

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Spectrum Policy Task Force Seeks Public	)	ET Docket No. 02 - 135
Comment on Issues Related to Commission's	)	
Spectrum Policies	)	

**Comments of Mobile Satellite Ventures Subsidiary LLC**

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## Summary

MSV files these comments in response to the questions posed by the Spectrum Policy Task Force about (i) new technologies that can improve spectrum efficiency and utilization; (ii) giving incumbent licensees flexibility to use their spectrum for new services and the impact of that flexibility on the interference environment; and (iii) the use of market-based assignment policies.

MSV operates the first North American Mobile Satellite Service system, providing essential services to rural and underserved areas. MSV is planning the development of a second-generation system that will use ancillary terrestrial facilities (operating in the same frequencies) to increase the value and capacity of its service. With such a system, MSV will be able to provide service using small, handheld terminals that operate reliably not only in rural and remote areas, but in urban and indoor environments as well. The technology that MSV seeks to use will greatly improve the efficiency of the L-band spectrum already assigned to MSV and will do so in a way that MSV has demonstrated will not cause harmful interference to other users of the same or adjacent spectrum. Giving MSV—as an incumbent licensee—the flexibility to deploy this innovative next-generation system is good public policy and properly relies on market forces. Moreover, it is fully consistent with Commission precedent.

MSV's proposal for its next-generation system was filed in January 2001. MSV urges the Task Force to use its efforts to speed Commission efforts to process MSV's application as soon as possible.

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Mobile Satellite Ventures Subsidiary LLC (“MSV”) hereby submits these Comments in response to the Public Notice of the Spectrum Policy Task Force (“SPTF”) seeking comment on a broad range of issues relating to the Commission’s spectrum policies. MSV is filing these Comments to aid the SPTF with its specific questions regarding whether there are any new technologies that can improve spectrum efficiency and utilization, whether incumbent licensees should be given flexible use of their spectrum and whether flexibility will impact interference, and whether market-based assignment policies will affect other Commission objectives. In response to these questions, MSV discusses herein its pending proposal to supplement its mobile satellite service with ancillary terrestrial facilities as a prime example of the type of spectrum efficiency and spectrum flexibility the Commission should encourage.

**Background**

MSV is the successor to Motient Services Inc. (“Motient”), the entity authorized by the Commission in 1989 to construct, launch, and operate a U.S. MSS system in the L-band.<sup>1</sup> The first Motient satellite (AMSC-1) was launched in 1995, and Motient began offering service in

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<sup>1</sup>Memorandum Opinion, Order and Authorization, 4 FCC Rcd 6041 (1989); Final Decision on Remand, 7 FCC Rcd 266 (1992); *aff’d sub nom.* Aeronautical Radio, Inc. v. FCC, 983 F.2d 275 (D.C. Cir. 1993) (“*Licensing Order*”).

1996. In November 2001, Motient entered into a joint venture with TMI Communications and Company, Limited Partnership (“TMI”), the Canadian licensee of the L-band MSS satellite MSAT-1, forming MSV. Together, the two companies have invested approximately \$1.5 billion in the development of their first-generation MSS systems. Today, MSV offers a wide range of land, maritime, and aeronautical mobile satellite services, including voice and data, throughout the contiguous United States and Canada as well as Alaska, Hawaii, the U.S. Virgin Islands, and coastal areas up to 200 miles offshore.

MSV’s current system uses large beams and requires significant power to close the link between the mobile terminals and the satellite. By today’s standards, the consumer equipment is expensive (over \$1000) and is the size of a laptop computer. MSV’s first-generation MSS system is also burdened with the fundamental technical limitation that has plagued all MSS systems to date – the inability to overcome signal blockage in urban and indoor environments. While MSV is proud of what it has accomplished with its first-generation system, particularly its service to public safety and rural customers, it has struggled to break even.

