## Before The FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)
Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems	) ET Docket No. 00-258 ) )
Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use By the Mobile-Satellite Service	) ET Docket No. 95-18 )
The Establishment of Policies and Service Rules For the Mobile-Satellite Service in the 2 GHz Band	) IB Docket No. 99-81
Petition for Rule Making of the Wireless Information Networks Forum Concerning the Unlicensed Personal Communications Service	) RM-9498 )
Petition for Rule Making of UTStarcom, Inc. Concerning the Unlicensed Personal Communications Service	) RM-10024 ) )

# **COMMENTS OF VERIZON WIRELESS**

John T. Scott, III Vice President and Deputy General Counsel – Regulatory Law

Donald C. Brittingham Director – Spectrum Policy

Verizon Wireless 1300 I Street, N.W., Suite 400W Washington, DC 20005 (202) 589-3760

Dated: October 19, 2001

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### **COMMENTS OF VERIZON WIRELESS**

### SUMMARY

The Commission should expedite the allocation of suitable spectrum that will support the introduction of Third Generation ("3G") mobile and other advanced wireless services.<sup>1</sup> Some of the frequency bands identified in the instant proceeding are ideally

<sup>&</sup>lt;sup>1</sup> In the Matter of Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking ("Further Notice") FCC 01-224 (rel. Aug. 20, 2001).

suited for the provision of 3G services, while others would facilitate the relocation of services from frequency bands designated for 3G. The prompt reallocation of these bands, in conjunction with frequency bands previously identified for 3G use, will assist the Commission in its efforts to develop a comprehensive spectrum management plan for advanced wireless services.<sup>2</sup>

As Verizon Wireless has previously noted, the availability of adequate spectrum is essential to the continued growth of the wireless industry and the development of advanced services that will yield significant benefits to the public and the United States economy.<sup>3</sup> The International Telecommunications Union ("ITU") has estimated that a total of 390 MHz of spectrum will be required to support the demand for commercial mobile services through 2010.<sup>4</sup> This is more than twice the amount of spectrum currently available in the United States for such services.<sup>5</sup> Other countries have already allocated substantial amounts of additional spectrum for advanced wireless services. The U.S. government must do the same, or risk losing its leadership role in the global wireless marketplace.

Despite the slowdown in the U.S. economy, the mobile industry continues to experience steady growth. During the third quarter of 2001, the industry was expected to

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<sup>&</sup>lt;sup>2</sup> In the Matter of Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, Notice of Proposed Rulemaking and Order ("Notice"), FCC 00-455 (rel. Jan. 5, 2001)

<sup>&</sup>lt;sup>3</sup> See Comments of Verizon Wireless (filed Feb. 22, 2001), in response to Notice ("Verizon Wireless Comments") at 1.

<sup>&</sup>lt;sup>4</sup> Radio Sector, International Telecommunications Union, *Spectrum Requirements for International Mobile Telecommunications-2000 (IMT-2000)*, Report ITU-R M.2023, ("ITU Report") (2001) at 4.

<sup>&</sup>lt;sup>5</sup> Current commercial mobile allocations in the U.S. include 50 MHz in the Cellular Service, 120 MHz in the Personal Communications Service ("PCS") and about 19 MHz in the Specialized Mobile Radio ("SMR") Service.

produce at least 22% year-over-year subscriber growth and 24% revenue growth.<sup>6</sup> By the end of 2001, wireless penetration is expected to exceed 46% with more than 130 million subscribers.<sup>7</sup> This steady growth in wireless subscribers is accompanied by a continued dramatic increase in usage. During the third quarter of 2001, the average minutes of use ("MOU") per Verizon Wireless customer has grown 24% as compared to the previous year, while total MOU for the network has grown 40%.

In the future, the continued increase in usage of wireless voice services, the emergence of new wireless data services, and the heightened interest in wireless as an important safety tool will fuel the continued growth of wireless services and the demand for more spectrum. Verizon Wireless urges the Commission to ensure that adequate spectrum is made available for these future mobile services by taking the following actions:

- 1. Allocate the 1710-1770 MHz and 2110-2170 MHz bands for advanced wireless services, and institute rules that will ensure their availability for commercial use in the next 3-4 years.
- 2. Relocate MDS operations in the 2150-2162 MHz band to alternate spectrum.
- 3. Reallocate the 2385-2400 MHz band and make it available to accommodate MDS relocation.
- 4. Reallocate all unassigned and abandoned spectrum in the 1990-2025 MHz and 2165-2200 MHz MSS bands and make it available for advanced wireless services.

