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FEDERAL COMMUNICATIONS COMMISSION
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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 CONSTELLATION COMMUNICATIONS HOLDINGS, INC.

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EXECUTIVE SUMMARY

Constellation is a current mobile satellite service ("MSS") licensee in the 2 GHz MSS bands. As a 2 GHz MSS licensee, Constellation would be adversely affected by the Commission's proposal to re-allocate a portion of the 2 GHz MSS allocation to the mobile service.

Constellation believes that the Commission's proposals in its Further Notice would have a chilling effect on the viability of the 2 GHz MSS service, which is vital to extending basic and advanced wireless telecommunications services to rural and underserved areas. Constellation believes that re-allocation of any 2 GHz MSS spectrum at this time would be arbitrary and capricious and would adversely affect the development of the MSS industry. This would deprive the public, particularly those in rural and underserved areas, the benefits of this technology for basic and advanced wireless services. Moreover, the impact of this proposal is disproportionately adverse to MSS compared to any benefits to terrestrial users at this time. The amount of spectrum available in the MSS bands is relatively small compared to existing allocations and pending rule making proceedings, and would provide little relief to mobile services.

Instead, the Commission should re-affirm its support of its 2 GHz MSS decisions by clarifying the flexibility of 2 GHz MSS systems to fully utilize the spectrum currently allocated for them. In reconsidering its 2 GHz MSS order, the Commission should provide the MSS industry with a flexible and stable regulatory environment needed for the long term financing of the capital intensive MSS industry. In particular, the Commission should re-assign 2 GHz MSS spectrum among the remaining MSS licensees whenever an MSS license is revoked for failure to meet due diligence milestones.

To the extent that the Commission determined that there is a pressing need for additional allocations for terrestrial mobile services, Constellation urges the Commission to complete other ongoing proceedings to re-allocate spectrum for this purpose. The other allocation options identified in this proceeding can provide adequate relief for the demands for additional spectrum to be used for advanced mobile services provided by terrestrial facilities.

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COMMENTS OF CONSTELLATION COMMUNICATIONS HOLDINGS, INC.

Constellation Communications Holdings, Inc. ("Constellation") submits these comments in response to the Commission's Further Notice of Proposed Rulemaking in ET Docket No. 00-028.[1]

[1] *See* Amendment of the Commission's Rules to Allocate Spectrum Below 3 GHz For Mobile and Fixed Service to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, FCC 01-224, Further Notice of Proposed Rulemaking, released August 20, 2001 ("Further Notice").

Constellation is a current mobile satellite service ("MSS") licensee in the 2 GHz MSS bands.[2] As a 2 GHz MSS licensee, Constellation would be adversely affected by the Commission's proposal to reallocate a portion of the 2 GHz MSS allocation to the mobile service, and urges the Commission to retain the current 2 GHz MSS allocations. Constellation believes that the Commission's proposals in its Further Notice would have a chilling effect on the viability of the MSS service, which is vital to extending basic and advanced wireless telecommunications services to rural and underserved areas. Instead, the Commission should re-affirm its support of its 2 GHz MSS decisions by clarifying the flexibility of 2 GHz MSS systems to fully utilize the spectrum currently allocated for them. To the extent that the Commission determined that there is a pressing need for additional allocations for terrestrial mobile services, Constellation urges the Commission to complete other ongoing proceedings to identify the spectrum for this purpose.

I. Reallocation Of 2 GHz MSS Spectrum Would Adversely Affect The Public Interest

The Commission has consistently determined that the public interest is served by MSS technology, particularly in rural and underserved areas.[3] The Commission's Further Notice advocates changes in the established regulatory scheme for the 2 GHz MSS that would adversely affect the development of these innovative services by decreasing system capacity. Such a result

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2 *See Further Notice* at para. 21 and n. 64. Constellation is also a licensee in the 1.6/2.4 GHz MSS service.