Both AMSC-1 and MSAT-1 will reach the end of their useful lives in several years, and timely replacement decisions are essential. While MSV is committed to deploying a next-generation replacement system, MSV believes its satellite system will only be viable if it can offer a service that uses a small, handheld terminal that works everywhere, and can attract the critical mass of consumers needed to motivate equipment manufacturers to produce affordable handsets. To reach this goal, MSV filed an application in January 2001 to deploy a next-generation, replacement MSS system that includes integrated, ancillary, in-band terrestrial facilities (“ATC”) in urban areas to supplement signals from the planned next-generation

satellites.<sup>2</sup> With such a system, MSV will be able to provide service using small, handheld terminals (comparable in size to the smallest cellular and PCS phones) that operate reliably not only in rural and remote areas, but in urban and indoor environments as well. MSV's vision is to provide affordable, high-quality digital service to all of America, with ATC in urban areas and with its satellites in those areas where terrestrial systems do not provide digital coverage, which the Commission has found are substantial.<sup>3</sup>

The Commission put the MSV application on Public Notice in March 2001 and specifically requested comment on MSV's proposal that it be afforded the flexibility to deploy ancillary terrestrial facilities.<sup>4</sup> In response to MSV's ATC proposal and a similar proposal for flexibility filed by New ICO Global Communications (Holdings) Ltd. for the 2 GHz MSS band,<sup>5</sup> the Commission also issued a Notice of Proposed Rulemaking ("NPRM") in August 2001 seeking comment on the need for ancillary terrestrial operations, ways to ensure that terrestrial

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<sup>2</sup>MSV originally filed its application on January 16, 2001. *See* File No. SAT-ASG-20010116-00010 (Jan.16, 2001). At the request of Commission staff, MSV withdrew this application and refiled an identical application on March 2, 2001. *See* Application of Motient Services Inc. and Mobile Satellite Ventures Subsidiary LLC, File No. SAT-ASG-20010302-00017 et al. (March 2, 2001).

<sup>3</sup>*See* In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, *Sixth Report*, FCC 01-192, Table 7 of Appendix C (released July 17, 2001) ("*Sixth CMRS Report*").

<sup>4</sup>*See* "International Bureau Sets Deadlines Concerning Motient/TMI Assignment and Transfer of Control Applications, and Motient's Request for Second Generation Satellite/Terrestrial Base Station System," *Public Notice*, Report No. SAT-00066 (March 19, 2001).

<sup>5</sup>*Ex parte* letter from Lawrence H. Williams and Suzanne Hutchings, New ICO Global Communications (Holdings) Ltd., to Chairman Michael K. Powell, FCC, IB Docket No. 99-81 (March 8, 2001) ("*ICO Letter*").

operations remain ancillary to satellite service, the technical rules that should be adopted to protect co-channel and adjacent band licensees from interference, and licensing procedures.<sup>6</sup>

MSV's flexibility proposal has been opposed by Inmarsat Ventures plc ("Inmarsat"), a competitor of MSV. Inmarsat argues that MSS is a viable service without terrestrial augmentation,<sup>7</sup> ATC will cause harmful interference to Inmarsat's L-band satellite service,<sup>8</sup> and ATC will violate international treaties.<sup>9</sup> The terrestrial wireless industry has also opposed the flexibility requests of the MSS licensees, arguing either that MSS spectrum should be reallocated to terrestrial only use and then auctioned or that, if the spectrum is not reallocated, any terrestrial use of MSS spectrum should be severed with licenses awarded via auction.<sup>10</sup> Specifically addressing this issue, the Commission requested comment in March 2002, on whether, from a purely technical point of view, MSS operations in the 2 GHz band, L-band, and Big LEO bands can be severed from terrestrial operations.<sup>11</sup>

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<sup>6</sup>Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Band, *Notice of Proposed Rulemaking*, IB Docket 01-185 (August 17, 2001) ("MSS Flexibility NPRM").

<sup>7</sup>Comments of Inmarsat Ventures plc ("Inmarsat"), IB Docket No. 01-185 (Oct. 22, 2001), at 26-29.

