filed Sept. 15, 2010) (“U.S. Cellular Comments”); Comments of Verizon Wireless, ET Docket No. 10-142 at 4 (filed Sept. 15, 2010) (“Verizon Wireless Comments”).

encouraged the FCC to continue to embrace its policies of exclusive-use licensing and flexible service rules to promote innovation and investment.

CTIA and numerous commenters highlighted the looming spectrum crisis spurred by the dramatic increase in data traffic resulting from adoption of new applications, products, and services. AT&T explained that the ever expanding demand for mobile broadband services is exhausting the capacity of wireless networks, and, at the current rate of growth, this demand will exceed capacity.<sup>3</sup> EchoStar agreed “that additional flexibility for existing spectrum to be used more efficiently will help spur investment while addressing spectrum scarcity for mobile broadband.”<sup>4</sup> The record illustrates how as mobile broadband continues to emerge as a dynamic and innovative communications platform, significant amounts of additional spectrum are necessary to support its growth.

The record also demonstrates widespread support across industries for the Commission’s examination of MSS spectrum in particular. As CTIA noted, the MSS spectrum is ideally suited for terrestrial mobile broadband use.<sup>5</sup> Verizon Wireless explained that the spectrum “allows sufficient mobility while also affording an acceptable trade-off between coverage and cost.”<sup>6</sup> Multiple commenters noted that adding a primary

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<sup>3</sup> Comments of AT&T Inc., ET Docket No. 10-142 at 2-3 (filed Sept. 15, 2010) (“AT&T Comments”). *See also* U.S. Cellular Comments at 3; Comments of Cricket Communications Inc., ET Docket No. 10-142 at 1 (filed Sept. 15, 2010) (“Cricket Comments”); CDMA Development Group Comments at 3-4.

<sup>4</sup> Comments of EchoStar Satellite Services LLC, ET Docket No. 10-142 at 2 (filed Sept. 15, 2010) (“EchoStar Comments”).

<sup>5</sup> CTIA Comments at 8-9. *See also* Comments of Iridium Satellite LLC, ET Docket No. 10-142 at 9 (filed Sept. 15, 2010) (“The Commission is right to focus on the 2 GHz band as the best opportunity to identify spectrum for terrestrial wireless.”) (internal cite omitted) (“Iridium Comments”).

<sup>6</sup> Verizon Wireless Comments at 3-4.

allocation would harmonize the U.S. allocation for the bands with the international allocation, resulting in beneficial synergies that will lower equipment costs and enable innovation.<sup>7</sup> The 2 GHz MSS band's proximity to the PCS and AWS bands also makes the spectrum ideal for terrestrial mobile broadband services.<sup>8</sup> Further, the 2 GHz MSS band is available in large contiguous blocks—a technical characteristic that is essential for effective mobile broadband spectrum.<sup>9</sup>

The record also shows support for the Commission's policies of exclusive-use licensing and flexible service rules, which have provided licensees certainty and fostered innovation. Commenters stated that these policies should continue in any further allocation of spectrum for terrestrial wireless services. One commenter pointed out that exclusive-use licensing has resulted in wireless licensees having considerable flexibility and a powerful financial incentive to make unused spectrum available to other carriers through spectrum leasing.<sup>10</sup> CTIA noted that such a regime has fostered innovation and investment in wireless networks and promoted competition.<sup>11</sup> Flexible service rules will also yield “extraordinary public benefits,” making more spectrum capacity available and

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<sup>7</sup> See, e.g., Terrestar Comments at 4; T-Mobile Comments at 3; CDMA Development Group Comments at 3-4.

<sup>8</sup> T-Mobile Comments at 3 (explaining how the 2 GHz MSS band is directly adjacent to the AWS H Block and J Block, and very close to the broadband PCS bands, meaning that “the spectrum could be used easily by new or existing service providers to provide innovative terrestrial mobile broadband services. . .”); CTIA Comments at 9; AT&T Comments at 5-6; Comments of New DBSD Satellite Services G.P., ET Docket No. 10-142 at 16 (filed Sept. 15, 2010) (“DBSD Comments”).

<sup>9</sup> See, e.g., CTIA Comments at 8; AT&T Comments at ii.

<sup>10</sup> AT&T Comments at 4-5. See also CDMA Development Group Comments at 5-6.

<sup>11</sup> CTIA Comments at 9.

ensuring more efficient use of spectrum for mobile terrestrial services.<sup>12</sup> Wireless broadband providers should be provided certainty that they can invest heavily in their networks without facing the threat of harmful interference. Additionally, wireless providers should be permitted to operate their networks at a planned level of quality and modify their networks to meet the evolving marketplace's demands without unnecessary intervention and oversight by the Commission.