3 *See Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum in the 1.6/2.4 GHz Band for Use by the Mobile Satellite Service*, 9 FCC Rcd 536 (1994) ("Big Leo Allocation Order"); *See 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, First Report and Order and Further Notice of Proposed Rulemaking, 12 FCC Rcd 7388 (1997), *aff'd on recon.*, Memorandum Opinion and Order and Third Notice of Proposed Rulemaking and Order, 13 FCC Rcd 23949 (1998), *further proceedings*, Second Report And Order and Second Memorandum Opinion and Order, 15 FCC Rcd 12315 (2000) ("2 GHz *Allocation & Relocation Proceedings*").

will raise questions about these systems technical and financial capabilities, frustrating each licensees ability to implement its proposed system.

A. MSS Remains The Only Means Of Extending Affordable Advanced Mobile Services To Rural And Underserved Areas

Although the growth of terrestrial cellular and personal communications services ("PCS") has been impressive in many areas, there remain areas of the country where mobile telephony services are poor or nonexistent.[4] Terrestrial wireless networks require an extensive ground-based infrastructure of towers and landlines to establish a geographic pattern of contiguous coverage cells. Such an infrastructure can be efficiently constructed and operated in built-up urban and suburban areas where significant traffic is offered throughout the network, but becomes costly in areas of low population density. Geographical expansion of existing terrestrial wireless networks into remote areas beyond currently served urban and suburban areas is unlikely, even under the best economic market conditions, because of the high costs involved.[5] Consequently, there exist large areas of the country that are unreachable by terrestrial wireless facilities for basic and advanced telecommunications services.

The capabilities of MSS to provide affordable wireless services to the public in rural and underserved areas will be adversely affected by a reduction in the amount of spectrum allocated to MSS. The capacity of MSS systems is limited by the amount of spectrum assigned to it. Unlike terrestrial systems, where cells can be subdivided or sectorized as traffic demands grow,

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4 *See Extending Wireless Telecommunications Services to Tribal Lands*, Notice of Proposed Rulemaking, WT Docket No. 99-266, 14 FCC Rcd 13679 (1999) ("Tribal Land Notice").

5 As the Commission is aware, the same economic limitations in rural areas for terrestrial wireline and electrical services have been issues that governments have grappled with for decades. In order to bring these services to these areas, governments provided either direct subsidies or encouraged cross-subsidies between rural and urban areas.

the number and size of antenna beams generated by MSS satellites can not be modified once they are in orbit. Consequently, the frequency reuse capabilities of an MSS satellite system, which depends on the number of antenna beams on the satellite, is constant throughout the ramp-up of traffic over the lifetime of a satellite. It can not be increased until a follow-on generation of higher capacity satellites with a greater number of antenna beams is launched. Thus, sufficient spectrum must be assigned to an MSS system to meet growing traffic levels for the entire satellite lifetime.[6] This is particularly important if MSS systems are to provide advanced wireless services, requiring higher data rates and radio bandwidth, to rural and underserved areas. If spectrum available to these systems is reduced, it will have concomitant impact on these systems ability to implement, in an economically viable manner, which would directly impact rural and underserved users.

B. The Development Of New MSS Services Requires Patience And Regulatory Flexibility

Despite the recent financial challenges faced by Iridium and ICO, MSS remains a viable business. These and other new MSS satellite systems authorized by the Commission in the past few years involve very large capital investment, as well as the development of global marketing strategies and product distribution networks. The initial ambitious undertakings of Iridium and Globalstar have proven the technical viability of such global personal satellite communications services, but current financial markets have been disappointed by the slow ramp-up performance of these initial systems. The recent re-organizations of Iridium and ICO should provide these

[6] The total amount of spectrum allocated to MSS is less than the amount that previous studies indicated was required to serve the potential market. Moreover, the Commission has not allocated the entire amount of spectrum allocated at 2 GHz for MSS use within the United States.

companies with the opportunity to succeed, further encouraging the introduction of additional competitive MSS spectrum.

