

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Spectrum Task Force Invites Technical)	ET Docket No. 10-142
Input on Approaches to Maximize)	WT Docket No. 04-356
Broadband Use of Fixed/Mobile Spectrum)	WT Docket No. 07-195
Allocations in the 2 GHz Range)	

COMMENTS OF T-MOBILE USA, INC.

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T-Mobile USA, Inc. (“T-Mobile”) respectfully submits these comments in response to the Public Notice released by the FCC on May 20, 2011, inviting input on approaches to encourage the growth of terrestrial broadband services in the 2 GHz Mobile Satellite Service (“MSS”) spectrum that is allocated for fixed and mobile use.^{1/} The *Public Notice* also seeks input on the potential use of other spectrum, currently designated for Advanced Wireless Services (“AWS”) that may be paired with the 2 GHz MSS spectrum.

I. SUMMARY

T-Mobile applauds the Commission’s continuing efforts to make spectrum available for wireless broadband in general and its plan to use 2 GHz MSS spectrum for wireless broadband terrestrial use in particular. However, given ongoing activities, the Commission should not adopt a band plan at this time for the use of terrestrial broadband services in the 2 GHz band, particularly if that band plan also involves AWS-2 and AWS-3 spectrum. The National Telecommunications and Information Administration (“NTIA”) is actively considering the use of

^{1/} *Spectrum Task Force Invites Technical Input on Approaches to Maximize Broadband Use of Fixed/Mobile Spectrum Allocations in the 2 GHz Range*, Public Notice, ET Docket No. 10-142, DA 11-929 (rel. May 20, 2011) (“*Public Notice*”). The Commission extended the deadlines for the submission of comments and reply comments in this proceeding to July 8 and July 22, respectively. *See Spectrum Task Force Extends Period for Filing Comments and Reply Comments for Technical Input on Approaches to Maximize Broadband Use of Fixed/Mobile Spectrum Allocations in the 2 GHz Range*, Public Notice, ET Docket No. 10-142, DA 11-1046 (rel. June 10, 2011).

the 1755-1850 MHz band for commercial broadband use.^{2/} The 1755-1780 MHz portion of that band, currently subject to an NTIA “Fast Track” evaluation, is best paired with part of the AWS-2 and the entire AWS-3 spectrum. If some or all of the 1755-1850 MHz band is made available for commercial wireless broadband, that spectrum must also be considered in the Commission’s assessment of the 2 GHz MSS spectrum.

II. INTRODUCTION

T-Mobile strongly supports the Commission’s efforts to make additional spectrum available for wireless broadband applications. As Chairman Genachowski has noted, spectrum is the “oxygen” of mobile broadband services and additional spectrum is necessary to promote jobs, growth, education and a range of other social and economic goals.^{3/} As the Commission recently found, wireless data traffic is growing significantly^{4/} and the need for additional spectrum is being driven by, among other things, consumers’ increased expectation of being able to enjoy the same level of Internet connectivity in a mobile environment as they experience at home or in the office. In order to meet this skyrocketing demand for additional broadband capacity, the Commission must make more spectrum available for commercial providers.

^{2/} Press Release, National Telecommunications and Information Administration, NTIA Takes Steps in 500 MHz Wireless Broadband Initiative; Agency to Conduct a Detailed Analysis of the 1755-1850 MHz Band, (Jan. 31, 2011) *available at* http://www.ntia.doc.gov/press/2011/500mhzstatement_02012011.html.

^{3/} See Julius Genachowski, Chairman, FCC, Remarks as Prepared for Delivery at CTIA Wireless 2011, at 5, 8-9 (Mar. 22, 2011); *see also* Address Before a Joint Session of the Congress on the State of the Union, Daily Comp. Pres. Docs., 2011 DCPD No. 00047, at 6 (Jan. 25, 2011), *available at* <http://www.gpo.gov/fdsys/pkg/DCPD-201100047/pdf/DCPD-201100047.pdf> (noting that making additional spectrum available is a national priority).