<sup>8</sup>*Id.* at 12-16; Reply Comments of Inmarsat, IB Docket No. 01-185 (Nov. 13, 2001), at 7-20.

<sup>9</sup>Comments of Inmarsat, IB Docket No. 01-185, at 18-24; Reply Comments of Inmarsat, IB Docket No. 01-185, at 4-7.

<sup>10</sup>*See, e.g.*, Comments of AT&T Wireless Services, Inc. ("AWS"), IB Docket No. 01-185 (Oct. 22, 2001) at 13-14; AWS *Ex Parte* Presentation, IB Docket No. 01-185 (April 1, 2002); Joint Comments of Cingular Wireless and Verizon Wireless, IB Docket No. 01-185 (Oct. 22, 2001) at 21-23; Comments of Telephone and Data Systems, Inc., IB Docket No. 01-185 (Oct. 22, 2001) at 12-13; Sprint Corporation and Cingular Wireless LLC *Ex Parte* Presentation, IB Docket No. 01-185 (May 13, 2002).

<sup>11</sup>"Commission Staff Invites Technical Comments on the Certain Proposals to Permit Flexibility in the Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Band," IB Docket No. 01-185, ET Docket No. 95-18, *Public Notice* (rel. Mar. 6, 2002) ("Public Notice").

In response, MSV has provided extensive technical analysis demonstrating that is next-generation system supplemented with ATC will not cause harmful interference to Inmarsat or violate international treaties.<sup>12</sup> MSV has also provided extensive analysis as to why ATC is essential to the viability of MSS,<sup>13</sup> how MSS must be preserved to ensure service to rural and underserved area,<sup>14</sup> and how terrestrial operations in the L-band can occur only if the satellite and terrestrial operations are integrated under the control of one entity.<sup>15</sup>

On June 6, 2002, Chairman Michael K. Powell announced the formation of a “Spectrum Policy Task Force” (“SPTF”) to evaluate existing Commission spectrum policies and to make recommendations for possible improvements.<sup>16</sup> On the same day, the SPTF issued a Public Notice asking for comment on a series of questions relating to spectrum policy.<sup>17</sup> The SPTF notes that one model the Commission has used for transitioning to a more market-oriented spectrum policy is to grant incumbent licensees flexibility so that they can migrate spectrum to

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<sup>12</sup>Comments of MSV, IB Docket No. 01-185, Technical Appendix (Oct. 22, 2001); Reply Comments of MSV, IB Docket No. 01-185, at 13, 15-17 & Technical Appendix (Nov. 13, 2001); MSV *Ex Parte* Presentation, IB Docket No. 01-185 (Jan. 11, 2002); MSV *Ex Parte* Presentation, IB Docket No. 01-185 (Jan. 29, 2002); MSV *Ex Parte* Presentation, IB Docket No. 01-185 (Feb. 6, 2002); MSV *Ex Parte* Presentation, IB Docket No. 01-185 (March 28, 2002); MSV *Ex Parte* Presentation, IB Docket No. 01-185 (May 1, 2002).

<sup>13</sup>Comments of MSV, IB Docket No. 01-185, at 11-16; Reply Comments of MSV, IB Docket No. 01-185, at 8-9.

<sup>14</sup>Comments of MSV, IB Docket No. 01-185, at 5-11; Reply Comments of MSV, IB Docket No. 01-185, at 6-9.

<sup>15</sup>Comments of MSV, IB Docket No. 01-185, at 33-35 and Technical Appendix at 2-4; Reply Comments of MSV, IB Docket No. 01-185, at 13-15; Comments of MSV, IB Docket No. 01-185 (March 22, 2002) (“*MSV Severability Comments*”).

<sup>16</sup>“FCC Chairman Michael K. Powell Announces Formation of Spectrum Policy Task Force,” *News Release* (June 6, 2002).