This slow ramp-up of subscribers is not unusual in the satellite industry. Satellite markets have historically taken a long time to develop and prove themselves by finding the optimum applications for their technology. For example, the initial market targeted for domestic satellites in the mid-1970s was less expensive, long-distance telephony. This satellite market did not develop successfully, and it was not until 1980 that domestic satellites established for themselves an essential market position for program distribution to cable television systems and broadcast stations. Satellite newsgathering and very small aperture satellite data networks became distinctive market segments for domestic satellites only during their second generation. A similarly long ramp-up period was also encountered by the direct broadcast satellite ("DBS") industry. First proposed in the 1980s, DBS did not became a significant competitor to cable television systems and broadcast stations until the 1990s, which in particular fueled by backyard home receiving terminals tuned to domestic satellites during the 1980s.

The new MSS systems designed for direct access by handheld terminals have been initially marketed as extensions of terrestrial cellular systems to provide basic telecommunications service in rural and remote areas. However, such remote areas are difficult to reach through normal retail distribution chains, especially in the early phases of system roll-out. Even the initial commercial MSS system – Inmarsat – has taken years to become a service and financial success. The Inmarsat system has taken two decades to grow from packages on spacecraft, providing essential maritime services to large shipboard terminals, to its current dominant position that includes the provision of data and news feeds from portable terminals

throughout the world.[7] If the new MSS systems designed for personal satellite services to handheld terminals are to be successful, the Commission should be patient and refrain from taking any regulatory actions that would undermine the ability of system operators to finance their systems during construction and service ramp-up. This is particularly important since MSS remains the only technology capable of providing basic telecommunications and advanced wireless services to remote areas in the United States and throughout the world.

The benefits of regulatory patience and flexibility is perhaps best illustrated by the Commission's experience with domestic satellites beginning with Docket 16495.[8] In particular, the Commission approached the development of this industry as a regulatory experiment that resulted in the successful application of satellite technology to the development of innovative services in the newly deregulated market for competitive carrier transmission services. This flexibility extended to many areas of regulatory concern, including technical standards, frequency and orbit utilization, service regulation and consolidation of applicants and licensees. A similar opportunity is presented to the Commission now for the development of innovative approaches to providing advanced wireless services with the new satellite technologies capable of providing direct satellite connections to personal terminals.

C. Re-Allocation Of 2 GHz MSS Spectrum Would Adversely Affect The Financing And Development Of MSS Systems

In order to finance and implement a satellite system, a system operator must first receive a license issued by the FCC. 2 GHz MSS licensees accepted their licenses under the terms of the

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7 *See Comsat Corporation d/b/a Comsat Mobile Communications*, FCC 01-272 (File No. ITC 97-222 *et. al.*), released October 9, 2001. This recent order authorized the use of Inmarsat facilities in the U.S.

8 *See Domestic Satellite Service*, Docket 16495, 22 FCC 2d 86 (1970) (Domsat I), 22 FCC 2d 810 (1970) (Domsat II) and 35 FCC 2d 844 (1972) (Domsat III).

2 GHz MSS Order[9] and began the process of obtaining the necessary financing under the terms of that order. However, the 2 GHz MSS applicants accepted licenses granting less than the requested amount of spectrum in anticipation that the entire 3.5 MHz allocated to MSS in each direction of transmission would be available for assignment among those systems that the market decided were most worthy of financing. Consequently, acceptance of 2 GHz MSS licenses should not be construed as evidence that a financially viable MSS system can in fact be accomplished with only 3.5 MHz of spectrum.

When the Commission adopted its 2 GHz rules and issued licenses to applicants, a regulatory framework was established that all participants in this new service would operate under. Specifically, each license was assigned 3.5 MHz of spectrum and provided the promise of additional spectrum for system growth if any of the licensees did not implement their proposed systems. Based on this framework, each licensee, as well as potential partners are calculating the commercial viability of each proposed 2 GHz system. To the extent the Commission alters the regulatory framework after the fact, it will raise additional questions and regulatory uncertainty which were not considered by the licensees and their potential partners at the time the 2 GHz regulatory framework was established and the licenses issued. At minimum, it will raise a very serious question as to how these systems will be able to grow capacity beyond the limitations associated with the 3.5 MHz initial allocation.