^{4/} *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, Fifteenth Report, WT Docket No. 10-133, FCC 11-103, at ¶¶ 185-186 (rel. June 27, 2011) (noting the wireless industry’s migration from a “voice-centric to a data-centric service,” and reports that show that “mobile data traffic is growing significantly”).

The Commission and the Obama administration have already taken important steps toward fulfilling this need. The National Broadband Plan calls for the Commission to make 500 megahertz of spectrum available for wireless broadband over the next ten years, with 300 megahertz available in the next five years.^{5/} The President has echoed this goal.^{6/} NTIA has made meaningful progress toward supporting these goals by identifying spectrum that may be made available for commercial wireless operations.^{7/}

The steps the Commission proposes in the *Public Notice* are important measures toward that goal and extensions of actions the FCC has already taken in the *MSS Flexibility Proceeding*.^{8/} In that proceeding, the Commission correctly added a mobile and fixed allocation

^{5/} *Connecting America: The National Broadband Plan*, The Federal Communications Commission (March 2010), at 84, available at <http://download.broadband.gov/plan/national-broadband-plan.pdf> (recommending that the Commission make 500 megahertz newly available for broadband use within the next 10 years, of which 300 megahertz between 225 MHz and 3.7 GHz should be made newly available for mobile use within five years).

^{6/} Memorandum for the Heads of Executive Departments and Agencies, *Unleashing the Wireless Broadband Revolution*, (Presidential Memorandum), rel. June 28, 2010, 75 Fed. Reg. 38387, available at <http://www.whitehouse.gov/the-press-office/presidential-memorandum-unleashing-wireless-broadband-revolution> (encouraging the Secretary of Commerce, working through the National Telecommunications and Information Administration to “collaborate with the Federal Communications Commission (FCC) to make available a total of 500 MHz of Federal and nonfederal spectrum over the next 10 years, suitable for both mobile and fixed wireless broadband use.”). See also Press Release, The White House, Office of the Press Secretary, *President Obama Details Plan to Win the Future through Expanded Wireless Access* (Feb. 10, 2011) available at <http://www.whitehouse.gov/the-press-office/2011/02/10/president-obama-details-plan-win-future-through-expanded-wireless-access> (noting President Obama’s call for a National Wireless Initiative during his State of the Union address and reiterating the goal of freeing up 500 MHz of spectrum for mobile broadband).

^{7/} See Gary Locke and Lawrence E. Strickling, Dep’t of Commerce, *Plan and Timetable to Make Available 500 MHz of Spectrum for Wireless Broadband*, (Oct. 2010), available at http://www.ntia.doc.gov/reports/2010/TenYearPlan_11152010.pdf; Gary Locke and Lawrence E. Strickling, Dep’t of Commerce, *An Assessment of the Near-Term Viability of Accommodating Wireless Broadband Systems in the 1675-1710 MHz, 1755-1780 MHz, 3500-3650 MHz, and 4200-4220 MHz, 4380-4400 MHz Bands* (Oct. 2010), available at http://www.ntia.doc.gov/reports/2010/FastTrackEvaluation_11152010.pdf; Gary Locke and Lawrence E. Strickling, Dep’t of Commerce, *First Interim Progress Report on the Ten-Year Plan and Timetable* (Apr. 2011), available at http://www.ntia.doc.gov/reports/2011/First_Interim_Progress_Report_04012011.pdf.