### **III. THE PROPOSALS IN THE NPRM SHOULD BE ADOPTED AS THEY RECEIVED STRONG SUPPORT FROM VARIOUS INDUSTRY COMMENTERS**

The Commission's two main proposals in the NPRM—to add primary Fixed and Mobile allocations for the 2 GHz MSS band, and to adopt secondary market rules for leases of terrestrial rights to the MSS bands—received widespread support by commenters from all industries. Although some parties differed as to the details of implementation, most generally agreed that these two proposals were sound first steps toward more efficient use of the MSS spectrum bands in the public interest.

#### **A. The Record Demonstrates Uniform Agreement that the Commission Should Add Primary Fixed and Mobile Allocations for the 2000-2020 MHz and 2180-2200 MHz Bands.**

The Commission's tentative conclusion in the MSS NPRM to add Fixed and Mobile allocations to the 2000-2020 and 2180-2200 MHz bands that would be co-primary with the existing Mobile-Satellite allocations for these bands was broadly supported by a cross-section of the communications industries. CTIA urges the Commission to promptly act upon this proposal. Numerous commenters concurred with

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<sup>12</sup> Comments of Globalstar, Inc., ET Docket No. 10-142 at v (filed Sept. 15, 2010) (“Globalstar Comments”). *See also* DBSD Comments at 2.

CTIA that this would be a sound first step toward rationalizing this band for terrestrial uses.<sup>13</sup> As T-Mobile noted, “the enhanced flexibility could spur investment and innovation in the 2 GHz MSS band, thereby maximizing intensive use of the band and facilitating increased deployment of wireless broadband services.”<sup>14</sup>

Notably, the new allocations in the 2 GHz MSS band were supported by a variety of satellite service providers, including both current 2 GHz MSS licensees, which indicated that the proposal would be a sensible measure in the effort to promote innovative use of this band.<sup>15</sup> Moreover, various commenters echoed CTIA’s observations that, in addition to having the appropriate physical characteristics for mobile broadband, adding the new allocations would promote the goal of identifying internationally harmonized spectrum, which, as explained by DBSD, “in turn, will provide opportunities for standardized services, economies of scale, and reductions in service costs.”<sup>16</sup> Based on this record, the Commission can promptly move forward with adding the new allocations, confident that the entire communications ecosystem supports this first step toward expanding terrestrial use of the MSS bands.

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<sup>13</sup> See, e.g., Cricket Comments at 4-5; CDMA Development Group Comments at 3-4; DBSD Comments at 13; AT&T Comments at 5-6; Echostar Comments at 4-5; Iridium Comments at 9; Comments of LightSquared Subsidiary LLC, ET Docket No. 10-142 at 10-11 (filed Sept. 15, 2010) (“LightSquared Comments”).

<sup>14</sup> T-Mobile Comments at 3.

<sup>15</sup> See DBSD Comments at 12; Terrestar Comments at 4-5; see also Echostar comments at 4-5; Iridium Comments at 9; LightSquared Comments at 10-11.

<sup>16</sup> DBSD Comments at 12; see also CDMA Development Group at 3-4; Comments of the Telecommunications Industry Association, ET Docket No. 10-142 at 2 (filed Sept. 15, 2010) (“TIA Comments”); Terrestar Comments at 4; T-Mobile Comments at 3-4; U.S. Cellular Comments at 3-4; Verizon Wireless Comments at 4.

Finally, CTIA agrees with the numerous parties who support the Commission's proposal that any 2 GHz spectrum returned to the Commission in these spectrum bands should be reserved for purely licensed terrestrial mobile services.<sup>17</sup> As CTIA described in its initial comments, this result would be consistent with prior Commission action and would facilitate the repurposing of this spectrum toward the pressing need for additional licensed mobile broadband capacity.<sup>18</sup>

**B. The Commission's Proposal to Apply Secondary Markets Rules to MSS Spectrum Licenses Was Widely Supported.**

The record in this proceeding indicates that the Commission's proposal to apply secondary markets rules to MSS terrestrial leases is a sound, pro-competitive policy, and should be immediately adopted. No commenter opposed the Commission's proposal, and the overwhelming majority of the parties that addressed the issue gave it strong support.<sup>19</sup> Various commenters noted, as did CTIA, that secondary markets are a powerful tool for moving underutilized spectrum to a higher and better use.<sup>20</sup> Verizon Wireless conducted an examination of data regarding active spectrum leases taken from the Commission's

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<sup>17</sup> See T-Mobile Comments at 4; AT&T Comments at 6-7.

<sup>18</sup> CTIA Comments at 11.