This additional question may prove to be a barrier to the successful implementation of 2 GHz MSS. This is particularly troublesome, given the long timeline required for MSS system design, construction and launch, and the long system lifetime to recover investment. If these

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9 *See Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, IB Docket No. 99-81, *Report and Order,* 15 FCC Rcd 16127 (2000) (2 GHz MSS Order)

systems are not implemented, it will deny basic and advanced services to users in rural and underserved areas. Moreover, the consequences would extend beyond this country, since non-GSO MSS systems have worldwide coverage. Adverse impacts include global trade, U.S. leadership in telecommunications technology and service innovation and access to secure worldwide advanced mobile communications.

The Commission's 2 GHz MSS proposals in the Further Notice not only increase risks for the MSS, but also represent poor spectrum management practices by prematurely changing allocation decisions. It has taken many years to resolve the 2 GHz MSS allocations, adopt service rules and issue licenses, and several years still remain before the authorized systems are finally designed, financed and placed into operation. Effective spectrum management requires that allocations remain in effect for a sufficiently long period of time to afford licensees a full opportunity to develop the anticipated market and optimize the use of the facilities they have designed and placed into operation. A premature reduction in the 2 GHz MSS allocations not only diminishes the ability of the 2 GHz MSS to fulfill its promised benefits, but also serves as a precedent for making poor spectrum management decisions in the future on the basis of transitory, short-sighted considerations.

D. Reallocation Of The 2 GHz MSS Bands Before The Licensed Systems Have A Full Opportunity To Succeed Or Fail Is Arbitrary And Capricious

The Commission proposes to reallocate 10 to 14 MHz of 2 GHz MSS spectrum for advanced mobile services immediately, yet does not consider the adverse impact of such a re-allocation on licensed MSS systems.[10] Constellation opposes any reallocation of 2 GHz MSS spectrum. The impact of this proposal is disproportionately adverse to MSS compared to any

[10] *See Notice* at para. 24.

benefits to terrestrial users at this time. The amount of spectrum available in the MSS bands is relatively small compared to existing allocations and pending rule making proceedings, and would provide little relief to mobile services.[11] Thus, reallocation of 2 GHz MSS spectrum at this time would have a disproportionately adverse impact on MSS while providing very limited relief for terrestrial mobile.

On the other hand, a reduction in the amount of spectrum allocated to MSS at 2 GHz would have a detrimental impact on the viability of 2 GHz MSS systems. The 2 GHz MSS licensees have accepted their licenses on the basis of the current MSS allocations in the U.S. Table of Allocations. They have been proceeding on the basis that this amount of spectrum would continue to remain available for MSS operations under reasonable rules for re-assignment of spectrum initially reserved for systems that are not ultimately implemented. Moreover, the Commission has not met its burden of modifying the outstanding 2 GHz MSS licenses pursuant to Section 316 of the Communications Act to reduce the amount of assigned spectrum or restrict its use.[12]

The Commission's proposals in its Further Notice reduce the potential capacity of MSS satellite systems serving the United States and may adversely affect the economic viability of MSS systems. Since the initial due diligence milestone for these 2 GHz systems has not yet occurred, these licensees have not yet had the opportunity to succeed or fail under the currently difficult satellite financing environment. In the absence of any actual performance under the current 2 GHz MSS allocations, the Commission's proposals to reduce the 2 GHz MSS

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[11] Other options currently under consideration by the Commission involve the allocation of 120 or 140 MHz for advanced wireless services. *See* Further Notice at para. 42. This is ten times the amount of spectrum being considered for reallocation from MSS at this time.

[12] *See Notice* at para. 30.

allocations constitute an arbitrary and capricious interference in the activities of 2 GHz MSS licensees who have been trying to implement their systems based on the current allocations and license terms.