^{8/} *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*, Report

to the 2 GHz MSS band to allow the more intense use of the spectrum for terrestrial broadband. While MSS licensees were authorized to provide an ancillary terrestrial component (“ATC”) of their satellite service, the *MSS Flexibility Proceeding* opened the door to terrestrial-only use of the band, untethered to a satellite service. The *Public Notice* suggests that the 2 GHz MSS band may be made more productive by providing licensees with incentives to relinquish spectrum in exchange, for example, for the ability to provide terrestrial services free of current ancillary restrictions.^{9/}

T-Mobile supported the FCC’s actions in the *MSS Flexibility Proceeding* and it generally supports the *Public Notice’s* approach to make the 2 GHz MSS spectrum more accessible for terrestrial wireless broadband operations. As T-Mobile noted, the 2 GHz MSS band has been historically underutilized since it was allocated for MSS operations.^{10/} The *Public Notice* graphically indicates that the band is adjacent to AWS and broadband personal communications service (“PCS”) spectrum. That proximity may permit the extension of current terrestrial technologies to the band whether on a stand-alone basis or in connection with existing services. As T-Mobile also noted, use of the 2 GHz MSS band for terrestrial services would be consistent with international spectrum allocations, as the 2 GHz MSS band is identified as an International Mobile Telecommunications (“IMT-2000”) terrestrial band in the Table of Frequency Allocations.^{11/} Resolution 212 of the Radio Regulations encourages the use of the 2 GHz band

and Order, 26 FCC Rcd 5710 ¶ 2 (2011) (adding co-primary Fixed and Mobile allocations to the MSS 2 GHz band) (“*MSS Flexibility Order*”).

^{9/} *Public Notice* at 3-4.

^{10/} Reply Comments of T-Mobile USA, Inc., ET Docket No. 10-142 at 6 (filed Sept. 30, 2010). *See also MSS Flexibility Order* ¶ 5 (“At present, use of these MSS bands for terrestrial mobile service is permitted only under the Commission’s ATC rules in association with the existing satellite system authority.”).

^{11/} International Telecommunications Union, Radio Regulations, RR5-71-72, n.5.388 (2008). *See also* International Telecommunications Union, Radio Regulations, Resolution 212 (Rev.WRC-07),

for both terrestrial and MSS services, stating that “the availability of the satellite component of IMT-2000 in the bands 1980-2010 MHz and 2170-2200 MHz simultaneously with the terrestrial component of IMT-2000 . . . would improve the overall implementation and the attractiveness of IMT-2000 to both developed and developing countries.”^{12/}

III. THE COMMISSION SHOULD TAKE NO ACTION THAT WOULD FORECLOSE OPTIONS FOR THE USE OF THE 2 GHZ MSS BAND AND THE AWS-2 AND AWS-3 SPECTRUM

While T-Mobile encourages the Commission to make the 2 GHz MSS spectrum more useful for terrestrial wireless broadband, it should refrain from adopting any of the three band plan concepts contained in the *Public Notice*. Instead, the Commission should work with NTIA to make the 1755-1850 MHz band available for commercial broadband paired with the AWS-2 upper J Block spectrum (2175-2180 MHz) and the AWS-3 spectrum (2155-2175 MHz). NTIA is examining the possibility of making the 1755-1850 MHz band available for commercial use and has subjected the 1755-1780 MHz band to “Fast Track” consideration, and the FCC has also sought comment on the potential reallocation of, among others, the 1755-1780 MHz band.^{13/} Moreover, legislation has been introduced which, if enacted, would mandate the auction of the

Implementation of International Mobile Telecommunications in the bands 1885-2025 MHz and 2110-2200 MHz (2008).

^{12/} *Implementation of International Mobile Telecommunications-2000 (IMT-2000)*, World Radiocommunication Conference 1997, Resolution 212, available at http://www.itu.int/newsarchive/wrc2000/presskit/resolution_212.html.