<sup>17</sup>“Spectrum Policy Task Force Seeks Public Comment on Issues Related to Commission’s Spectrum Policies,” *Public Notice*, DA 02-1311, ET Docket No. 02-135 (June 6, 2002) (“Public Notice”).

its highest value use. *See* Public Notice at 2. The SPTF seeks input regarding how the Commission can expand its use of this approach. *Id.* The SPTF also seeks comments on an alternative approach whereby spectrum bands are reallocated for flexible use. *Id.*

### **Discussion**

MSV's proposal is a prime example of the type of spectrum flexibility and efficiency the Commission's policies should encourage. MSV urges the Commission and the SPTF, however, to ensure that the work of the SPTF does not delay action on MSV's application or the MSS flexibility rulemaking. MSV's application to launch and operate a next-generation satellite system has been pending for a year and a half and the issues raised in response have already been thoroughly debated. With MSV's satellites approaching the end of their useful lives, further delay on MSV's application threatens a gap in service and will seriously prejudice its goal to launch and operate a replacement system.

#### **I. ANCILLARY TERRESTRIAL OPERATIONS WILL VASTLY IMPROVE SPECTRUM EFFICIENCY AND UTILIZATION IN THE L-BAND**

The SPTF asks if there are any new technologies that could improve spectral efficiencies and utilization. *See* Public Notice at 5 (Question No. 19). MSV's proposed next-generation MSS system is an excellent example of such a technology. MSV's integrated satellite and terrestrial system will re-use for terrestrial service *the exact same spectrum* it uses to provide other customers with satellite service in other geographical areas. A radio resource manager will control system-wide frequencies and distribute them dynamically over both the satellite and terrestrial segments to minimize interference and satisfy capacity demand. Only a fully integrated system such as that proposed by MSV, in which terrestrial and satellite operations are coordinated in real time using a common radio resource management algorithm, can achieve this efficiency. Thus, MSV's L-band ATC proposal represents the height of spectrum efficiency

because it will make use of otherwise unusable L-band MSS spectrum in urban environments while at the same time ensuring that rural and underserved areas receive the same robust and reliable satellite service.

Those who oppose MSV's flexibility proposal have argued that MSV could simply use dual-band handsets and serve urban areas by relying on commercial arrangements with terrestrial carriers operating in other bands.<sup>18</sup> Not only have such arrangements failed in the past, they also represent a gross waste of spectrum.<sup>19</sup> A dual-band arrangement would require an MSS provider to rely on arrangements with terrestrial carriers or to acquire spectrum in other bands to serve urban and indoor areas. The Commission's goal should be to increase the public's supply of accessible spectrum by encouraging licensees to maximize the use of their spectrum, not to increase the demand for existing spectrum.

The SPTF also asks if there are any barriers to the deployment of technologies that will improve spectrum efficiency and utilization. *See* Public Notice at 5 (Question No. 19). In MSV's case, the only barrier is the regulatory one – the need for the Commission to authorize this innovative operation.

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<sup>18</sup>Comments of AWS, IB Docket No. 01-185, at 6-7; Comments of the Aviation Industry Parties, IB Docket 01-185 (Oct. 19, 2001), at 10; Comments of the Cellular Telecommunications & Internet Association, IB Docket No. 01-185 (Oct. 22, 2001), at 13; Comments of Inmarsat, IB Docket No. 01-185, at 27-28; Comments of Telenor Broadband Services AS, IB Docket No. 01-185 (Oct. 19, 2001), at 6-7; Comments of Stratos Mobile Networks (USA) LLC and Marinesat Communications Network, Inc., IB Docket No. 01-185 (Oct. 22, 2001), at 10.

<sup>19</sup>*See* Comments of MSV, IB Docket No. 01-185, at 14-16; Reply Comments of MSV, IB Docket No. 01-185, at 11-12.