<sup>19</sup> See U.S. Cellular Comments at 4-5; T-Mobile Comments at 4-5; CDMA Development Group Comments at 5-6; Cricket Comments at 5-9; CTIA Comments at 11-12; EchoStar Comments at 5; Comments of Granite Telecommunications, LLC, ET Docket No. 10-142 at 9-10 (filed Sept. 15, 2010); Globalstar Comments at 19-20; Comments of Inmarsat, ET Docket No. 10-142 at 8-10 (filed Sept. 15, 2010); AT&T Comments at 7-8; Comments of the Mobile Satellite Users Association, ET Docket No. 10-142 at 4 (filed Sept. 15, 2010); LightSquared Comments at 8-9; Comments of the MSS ATC Coalition, ET Docket No. 10-142 at 13-14 (filed Sept. 15, 2010); DBSD Comments at 8-12; TIA Comments at 6; Terrestar Comments at 6-7; Verizon Wireless Comments at 5-6.

<sup>20</sup> See, e.g., T-Mobile Comments at 4-5; AT&T Comments at 8; Verizon Wireless Comments at 5.

Universal Licensing System, which demonstrated that secondary markets are already very active.<sup>21</sup> With an average of 555 new lease applications and notifications being filed per year, according to Verizon Wireless,<sup>22</sup> it is clear that there is substantial untapped demand for spectrum and that secondary markets have facilitated the transfer of spectrum rights to those parties who value them most.

There was also substantial support for applying the secondary markets rules uniformly to MSS and terrestrial licensees.<sup>23</sup> As CTIA explained in its initial comments, MSS already is defined as a subset of CMRS, and thus the Commission need only add MSS to the list of included services in Section 1.9005 to give these licensees the full benefit of the spectrum leasing rules.<sup>24</sup> By applying all spectrum leasing rules equally to MSS and terrestrial wireless licensees, the Commission can best achieve the goal, set forth in the NPRM, of “provid[ing] greater regulatory predictability and parity.”<sup>25</sup>

#### **IV. THE RECORD SUPPORTS CTIA’S CALL FOR REALLOCATION OF THE 2 GHz MSS BAND FOR LICENSED TERRESTRIAL USE**

The Commission should adopt CTIA’s call for reallocation of the 2 GHz MSS band for licensed terrestrial mobile broadband use, as this proposal is supported by facts

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<sup>21</sup> Verizon Wireless Comments at 5-6.

<sup>22</sup> *Id.* at 5.

<sup>23</sup> See CDMA Development Group Comments at 5; Cricket Comments at 6; DBSD Comments at 9; Echostar Comments at 5; Globalstar Comments at 19-20; LightSquared Comments at 8; Terrestrial Comments at 5; Verizon Wireless Comments at 5.

<sup>24</sup> CTIA Comments at 12.

<sup>25</sup> *MSS Notice* at ¶ 17; see also CDMA Development Group Comments at 5; DBSD Comments at 9; Echostar Comments at 5.

and views in the record. As noted above,<sup>26</sup> many commenters echoed CTIA's observations that the physical characteristics of the 2 GHz MSS band make it an ideal candidate for reallocation for terrestrial use. Similarly, the record contains substantial support for the use of incentive auctions as a means of facilitating the transition of the 2 GHz spectrum from satellite to terrestrial use.<sup>27</sup> CTIA also would consider other mechanisms, including appropriate leasing proposals, for bringing the spectrum to market. CTIA notes, however, that any methodology for reclaiming spectrum from incumbents requires a balancing of public interest issues concerning unjust enrichment alongside the critical need for mobile broadband spectrum.

Also, as CTIA noted in its initial comments, the Commission must take care to ensure that any redistribution of MSS spectrum makes available sufficiently large contiguous blocks of spectrum to be useful for mobile broadband, rather than a piecemeal approach. Reallocating all of the spectrum that becomes available will give the Commission more flexibility to consider different sized licenses when it would design the auction. Alternatively, as Verizon Wireless explained, adopting a "piecemeal approach" that allows licensees to turn in only small amounts of spectrum would lead to "insufficient spectrum being reallocated for wireless broadband."<sup>28</sup>

## V. CONCLUSION

The record shows overwhelming support across industries for the Commission's proposals and policies set forth in the *Notice*. A majority of commenters strongly agreed

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<sup>26</sup> See *supra* pp. 3-4.

<sup>27</sup> See TIA Comments at 6; T-Mobile Comments at 8-10; AT&T Comments at 11-12; Verizon Wireless Comments at 7-8.

<sup>28</sup> Verizon Wireless Comments at 8.

that adding fixed and mobile terrestrial allocations to the 2 GHz MSS band would provide valuable and much needed spectrum for licensed terrestrial mobile broadband services. The Commission's adoption of its proposals in the MSS NPRM together with the reallocation of 2 GHz MSS spectrum will further the National Broadband Plan's spectrum policies and promote the continued success of wireless broadband in America.

Respectfully submitted,

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