^{13/} See, e.g., Gary Locke and Lawrence E. Strickling, Dep’t of Commerce, *An Assessment of the Near-Term Viability of Accommodating Wireless Broadband Systems in the 1675-1710 MHz, 1755-1780 MHz, 3500-3650 MHz, and 4200-4220 MHz, 4380-4400 MHz Bands* (Oct. 2010), available at http://www.ntia.doc.gov/reports/2010/FastTrackEvaluation_11152010.pdf; *Spectrum Task Force Requests Information on Frequency Bands Identified by NTIA as Potential Broadband Spectrum*, Public Notice, 26 FCC Rcd 3486 (2011) (seeking input on bands NTIA identified for potential deployment of wireless broadband, including 1755-1850 MHz, for commercial use).

entire 1755-1850 MHz band for commercial services.^{14/} All of these factors – not yet resolved – will influence the FCC’s analysis of how the 2 GHz spectrum considered in the *Public Notice* could be used for terrestrial purposes.

First, as T-Mobile has observed before,^{15/} the 1755-1780 MHz band, which is part of the NTIA’s “Fast Track” evaluation and a segment of the band subject to pending legislation, is ideally paired with the AWS-2 upper J Block and the AWS-3 band. Reallocation of the entire 1755-1850 MHz band would make 1755-1780 MHz available for the optimum pairing of the upper J Block and the AWS-3 band. However, two of the three potential terrestrial spectrum concepts specified in the *Public Notice* would extract spectrum from the AWS-2 and AWS-3 bands. While the *Public Notice*’s 40 megahertz concept would include only the 2 GHz MSS spectrum at 2000-2020/2180-2200 MHz, the 50 megahertz concept would augment the 2 GHz MSS spectrum with ten megahertz of AWS-2 J Block at 2020-2025/2175-2180 MHz and the 60 megahertz concept would further include the five megahertz of AWS-2 H Block spectrum at 1995-2000 MHz and the 5 megahertz at 2170-2175 MHz, which is currently part of the AWS-3 band. The Commission should not adopt any plan that would affect the optimum pairing of the AWS-2 upper J Block and the AWS-3 band at this time. The pairing proposals advanced by the Commission would also create a mobile uplink immediately adjacent to the personal communications service (“PCS”) base station downlink band, creating an unacceptable

^{14/} S. 911, 112th Cong. (as reported by S. Comm. on Commerce, Sci. and Transp.) (2011); S. 1040, 112th Cong. (2011); H.R. 607, 112th Cong. (2011). In addition, ownership of the 2 GHz licenses is currently in flux, and therefore it would be prudent for the Commission to withhold making decisions on the matters contained in the *Public Notice* until these ownership issues are settled. *In re TerreStar Networks Inc.*, 10-15446, U.S. Bankruptcy Court, Southern District of New York (approving DISH Network Corp’s agreement to buy TerreStar out of bankruptcy); see also David McLaughlin, *Dish’s \$1.38 Billion TerreStar Purchase Approved by U.S. Bankruptcy Judge*, BLOOMBERG, July 7, 2011, available at <http://www.bloomberg.com/news/2011-07-07/dish-s-1-38-billion-terrestar-purchase-approved-by-u-s-bankruptcy-judge.html>.

^{15/} Comments of T-Mobile USA, Inc., ET Docket No. 10-123 at 8 (filed June 28, 2010).

interference problem.^{16/} Further, if the entire 1755-1850 MHz band is made available for commercial broadband, the FCC may wish to evaluate whether some of that spectrum may be effectively paired and used with the 2 GHz MSS band.

IV. THE OPTIMUM USE OF THE AWS-3 AND AWS-2 UPPER J BLOCK IS TO PAIR THEM WITH THE FEDERAL SPECTRUM AT 1755-1780 MHz

A. The Proposed Pairing Would Be Adjacent to AWS-1 Spectrum

The 2155-2180/1755-1780 MHz spectrum pairing remains an optimum potential wireless broadband allocation. The proposed pairing would be immediately adjacent to both the uplink and downlink allocations for AWS-1 spectrum at 2110-2155 MHz and 1710-1755 MHz, creating 140 megahertz of paired contiguous spectrum (two blocks of 70 megahertz each) for wireless broadband. That configuration would be beneficial for several reasons. First, the allocation would harmonize the United States allocation of AWS spectrum, in large part, with 3GPP band class 10 devices that are used in the Americas.^{17/} Second, the creation of an additional AWS allocation immediately adjacent to the current AWS-1 allocation will allow for more immediate equipment development and deployment. Current technology can more easily be extended to