Rather than continue to take spectrum off the table, it is time for the Commission to identify and make available spectrum to accommodate the growth of mobile services. We urge the Commission to do so quickly.

<sup>&</sup>lt;sup>6</sup> Salomon Smith Barney, *Wireless EDGE: Carriers On Track For 3Q Subscriber Growth*, Industry Note, (Oct. 1, 2001) at 1.

## I. THE 1710-1770 MHz AND 2110-2170 MHz BANDS SHOULD BE ALLOCATED AND MADE AVAILABLE FOR 3G AND OTHER ADVANCED WIRELESS SERVICES.

On October 5, 2001, the National Telecommunications and Information Administration ("NTIA") issued a statement regarding its new plan to identify spectrum for 3G and other advanced wireless mobile services.<sup>8</sup> This new plan will examine "certain options and timelines for making additional spectrum available for commercial advanced wireless services, while ensuring incumbents can meet their current and future radio spectrum needs." Under this plan, the NTIA, the FCC, the Department of Defense ("DoD") and other Executive Branch agencies will focus their assessment on the potential use of the 1710-1770 MHz and 2110-2170 MHz bands. The rest of the Federal Government band being studied by NTIA, 1770-1850 MHz, will not be part of the current assessment. Under this new plan, a final assessment will be made by Spring 2002 and auctions will be conducted in 2004.

We concur with the decision of the NTIA, the FCC, and the DoD to focus current Federal resources on the allocation of the 1710-1770 MHz and 2110-2170 MHz bands, including the reallocation of 1755-1770 MHz from Federal Government to commercial use. While Verizon Wireless supports the long-term reallocation of additional Federal spectrum in the 1770-1850 MHz band, it is clear that a decision to reallocate the majority of this band cannot be made in the near-term.<sup>9</sup>

 $<sup>^{7}</sup>$  *Id* at 2.

<sup>&</sup>lt;sup>8</sup> NTIA, U.S. Department of Commerce, *NTIA Statement Regarding New Plan To Identify Spectrum for Advanced Wireless Mobile Services (3G)*, ("NTIA Statement"), (rel. Oct. 5, 2001) available at <a href="http://www.ntia.doc.gov/ntiahome/threeg/3gplan\_100501.htm">http://www.ntia.doc.gov/ntiahome/threeg/3gplan\_100501.htm</a>.

<sup>&</sup>lt;sup>9</sup> Verizon Wireless urges NTIA and the Commission to consider the near-term reallocation of additional Federal spectrum in the 1770-1780 MHz band; *see* NTIA, U.S. Department of Commerce, *The Potential* 

The need for additional commercial spectrum, however, has not diminished, and the allocation of additional spectrum that can accommodate the development of 3G and other advanced wireless services should not be delayed. The 1755-1770 MHz band represents that portion of the Federal Government band that is the least encumbered by important DoD systems. Combined with spectrum that has already been reallocated from Federal use, 1710-1755 MHz,<sup>10</sup> and additional commercial spectrum, 2110-2170 MHz, the NTIA proposal provides for additional commercial spectrum to support the near-term deployment of advanced wireless services.

# A. All Federal Government Systems Should Be Relocated From The 1710-1770 MHz Band.

In our comments to the original Notice, Verizon Wireless stressed the importance of clearing all Federal systems from the 1710-1755 MHz band.<sup>11</sup> This includes systems deemed by NTIA as "exempt" from mandatory relocation – i.e., all fixed microwave facilities operated by Federal power agencies, certain additional fixed microwave systems that are "safety-related," and various military systems operated at sixteen DoD sites. Studies conducted by DoD and NTIA determined that co-channel sharing between these Federal systems and 3G systems operating in the same geographic area will not be possible.<sup>12</sup> The large exclusion zones required to protect these Federal sites would preclude the deployment of 3G in those areas and would adversely affect the overall

For Accommodating Third Generation Mobile Systems in the 1710-1850 MHz Band: Federal Operations, Relocation Costs, and Operational Impacts, Final Report, NTIA Special Publication 01-46 ("NTIA Final Report") (March 2001), at 4-17.