## II. IN MSV'S CASE, GRANTING AN INCUMBENT LICENSEE FLEXIBLE USE OF SPECTRUM WILL SERVE IMPORTANT POLICY GOALS WITHOUT ADVERSELY IMPACTING THE INTERFERENCE ENVIRONMENT

The SPTF asks whether incumbent users should be given flexibility with their existing spectrum. *See* Public Notice at 2 (Question No. 2(a)). The SPTF notes that granting incumbent licensees flexibility so that they can migrate spectrum to its highest value use is a market-oriented spectrum policy. *See* Public Notice at 2.<sup>20</sup> The SPTF asks whether there are circumstances where adopting such a market-oriented allocation and assignment policy would affect other important Commission objectives. *See* Public Notice at 3 (Question No. 4). At least with respect to MSV's pending request to use ATC, granting an incumbent licensee flexible use of its spectrum will serve other important Commission policy goals, is consistent with precedent, will not cause interference to other spectrum users, and will not violate international agreements.

MSV's request for flexible use of its spectrum to deploy ATC will serve other important Commission policy goals. First, as discussed above, ATC will vastly improve spectrum efficiency and utilization in the L-band. Second, ATC will preserve the viability of MSS and the critical service it provides in rural and unserved areas. As the Commission has found, satellite technology is uniquely capable of providing instant connectivity to the most remote parts of the country.<sup>21</sup> The availability of high-speed data connections to rural and underserved America

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<sup>20</sup>For example, in permitting terrestrial wireless providers to provide fixed services, the Commission explained “[a]llowing service providers to offer all types of fixed, mobile, and hybrid services in response to market demand will allow for more flexible responses to consumer demand, a greater diversity of services and combinations of services, and increased competition.” Amendment to the Commission’s Rules to Permit Flexible Service Offerings in the Commercial Mobile Radio Services, *First Report and Order and Further Notice of Proposed Rulemaking*, WT Docket 96-6, 11 FCC Rcd 8965 (1996), ¶ 22 (“*CMRS Flexibility Order*”).

<sup>21</sup>*See* Qualcomm Incorporated, *Order*, DA 00-2438, ¶ 7 (Chief, Wireless Bureau, Oct. 30, 2000) (“[M]obile satellite service may provide an important additional emergency telecommunications resource, especially to callers located in remote and rural areas and callers

depends on satellite delivery because simple economic forces preclude terrestrial wireless carriers from serving sparsely populated areas. The MSS industry has struggled to remain viable, however, because of the inability of MSS carriers to provide service in heavily populated urban environments. This has prevented MSS providers from developing a critical mass of customers. This lack of critical mass has resulted in more expensive equipment and higher rates than would be the case for a service with more customers. Supplementing MSS with ATC, however, will preserve the viability of MSS by allowing MSS operators to use their spectrum to create a more valuable and attractive service that will enable MSS providers to attract a critical mass of customers. Without the flexibility to deploy ATC, the future of MSS is uncertain. Thus, by preserving the viability of MSS, ATC will in turn ensure that rural and underserved areas are not deprived of the high-speed mobile telecommunications services offered by MSS providers.

Flexibility is a cornerstone of the Commission's spectrum policies, and its treatment of MSS should be no exception. In the MSS Flexibility NPRM, the Commission acknowledged that affording licensees the necessary flexibility to use their spectrum more efficiently is its "favored approach to spectrum management and licensing." MSS Flexibility NPRM at ¶ 2. In many instances, the Commission has permitted licensees to supplement the services for which they were originally licensed in order to maximize use of their spectrum, despite these additional services being inconsistent with the original plans for the spectrum. For example, in September 2001, the Commission allowed Multipoint Distribution Service ("MDS") and Instructional Television Fixed Service ("ITFS") licensees to provide mobile services with their spectrum in

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located in underpopulated regions where neither landline nor terrestrial mobile services exists. Mobile satellite systems . . . can provide continuous, reliable coverage in many areas where cellular coverage is patchy."); *see also* Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Service in the Upper and Lower L-band, *Notice of Proposed Rulemaking*, 11 FCC Rcd 11675, ¶ 12 (1996).