^{16/} See, e.g., *Amendment of Part 15 of the Commission's Rules Regarding Unlicensed Personal Communications Service Devices in the 1920-1930 MHz Band*, Notice of Proposed Rulemaking, 25 FCC Rcd 5118, ¶ 15 n.40 (2010) (noting the Commission's tentative conclusion to designate certain AWS-2 spectrum for uplink transmissions and other non-adjacent spectrum for downlink transmissions in order to alleviate interference concerns); *Amendment of Part 27 of the Commission's Rules to Govern the Operation of Wireless Communications Services in the 2.3 GHz Band; Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band*, Report and Order and Second Report and Order, 25 FCC Rcd 11710, ¶ 74 (2010) ("rely[ing] heavily on the fact that mobile and portable devices using FDD technology will have a dedicated band for uplink transmissions rather than sharing a band with base stations' downlink transmissions" in limiting the potential for interference to SDARS receivers from WCS operations); *Amendment of §§ 22.501(g)(2) and 94.65(a)(1) of the Rules and Regulations to Re-Channel the 900 MHz Multiple Address Frequencies, et al.*, Report and Order, 3 FCC Rcd 1564, ¶ 60 (1988) ("We agree . . . that receiver desensitization is a concern when an uplink and a downlink system are operating on adjacent channels in close proximity to one another.").

^{17/} See 3GPP, 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio transmission and reception (Release 9), 3GPP TS 36.101 V9.4.0 (2010-06), available at http://3gppprotocol.com/web_documents/36101-940-utra-ue-trans-recv.doc.

adjacent bands than to bands with different uplink/downlink separations. Finally, as T-Mobile has pointed out in the past, the Commission must avoid configuring downlink spectrum adjacent to uplink spectrum.^{18/} T-Mobile's proposed configuration of the Federal spectrum and the AWS-3 and AWS-2 upper J Block will instead guarantee that uplink spectrum and downlink spectrum can be adjacent to other uplink and downlink spectrum, respectively.

B. The Proposed Pairing Would Facilitate Relocation of Federal Government Users

T-Mobile and others have successfully worked with Federal government users that were required to be relocated from the AWS-1 band.^{19/} The 1755-1780 MHz band is, in large part, populated with users similar to those that were in the 1710-1755 MHz band. Therefore, the designation of the 1755-1780 MHz band for AWS-3 service will allow wireless providers and incumbent Federal spectrum licensees to use the expertise they acquired from the earlier spectrum relocation efforts when Federal users move from spectrum between 1755-1780 MHz. This should make the transition smoother for all parties and ensure the ability to share spectrum during the process.

^{18/} See, e.g., Comments of T-Mobile USA, Inc., ET Docket No. 10-123 at 4-5 (filed June 28, 2010) (noting interference concerns with pairing downlink spectrum directly adjacent to uplink spectrum). See also Coleman Bazelon, *The Economic Basis of Spectrum Value: Pairing AWS-3 with the 1755 MHz Band is More Valuable than Pairing it with Frequencies from the 1690 MHz Band* at 8-9 (Apr. 11, 2011), filed as an attachment to Letter from Coleman Bazelon, Principal, The Brattle Group, to Marlene H. Dortch, Secretary, FCC, ET Docket No. 10-123 (filed April 11, 2011) (noting the importance of separating two bands in a pair so that "the up-stream and down-stream transmissions are not adjacent in order to prevent interference with each other.") ("*Brattle Group Report*").

^{19/} Gary Locke and Lawrence E. Strickling, Dep't of Commerce, *Relocation of Federal Radio Systems from the 1710-1755 MHz Spectrum Band, Fourth Annual Progress Report* (March 2011), available at http://www.ntia.doc.gov/reports/2011/1710-1755MHZ_CSEAreport_03302011.pdf.