<sup>&</sup>lt;sup>10</sup> See Omnibus Budge Reconciliation Act of 1993 ("OBRA-93"), Pub. L. No. 103-66, 107 Stat. 312 (1993) and Balanced Budget Act of 1997 ("BBA-97"), Pub. L. No. 105-33, 111 Stat. 251 (1997).

<sup>&</sup>lt;sup>11</sup> Verizon Wireless Comments at 10.

deployment of 3G. While band-sharing arrangements based on geographical separation may work in the short term, such as in areas where 3G deployment will occur at a later date, it is essential that all Federal systems be relocated to alternate spectrum.

In the extensive discussions that have occurred between the wireless industry and various Federal agencies, NTIA has indicated that, while mandatory relocation of these "exempt" systems is not required, voluntary relocation may be possible. As we have previously indicated, we believe it is not just possible, but essential, and we urge the Commission to continue to work with NTIA to ensure that <u>all</u> Federal systems are cleared from the 1710-1755 MHz band.

It is equally important that all Federal systems operating in the 1755-1770 MHz band be relocated to alternate spectrum, assuming that band is reallocated in accordance with the new NTIA plan. We understand that it may not be possible to relocate the DoD satellite systems operating in the 1761-1770 MHz band, and that those systems would need to continue to operate until replacement satellites can be launched. However, we urge the Commission to work with NTIA to develop a migration plan that will clear the 1755-1770 MHz band of <u>all</u> Federal users as quickly as practicable.<sup>13</sup>

### B. The 1770-1850 MHz Federal Government Band Should Be Reallocated To Commercial Services Over The Long-Term.

While we understand that it may not be possible to adequately assess the potential reallocation of the 1770-1850 MHz band in the near-term, it is important that this band

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<sup>&</sup>lt;sup>12</sup> NTIA Final Report at 4-6.

<sup>&</sup>lt;sup>13</sup> Verizon Wireless continues to advocate Federal Government relocation and reimbursement policies that advance 3G deployment while protecting Federal interests, including statutory changes that would authorize the use of auction proceeds to compensate displaced Federal users; *see* Reply Comments of Verizon Wireless (filed Mar. 9, 2001), in response to Notice ("Verizon Wireless Reply Comments"), at 15.

ultimately be reallocated for commercial services. DoD and NTIA have indicated their preference for operating future satellite systems in the 2025-2110 MHz band assuming that appropriate regulatory protections are provided.<sup>14</sup> NTIA also concluded that non-space systems operating in the 1770-1850 MHz band could be relocated given sufficient time and comparable spectrum.<sup>15</sup> The benefits of reallocating this spectrum in an effort to harmonize both commercial and government spectrum use are significant and should not be ignored. Therefore, we recommend that the Commission and NTIA revisit the issue of reallocating the 1770-1850 MHz band as soon as practicable.

# II. THE 2150-2160 MHz BAND SHOULD BE REALLOCATED AND MADE AVAILABLE FOR ADVANCED WIRELESS SERVICES.

In the initial Notice, the Commission proposed the allocation of 2110-2150 MHz and 2160-2165 MHz for advanced wireless services.<sup>16</sup> In this Further Notice, the Commission examines the possible allocation of additional spectrum at 2150-2160 MHz and 2165-2170 MHz.<sup>17</sup> Verizon Wireless supports such an allocation. The entire 2110-2200 MHz band was identified for International Mobile Telephone – 2000 ("IMT-2000") services, commonly referred to as 3G, at the 1992 World Administrative Radio Conference ("WARC-92").<sup>18</sup> It is critically important that the Commission allocate as much contiguous spectrum from within this band as possible for 3G and other advanced wireless services. As the Commission notes, there are significant spectrum efficiencies

<sup>&</sup>lt;sup>14</sup> NTIA Final Report, Appendix D at 2-2.