addition to fixed services.<sup>22</sup> The Commission authorized such flexible use for incumbent licensees rather than accede to the demands of the terrestrial wireless industry that MDS/ITFS spectrum be reallocated for 3G wireless use.<sup>23</sup> The Commission's "favored" flexibility approach is also readily apparent in its decisions allowing terrestrial wireless carriers to provide fixed services,<sup>24</sup> allowing satellite radio licensees to supplement their satellite signals with terrestrial repeaters,<sup>25</sup> authorizing paging licensees to operate from high altitude balloons because it would otherwise be too costly and difficult to serve rural and underserved areas,<sup>26</sup> authorizing wireless cable providers to offer two-way services,<sup>27</sup> permitting flexible use of broadcast spectrum,<sup>28</sup> and

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<sup>22</sup>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, *First Report and Order and Memorandum Opinion and Order*, ET Docket No. 00-258, FCC 01-256 (Sept. 24, 2001) ("*MDS/ITFS Flexibility Order*").

<sup>23</sup>*Id.* at ¶ 19.

<sup>24</sup>Amendment to the Commission's Rules to Permit Flexible Service Offerings in the Commercial Mobile Radio Services, *First Report and Order and Further Notice of Proposed Rulemaking*, WT Docket 96-6, 11 FCC Rcd 8965 (1996) ("*CMRS Flexibility Order*"). The Commission also noted its concern that "regulatory restrictions on use of the spectrum could impede carriers from anticipating what services customers most need, and could result in inefficient spectrum use and reduced technological innovation. Allowing service providers to offer all types of fixed, mobile, and hybrid services in response to market demand will allow for more flexible responses to consumer demand, a greater diversity of services and combinations of services, and increased competition." *Id.* at ¶ 22.

<sup>25</sup>*See* Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, *Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 5754 (1997).

<sup>26</sup>*See* Space Data Corporation, Petition for a Declaratory Ruling, a Clarification or, in the Alternative, a Waiver of Certain Narrowband Personal Communications Services (PCS) Rules as they Apply to a High-Altitude Balloon-Based Communications System, *Memorandum Opinion and Order*, DA 01-2132 (Chief, Wireless Telecommunications Bureau, Sept. 12, 2001).

<sup>27</sup>Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, *Report and Order*, 13 FCC Rcd 19112 (1998) (allowing MDS/ITFS licensees to deploy two-way systems), recon., 14 FCC Rcd 12764 (1999), further recon., 15 FCC Rcd 14566 (2000).

<sup>28</sup>*See, e.g.*, Amendment of Parts 2 and 73 of the Commission's AM Broadcast Rules Concerning the Use of the AM Sub-carrier, *Report and Order*, 100 FCC 2d 5 (1984) (allowing

allowing cellular licensees to use signal repeaters as a cost effective means of correcting coverage problems.<sup>29</sup> The Commission has also established new or revised service allocations designed to give licensees flexibility with respect to the kinds of services they can provide and the ability to structure their services in a manner that would maximize their spectrum use.<sup>30</sup>

The SPTF also asks how interference rights of incumbents and new licensees would be redefined under flexibility. See Public Notice at 2 (Question No. 2.e). At least with respect to MSV's L-band ATC proposal, flexibility will have little effect on the interference environment because MSV is committed to operating its ATC on a non-interference basis. MSV has provided extensive technical analysis demonstrating that ATC will not result in interference to its own

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AM licensees to use their carrier signals for any broadcast or non-broadcast use that does not interfere with their main broadcast channel operation or the signals of other broadcast stations); Digital Data Transmission Within the Video Portion of Television Broadcast Station Transmissions, *Report and Order*, 11 FCC Rcd 7799 (1996) (amending the Commission's rules to allow broadcast television licensees to use approved methods of transmitting ancillary digital data inserted into the video portion of the standard NTSC television signal without prior Commission authorization).

<sup>29</sup>See Amendment of Sections of Part 22 of the Commission's Rules Airborne Use of Cellular Telephones and the Use of Cell Enhancers in the Domestic Public Cellular Radio Service, *Report and Order*, 7 FCC Rcd 23 (1991).