C. Paired Use of the AWS-3 and the J Block with Federal Spectrum Will Be Internationally Consistent

The spectrum at 2155-2180 MHz and 1755-1780 MHz is designated internationally for wireless use.^{20/} In addition, Mexico recently initiated a proceeding that would extend the current AWS-1 band in that country to the 1755-1770 MHz band.^{21/} Creating a domestic spectrum allocation that is consistent with international use will result in economies of scope and scale and create a more robust equipment market for the band. Moreover, consistent international allocations will allow consumers to more easily take their wireless devices to other countries without compatibility impediments.

D. There Would Be More Economic Value in an Auction of Spectrum that Paired 2155-2180 MHz with 1755-1780 MHz

If the Commission focuses on working with NTIA to advance the reallocation of the 1755-1850 MHz band in general and the 1755-1780 MHz band in particular before making a band plan for the 2 GHz MSS spectrum, it would ensure a more robust economic return for taxpayers in an auction of commercial wireless spectrum. A recent study found that the value of the AWS-3 band paired with the 1755 MHz band is approximately \$12 billion, as compared to the value of the AWS-3 band paired with the 1690 MHz band of \$7.3 billion.^{22/} Pairing the

^{20/} International Telecommunications Union, Radio Regulations, RR5-71-72, n.5.388 (2008). See also International Telecommunications Union, Radio Regulations, Resolution 212 (Rev.WRC-07), Implementation of International Mobile Telecommunications in the bands 1885-2025 MHz and 2110-2200 MHz (2008).

^{21/} Comisión Federal de Telecomunicaciones, *Cuestionario para la banda 1.7/2.1 GHz* (Nov. 11, 2010) (Mexico) available at http://www.cft.gob.mx/es/Cofetel_2008/Cuestionario_para_la_banda_1721_GHz. See also *Reporte de la Consulta Pública sobre Aspectos Técnicos y Regulatorios Aplicables a las Bandas 700 MHz, 1.7/2.1 GHz y 3.4.-3.7 GHz* available at http://www.cft.gob.mx/es/Cofetel_2008/Reporte_Consulta_Publica_Espectro.

^{22/} *Brattle Group Report* at 1.

AWS-3 spectrum with the 1755 MHz band would maximize the value of the spectrum and increase the revenues expected through a Commission auction.^{23/}

V. OTHER CONSIDERATIONS FOR THE 2 GHZ MSS SPECTRUM

A. Adjacent Band Operations

As noted above, to avoid harmful interference in adjacent bands, uplink and downlink spectrum should ideally be situated adjacent to other uplink or downlink spectrum which will likely have similar power and other technical characteristics. If the Commission does not follow T-Mobile's recommendation and proceeds to adopt a band plan for terrestrial operations in the 2 GHz band, it must not create incompatible adjacent band use. The 2000-2020 MHz band is currently allocated for uplink (mobile) operations and the 2180-2200 MHz band is allocated for downlink (base or satellite) use. If the Commission retains this configuration for terrestrial use, it will create a situation where uplink operations are immediately adjacent to, or are insufficiently separated from, downlink operations in the PCS band. There are numerous proceedings documenting the interference issues that are created by such an arrangement by both brute force overload and out of band emissions ("OOBE").^{24/} Accordingly, any Commission plan must recognize this issue and either provide consistent uplink and downlink configurations, or provide a sufficient guard band to avoid harmful interference between inconsistent band plans.

Similarly, time division duplex ("TDD") operations, which permit the licensee to use the spectrum for both mobile and base operations, should not be permitted in any band designated for paired wireless broadband operations. TDD uplink operations would cause harmful interference to wireless broadband downlink operations through mobile-to-mobile interaction that cannot be coordinated. The Commission should be particularly mindful of the AWS-2 H

^{23/} *Id.*

^{24/} *Supra*, note 16.