 $<sup>^{15}</sup>$  Id at xv.

<sup>&</sup>lt;sup>16</sup> Notice at  $\P$  50.

<sup>&</sup>lt;sup>17</sup> Further Notice at  $\P$  27 and  $\P$  37.

<sup>&</sup>lt;sup>18</sup> Notice at  $\P$  4.

inherent in allocating contiguous spectrum for new advanced wireless services.<sup>19</sup> Moreover, the availability of a substantial amount of harmonized spectrum is necessary to support the timely deployment of affordable wireless equipment and service offerings that are competitive in the global marketplace.<sup>20</sup>

### A. MDS Operations In The 2150-2160 MHz Band Should Be Relocated To Alternate Spectrum.

In its *Final Report* on the potential use of 2500-2690 MHz for 3G services, the FCC determined that co-channel sharing of the band between 3G and ITFS/MDS systems was not possible due to the large separation distances required to avoid harmful interference.<sup>21</sup> While the FCC did not specifically address the potential for sharing the 2150-2160 MHz band, we believe that the same conclusion would be reached there since the band is also used for fixed MDS systems. As a result, the use of the 2150-2160 MHz band for advanced wireless services requires that incumbent MDS operations be cleared from the band. While there may be other bands that can adequately accommodate MDS relocation, Verizon Wireless specifically addresses the two candidate bands identified in the Notice.

<sup>&</sup>lt;sup>19</sup> Further Notice at  $\P$  38.

<sup>&</sup>lt;sup>20</sup> See Comments of Motorola (filed Feb. 22, 2001), in response to Notice ("Motorola Comments") at 18; see also Comments of The Cellular Telecommunications & Internet Association (filed Apr. 16, 2001) in response to Public Notice DA 01-786, FCC Releases Staff Final Report "Spectrum Study of 2500-2690 MHz Band: The Potential for Accommodating Third Generation Mobile Systems", Seeks Comment on Final Report in Pending Spectrum Allocation Proceeding (ET Docket No. 00-258) ("CTIA Comments on Final Reports") at 5.

<sup>&</sup>lt;sup>21</sup> Office of Engineering and Technology, Mass Media Bureau, Wireless Telecommunications Bureau, and International Bureau, Federal Communications Commission, *Spectrum Study of the 2500-2690 MHz Band, The Potential for Accommodating Third Generation Mobile Systems*, Staff Report, ("FCC Final Report") Public Notice, DA 01-786 (rel. Mar. 30, 2001) at 27.

#### B. The 1910-1930 MHz Band Is Not Suitable For MDS Relocation.

In response to the initial Notice, several commentators noted the significant difficulties in operating MDS and 3G systems in adjacent frequency bands.<sup>22</sup> In fact, the potential for adjacent channel interference from MDS into 3G systems was one of the primary reasons that Verizon Wireless urged the Commission to relocate MDS operations in the 2150-2162 MHz band to alternate spectrum.<sup>23</sup> Our technical analysis has concluded that the potential for harmful interference is significant even if guard bands of 5 MHz or greater are employed to separate MDS and 3G operations.<sup>24</sup> Cisco and WorldCom have similarly concluded that significant guard bands may be required to protect against inter-service interference that may occur between MDS and 3G services in adjacent bands.<sup>25</sup>

In its *Final Report*, the FCC assessed the potential for interference between adjacent 3G and MDS operations and concluded that 4 MHz guard bands would be sufficient to protect 3G base stations from harmful interference caused by the operation of MDS base stations.<sup>26</sup> However, the report failed to address the potential for harmful interference to 3G mobile devices, and did not address the potential for other types of interference (such as blanketing interference or intermodulation distortion) that could result from the operation of disparate systems in adjacent bands. Consequently, the

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<sup>&</sup>lt;sup>22</sup> See Reply Comments of Motorola (filed Mar. 9, 2001), in response to Notice ("Motorola Reply Comments") Appendix at 1; see also Reply Comments of AT&T Wireless (filed Mar. 9, 2001), in response to Notice ("AT&T Wireless Reply Comments") at 8.

<sup>&</sup>lt;sup>23</sup> Verizon Wireless Comments at 14.