<sup>30</sup>See, e.g., Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, *First Report and Order*, 15 FCC Rcd 476, ¶ 1 (2000) (establishing service rules to afford 700 MHz licensees the flexibility to provide fixed, mobile, and new broadcast-type services in their licensed spectrum in order to enable "the broadest possible use of this spectrum"); Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service, *Report and Order*, 12 FCC Rcd 10785 (1997) (affording WCS licensees the flexibility to provide fixed, mobile, and radiolocation services as well as satellite digital audio radio service (DARS) in their licensed spectrum); Geographic Partitioning and Spectrum Disaggregation by CMRS Licensees, *Report and Order and Further Notice of Proposed Rulemaking*, 11 FCC Rcd 21831 (1996) (allowing broadband PCS licensees to partition and disaggregate spectrum in order to provide licensees with the flexibility to determine the amount of spectrum they will occupy and the geographic area they will serve).

satellite operations, the satellite operations of other L-band licensees, or the operations of adjacent band licensees.<sup>31</sup>

The SPTF also asks what role international considerations should play in spectrum policy. *See* Public Notice at 6 (Questions Nos. 25, 27). In addressing requests for flexible use of spectrum, the Commission can authorize any operations that do not cause harmful interference to services outside of the United States. *See* ITU Radio Reg. Article S4.4. As MSV has demonstrated, its ATC will operate on a non-interference basis and thus is permissible under the ITU Radio Regulations.<sup>32</sup> In opposition to MSV's flexibility proposal, Inmarsat has invoked the ITU Radio Regulations and international treaties, such as the Mexico City Memorandum of Understanding, in an attempt to deny MSV's request.<sup>33</sup> MSV has refuted these claims and will not repeat that debate here.<sup>34</sup> The short answer, however, is that international treaties are generally flexible themselves to the extent that the new operations and services do not cause harmful interference to foreign systems. In a situation such as that presented by MSV's ATC proposal, where the flexible authorization will not cause harmful interference to other spectrum users or violate international treaties, the Commission should not be reluctant to deviate from the ITU Table. The Commission must ensure that the United States remains the leader in developing innovative use of spectrum and not allow illusory international concerns to impede innovation.

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<sup>31</sup>Comments of MSV, IB Docket No. 01-185, Technical Appendix(Oct. 22, 2001); Reply Comments of MSV, IB Docket No. 01-185, at 13, 15-17 & Technical Appendix (Nov. 13, 2001); MSV *Ex Parte* Presentation, IB Docket No. 01-185 (Jan. 11, 2002); MSV *Ex Parte* Presentation, IB Docket No. 01-185 (Jan. 29, 2002); MSV *Ex Parte* Presentation, IB Docket No. 01-185 (Feb. 6, 2002); MSV *Ex Parte* Presentation, IB Docket No. 01-185 (March 28, 2002); MSV *Ex Parte* Presentation, IB Docket No. 01-185 (May 1, 2002).

<sup>32</sup>*See id.*

<sup>33</sup>Comments of Inmarsat, IB Docket No. 01-185, at 18-24; Reply Comments of Inmarsat, IB Docket No. 01-185, at 4-7.

### III. IN MSS'S CASE, AUCTIONING SPECTRUM RATHER THAN AFFORDING INCUMBENT LICENSEES FLEXIBILITY WOULD HARM THE PUBLIC INTEREST

While affording incumbent licensees flexible use of spectrum is a market-based approach to spectrum assignment, a number of terrestrial wireless interests have argued in response to the MSS flexibility proposals that a *more* market-based approach would be to reallocate MSS spectrum for terrestrial use and then auction the spectrum or, alternatively, to “sever” terrestrial operations from MSS and to auction the terrestrial rights.<sup>35</sup> As discussed above, either approach would thwart the Commission’s goals of ensuring service to rural and underserved areas and would lead to decreased spectrum efficiency and utilization.