Block at 1995-2000 MHz which would be immediately adjacent to the PCS downlink spectrum.

Uplink operations in the AWS-2 H Block would inevitably cause harmful interference to downlink operations in the PCS band below 1995 MHz.

B. The Commission Should Look Beyond Current Spectrum Pairing

Given the uncertain status of the 1755-1850 MHz band and the need to ensure the compatibility of existing and future mobile broadband operations, the Commission should not rush to lock into a band plan for this 2 GHz spectrum that is based on the current MSS satellite use pairing, but should look longer term to develop the optimal arrangement that can be implemented as part of a strategic spectrum plan.

T-Mobile recognizes that if the FCC pairs the AWS-3 and AWS-2 upper J Block with the 1755-1780 MHz band, then 1995-2000 MHz (the AWS-2 H Block) and 2020-2025 MHz (the lower AWS-2 J Block) could be orphaned. However, it may be desirable to reconfigure this spectrum to create a guard band between PCS and MSS operations, or to look at it more comprehensively as part of a reconfiguration of the MSS spectrum and pairing with spectrum in the 1780-1850 MHz band. It is premature for the Commission to set a course for use of this spectrum until there is a clearer picture as to the ultimate disposition of the entire 1755-1850 MHz band.

C. T-Mobile Continues to Support Voluntary Mechanisms to Promote Use of the 2 GHz MSS Spectrum

As the *Public Notice* states, the Commission is considering the use of incentive mechanisms that would encourage greater terrestrial use of the 2 GHz MSS spectrum. As it stated in the *MSS Flexibility Proceeding*, T-Mobile supports the use of these incentives, some of

which may require Congressional approval and others of which may not.^{25/} Today, 2 GHz MSS licensees have rights to provide an ATC component to their satellite service. However, as the *Public Notice* infers, these ATC rights are not the same as rights to provide full terrestrial services. Yet, capacity for full terrestrial services is what would be the best use of the 2 GHz MSS spectrum. Therefore, the Commission should structure any incentives so that the greatest amount of spectrum is available for terrestrial wireless broadband only.

Absent authority from Congress for incentive auctions, the Commission still has options available to facilitate making that spectrum available for terrestrial use. For instance, as T-Mobile has suggested before, it would be appropriate to allow existing MSS licensees to relinquish a portion of their spectrum, perhaps 50 percent, in exchange for receiving a terrestrial-only license, or a license that gives them greater flexibility to implement terrestrial-only services. This would allow the FCC to issue a new license, for terrestrial operations, for the returned spectrum. This would produce two licensees, both of whom would be authorized to operate terrestrial-only networks. Second, if Congress authorizes the FCC to conduct incentive auctions, the Commission could allow current 2 GHz MSS licensees to relinquish their authorizations entirely in favor of auction winners that would be licensed to provide primary terrestrial services.

VI. CONCLUSION

T-Mobile supports the Commission's efforts to make the 2 GHz MSS spectrum suitable for terrestrial mobile broadband services. However, it is premature for the Commission to adopt a band plan for that spectrum, particularly if that band plan also involves the use of AWS-2 upper J Block and AWS-3 spectrum. The Commission should work with NTIA to make the 1755-1850 MHz band available for wireless broadband use in the future. If this spectrum is

^{25/} See Comments of T-Mobile USA, Inc., ET Docket No. 10-142 (filed Sept. 15, 2010); Reply Comments of T-Mobile USA, Inc., ET Docket No. 10-142 (filed Sept. 20, 2010).

made available, the Commission would be able to use part of that band – 1755-1780 MHz – to pair with AWS-2 upper J Block and AWS-3 spectrum. Moreover, if the entire 1755-1850 MHz band were made available, the Commission may wish to consider that spectrum in the band plan for the 2 GHz spectrum, as part of a more strategic approach that will optimize the use of spectrum for mobile broadband.

Respectfully submitted,

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