<sup>&</sup>lt;sup>24</sup> Verizon Wireless Reply Comments at 13.

<sup>&</sup>lt;sup>25</sup> See Comments of Cisco (filed Feb. 22, 2001), in response to Notice ("Cisco Comments") at 9-10; see *also* Comments of WorldCom (filed Feb. 22, 2001), in response to Notice ("WorldCom Comments") at 18.

<sup>&</sup>lt;sup>26</sup> FCC Final Report at 49.

FCC's analysis is at best inconclusive regarding the potential for harmful interference resulting from adjacent MDS and 3G operations.

A relocation of MDS operations to the 1910-1930 MHz band would raise similar concerns about potential interference to/from adjacent PCS operations in the 1850-1910 MHz and 1930-1990 MHz bands. The Commission should not relocate MDS operations to the 1910-1930 MHz band unless it has determined conclusively that harmful interference would not be caused to PCS operations. Importantly, such an action would likely require significant changes to existing FCC technical rules applicable to MDS, such as the out-of-band emission limits.<sup>27</sup>

# C. The 2385-2400 MHz Band Should Be Reallocated And Made Available for MDS Relocation.

The Notice seeks comment on the potential reallocation of the 2385-2400 MHz band to advanced wireless services or to accommodate the relocation of services displaced by 3G systems in other bands.<sup>28</sup> Verizon Wireless supports such a reallocation and believes that this band can best be used to accommodate MDS relocation.

The 2385-2400 MHz band would provide sufficient spectrum to accommodate MDS systems currently operating in the 2150-2160 MHz band, while not causing harmful interference to those systems operating in adjacent bands. Since it was only recently reallocated from Federal Government to commercial use, it is not heavily encumbered with other commercial users. As a result, it may be the best candidate for accommodating MDS relocation in the near-term. Verizon Wireless urges the

<sup>&</sup>lt;sup>27</sup> Verizon Wireless Reply Comments at 13.

<sup>&</sup>lt;sup>28</sup> Notice at  $\P$  12.

Commission to remove the Amateur Service allocation from the 2390-2400 MHz band, reallocate the entire 2385-2390 MHz and 2390-2400 MHz bands to the Fixed Service, and make both bands available as soon as practicable for MDS relocation.

### III. THE 1990-2025 MHz AND 2165-2200 MHz BANDS SHOULD BE REALLOCATED AND MADE AVAILABLE FOR ADVANCED WIRELESS SERVICES.

As discussed supra, the availability of adequate spectrum is essential to the continued growth of the wireless industry and the development of 3G and other advanced wireless services. A substantial amount of spectrum was identified at the 2000 World Radiocommunication Conference ("WRC-2000") to meet the increasing demand for mobile services.<sup>29</sup> Two additional frequency bands were identified for potential 3G deployment; the 1710-1850 MHz and 2500-2690 MHz bands. Unfortunately, the U.S. Government has eliminated much of this spectrum from further consideration. On September 24, 2001, the Commission concluded that the 2500-2690 MHz band should <u>not</u> be cleared of incumbent systems and made available for 3G.<sup>30</sup> On October 5, 2001, the NTIA, in conjunction with the FCC and the DoD, announced it would <u>not</u> reallocate the 1770-1850 MHz band in the near-term.

It is imperative that <u>all</u> remaining spectrum identified in the initial Notice, i.e., 1710-1770 MHz, 2110-2150 MHz, and 2160-2165 MHz, as well as the 2150-2160 MHz band identified in the instant proceeding, be allocated for advanced wireless services.

<sup>&</sup>lt;sup>29</sup> See Provisional Final Acts of the 2000 World Radiocommunication Conference ("WRC-2000") ("Final Acts of WRC-2000"), Resolution 223, titled "Additional frequency bands identified for IMT-2000," was initially called Resolution [COM5/24].

<sup>&</sup>lt;sup>30</sup> In the Matter of Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third

Moreover, this spectrum should be cleared of incumbent systems and made available for use in a timeframe that will meet expected market demand.