Reallocating MSS spectrum to terrestrial only use would forever deprive rural and underserved areas of the high-speed telecommunications services offered by MSS providers. Terrestrial wireless carriers cannot economically serve vast areas of the nation’s land mass as well as aeronautical and maritime environments. Without MSS, these areas would go unserved, thereby thwarting the goal of Congress and the Commission to ensure all Americans receive high quality and high speed telecommunications services.<sup>36</sup>

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<sup>34</sup>Comments of MSV, IB Docket No. 01-185, at 32; Reply Comments of MSV, IB Docket No. 01-185, at 13, 15-17.

<sup>35</sup>*See, e.g.*, Comments of AT&T Wireless Services, Inc. (“AWS”), IB Docket No. 01-185 (Oct. 22, 2001) at 13-14; AWS *Ex Parte* Presentation, IB Docket No. 01-185 (April 1, 2002); Joint Comments of Cingular Wireless and Verizon Wireless, IB Docket No. 01-185 (Oct. 22, 2001) at 21-23; Comments of Telephone and Data Systems, Inc., IB Docket No. 01-185 (Oct. 22, 2001) at 12-13; Sprint Corporation and Cingular Wireless LLC *Ex Parte* Presentation, IB Docket No., 01-185 (May 13, 2002).

<sup>36</sup>*See, e.g.*, 47 U.S.C. § 151 (stating that one of the purposes of the Commission is “to make available, so far as possible, to all the people of the United States . . . a rapid, efficient, nationwide and world-wide wire and radio communication service with adequate facilities at reasonable charges”); Amendment of Part 1 of the Commission’s Rules – Competitive Bidding Procedures, *Fifth Report and Order*, 15 FCC Rcd 15293, ¶ 52 (April 14, 2000) (“The Commission has great interest in ensuring that rural and underserved areas have access to competitive advanced telecommunications services.”).

Some terrestrial wireless carriers have argued that MSS operations can be severed from terrestrial operations with the rights to independent terrestrial use awarded via auction.<sup>37</sup> MSV has demonstrated that such an approach (i) will defeat the purpose of ATC, which is to create a more valuable MSS service that will generate a critical mass of customers, whereas severing ATC would make the economics of an MSS system much more difficult<sup>38</sup>; (ii) will result in debilitating interference to satellite operators, vastly diminishing satellite capacity as well as destroying the spectrum efficiency afforded by an integrated satellite and terrestrial network<sup>39</sup>; and (iii) will severely complicate the Commission's requirement that L-band operators provide priority and preemptive access for safety operations.<sup>40</sup>

Thus, at least with respect to MSV's flexibility request, the purported more market-based approach of auctioning terrestrial rights in MSS spectrum, either through reallocating the spectrum or "severing" the terrestrial rights, would thwart the Commission's goals of ensuring service to rural and unserved areas and increasing spectrum efficiency and utilization.

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<sup>37</sup>Comments of Verizon Wireless, IB Docket No. 01-185 (March 22, 2002); Comments of Cellular Telecommunications and Internet Association, IB Docket No. 01-185 (March 22, 2002); AWS *Ex Parte* Presentation, IB Docket No. 01-185 (April 1, 2002); Sprint Corporation and Cingular Wireless LLC *Ex Parte* Presentation, IB Docket No., 01-185 (May 13, 2002).

<sup>38</sup>*MSV Severability Comments* at 5.

<sup>39</sup>*Id.* at 6-8.

<sup>40</sup>*Id.* at 9. MSV's access to spectrum in the L-band is subject to the requirement of the ITU radio regulations to provide real-time intra-system priority and preemptive access in the upper L-band to aviation safety service and in the lower L-band to maritime safety communications. 47 C.F.R. § 2.106 footnotes US308, US315.

## Conclusion

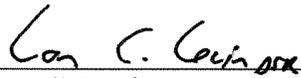
MSV requests the SPTF to consider these Comments in formulating recommendations for future Commission spectrum policies.

Respectfully submitted,

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