Unfortunately, this 120 MHz of spectrum falls woefully short of the amount of spectrum required to meet the demand for mobile services over the longer term. Consequently, the Commission must identify and make available for use additional spectrum resources that will accommodate 3G and other advanced wireless services. The 1990-2025 MHz and 2165-2200 MHz bands, currently allocated to the Mobile Satellite Service ("MSS"), are ideally suited for such services.<sup>31</sup>

### A. All Unassigned And Abandoned MSS Spectrum Should Be Reallocated For Advanced Wireless Services.

Verizon Wireless concurs with the Commission's proposal to allocate the 14 MHz of unassigned MSS spectrum for advanced wireless services.<sup>32</sup> As a supplement to other spectrum being considered for reallocation, i.e., 1710-1770 MHz and 2110-2165 MHz, this spectrum can be put to use immediately to support the provision of advanced wireless services. For example, the 2165-2170 MHz band can, and should, be combined with the 2110-2165 MHz band and paired with 1710-1770 MHz. Making such an allocation would provide additional spectrum for advanced wireless services, while resulting in

Generation Wireless Systems, First Report and Order and Memorandum Opinion and Order ("Order"), FCC 01-256.

<sup>&</sup>lt;sup>31</sup> As Verizon Wireless has noted previously, recent filings by MSS licensees, as well as recent business failures, raise substantial questions as to the present and future viability of MSS. They suggest that the public interest would best be served through a reallocation of this valuable spectrum to terrestrial wireless services, and Verizon Wireless supports the petition of CTIA to reallocate the 2 GHz MSS band. Coincident with the Notice, the Commission denied CTIA's petition. CTIA has asked the Commission to reconsider this action; *see* Petition for Reconsideration of the Cellular Telecommunications & Internet Association (filed Oct. 15, 2001), ("CTIA Petition for Reconsideration") ET Docket Nos. 00-258 and 95-18, IB Docket No. 99-81.

<sup>&</sup>lt;sup>32</sup> Further Notice at  $\P$  24.

little, if any, disruption to existing licensees. In addition, it would be consistent with efforts to promote global harmonization, since the entire 2110-2170 MHz band has been identified globally for terrestrial 3G services.

The remaining 9 MHz of unassigned MSS spectrum, i.e., 7 MHz in the 1990-2025 MHz band and 2 MHz in the 2170-2200 MHz band, should also be reallocated for non-MSS use. While this spectrum might be used to accommodate the relocation of systems that are displaced by 3G allocations to other bands (e.g., Government or MDS), we believe this spectrum would be best used for advanced wireless services in conjunction with other MSS spectrum that is abandoned in the event that any MSS licensees miss their required milestones.<sup>33</sup>

The record in this proceeding supports the allocation of substantial amounts of additional spectrum for 3G and other advanced wireless services, while the need for additional MSS spectrum is highly questionable. If MSS spectrum is abandoned as a result of market demands that are less than originally projected, it makes little sense to retain this spectrum for use by other MSS operators. Rather, this spectrum should be auctioned for other higher-valued services. Therefore, we strongly urge the Commission to reallocate all abandoned MSS spectrum to advanced wireless services.

# **B.** MSS Spectrum Should Be Assigned In A Manner That Will Facilitate Segmentation Of The Band For Advanced Wireless Services.

In granting MSS licenses to eight applicants, the International Bureau assigned a total of 7 MHz (2 x 3.5 MHz) to each licensee, but specified that the licensee could "choose its Selected Assignment such that the band edge of the assignment is an integer

multiple of 3.88 megahertz from the band edge of the 2 GHz MSS band."<sup>34</sup> An MSS assignment scheme of this type would create small slivers of spectrum interspersed among MSS assignments, and thus, preclude the Commission from recovering and making available for other uses a contiguous band of usable spectrum. Therefore, we support the Commission's proposal to make conforming changes to the provisions of the 2 GHz MSS system authorizations concerning Selected Assignments such that MSS licensees are spaced at 3.5 MHz intervals.

Moreover, the Commission should require MSS systems to be capable of operating over the entire 2 GHz MSS band, rather than 70% of the band as required by the current rule. This will facilitate the potential "repacking" of the 2 GHz band to accommodate advanced wireless services in the future, for example, in the event that abandoned MSS spectrum is reallocated. The current 70% rule could result in a patchwork assignment scheme with little contiguous spectrum available for future reallocation. This would frustrate the Commission's efforts to efficiently combine this spectrum with other bands (e.g., 2110-2170 MHz), and thus would not promote the deployment of 3G and other advanced wireless services.

### CONCLUSION

It is vitally important that the Commission allocate substantial amounts of additional spectrum to support the growing demand for 3G and other advanced wireless

<sup>&</sup>lt;sup>33</sup> This spectrum could be combined with other MSS spectrum and made available for advanced wireless services immediately if additional MSS spectrum is reallocated in accordance with the CTIA Petition.

<sup>&</sup>lt;sup>34</sup> See e.g., In the Matter of Application of Iridium LLC Concerning Use of the 1990-2025/2165-2200 MHz and Associated Frequency Bands for a Mobile-Satellite System, Order and Authorization, File No. 187-SAT-P/LA-97(96), rel. Jul. 17, 2001, at ¶ 7.

services. This spectrum should be available in a timeframe that meets market demands, and should be harmonized with worldwide allocations to the greatest extent possible. Consistent with these important objectives, the Commission should allocate spectrum in the 1710-1770 MHz, 2110-2170 MHz, 1990-2025 MHz, and 2165-2200 MHz bands for advanced wireless services.

Respectfully submitted,

VERIZON WIRELESS

T. Soott, E 10 By:

John T. Scott, III Vice President and Deputy General Counsel – Regulatory Law Verizon Wireless 1300 I Street, N.W., Suite 400W Washington, DC 20005 (202) 589-3760

M

Donald C. Brittingham Director – Spectrum Policy Verizon Wireless 1300 I Street, N.W., Suite 400W Washington, DC 20005 (202) 589-3785

Dated: October 19, 2001

### **Certificate of Service**

I hereby certify that on this 19<sup>th</sup> day of October copies of the foregoing "Comments of Verizon Wireless" in ET Docket 00-258 were sent by first-class mail to the following parties:

#### Peter Tenhula

Sr. Legal Advisor to Chairman Powell Federal Communications Commission 445 12<sup>th</sup> Street, SW – Room 8-A204 Washington, DC 20554

#### Bryan Tramont

Sr. Legal Advisor to Comm. Abernathy Federal Communications Commission 445 12<sup>th</sup> Street, SW – Room 8-xxx Washington, DC 20554

### Paul Margie

Legal Advisor to Commissioner Copps Federal Communications Commission 445 12<sup>th</sup> Street, SW – Room 8-xxx Washington, DC 20554

#### Monica Desai

Legal Advisor to Commissioner Martin Federal Communications Commission 445 12<sup>th</sup> Street, SW – Room 8-xxx Washington, DC 20554

Thomas J. Sugrue, Chief Wireless Telecommunications Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW – Room 3-C252 Washington, DC 20554

David Furth, Sr. Legal Advisor Wireless Telecommunications Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554 Thomas P. Stanley, Chief Engineer Wireless Telecommunications Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW – Room 3-C460 Washington, DC 20554

Bruce Franca, Acting Chief Office of Engineering and Technology Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Geraldine Matise, Deputy Chief Office of Engineering and Technology Federal Communications Commission 445 12<sup>th</sup> Street, SW – Room 7-A123 Washington, DC 20554

Julius P. Knapp, Chief Policy and Rules Division Office of Engineering and Technology Federal Communications Commission 445 12<sup>th</sup> Street, SW – Room 7-B133 Washington, DC 20554

Tom Derenge, Chief Spectrum Policy Branch Policy and Rules Division Office of Engineering and Technology Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554 John Spencer Wireless Telecommunications Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Rodney Small Spectrum Policy Branch Policy and Rules Division Office of Engineering and Technology Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Ira Keltz Spectrum Policy Branch Policy and Rules Division Office of Engineering and Technology Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Richard B. Engelman, Chief Planning and Negotiations Division International Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW, Room 7-A760 Washington, DC 20554

Karl Kensinger Satellite & Radiocommunications Div. International Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW, Room 7-A760 Washington, DC 20554

arah E Miisma

Sarah E. Weisman