II. The Commission Should Improve The Regulatory Environment For Financing 2 GHz MSS Systems

Multiple 2 GHz MSS systems are competing for a limited amount of spectrum and capital to bring innovative new basic and advanced wireless services to the public, especially in rural and underserved areas. In light of the currently challenged state of the U.S. economy, the world financial markets in general and the telecommunications market in particular, the Commission should use this proceeding to fashion a flexible regulatory environment in which a competitive MSS industry can emerge.

A. Ancillary Terrestrial Operations Will Improve MSS Market Acceptance And Spectrum Efficiency

The ancillary terrestrial operations being considered in IB Docket 01-185[13] offer a spectrum efficient approach to satisfying demand for advanced wireless services since it supports systems that can reuse the same pair of bands to provide new service in rural and underserved areas. Moreover, such facilities allow MSS operators to satisfy some of the demand for mobile services in urban areas without any new allocations or displacing existing users. In these cases, ancillary terrestrial facilities allow MSS systems to serve users when they are located in urban areas which can be reached by satellite. In addition, the availability of ancillary terrestrial facilities allows MSS system operators to optimize their network loading between satellite and terrestrial routings and reserve satellite capacity for additional customers or increased link

[13] *See Flexibility for Delivery of Communication by Mobile Satellite Service Providers in the 2 GHz, the C-Band, and the 1.6/2.4 GHz Band, Notice of Proposed Rulemaking,* IB Docket No. 01-185, FCC 01-225, released August 17, 2001. ("Flexible Spectrum Notice")

margins to users in remote areas where no terrestrial facilities exist.[14] These capabilities enhance the likelihood that 2 GHz MSS systems can provide the satellite component of IMT-3000/3G advanced wireless systems.[15]

While the authorization of ancillary terrestrial operations improve spectrum efficiency and expand the range of customers that can be served by MSS systems, they do not improve the ability of MSS systems to serve customers in rural and underserved areas where terrestrial facilities are not economically feasible. In these areas, capacity is limited by available spectrum, and any reduction in the amount of spectrum allocated to MSS will reduce the amount of capacity available to serve rural customers.

B. The 2 GHz MSS Allocations Must Be Retained For Use Only By 2 GHz MSS Licensees

In its 2 GHz MSS Report and Order, the Commission deferred a decision on the re-assignment of 2 GHz MSS spectrum that was reserved for systems that are not ultimately implemented. Constellation believes that the Commission should clarify the rules for the reassignment of such spectrum in order to eliminate this regulatory uncertainty which has the potential to hamper the financing of MSS systems.[16]

At the outset, Constellation believes that the Commission's use of the term "abandoned" spectrum[17] is highly prejudicial. All 2 GHz MSS systems are designed to use all or most of the allocated 2 GHz spectrum in beams with high traffic demands, and will have excess power

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14 See Comments of Constellation in Flexible Spectrum Notice proceeding filed October 22, 2001.

15 *See Further Notice* at paras. 4 and 14.

16 *See Id.* at para. 28.

17 *See Id.* at paras. 16, 22 and 28.

capabilities if only 3.5 MHz is available for operations. Thus, the 2 GHz MSS operators are fully capable of using, and fully intend to use, their share of any reassigned spectrum that was initially reserved for licensees who do not ultimately implement their proposed systems. No 2 GHz MSS spectrum is in any way "abandoned" since all MSS licensees are designing their systems to fully utilize this spectrum once it is assigned to them. Rather, such spectrum is merely "unassigned" or "unselected" under the Commission's 2 GHz MSS licensing procedures.

Instead, the Commission should provide a stable regulatory environment in order to encourage the financing of new MSS systems. Specifically, the Commission should take this opportunity to remove regulatory uncertainty by retaining the current 2 GHz MSS allocations in their entirety, and by clarifying its 2 GHz MSS licensing policies. With respect to use of the 2 GHz MSS spectrum, the Commission should establish the simple principal of assigning 35/N MHz of spectrum in each direction of transmission to each current 2 GHz MSS licensee, where N is the number of currently authorized systems.[18] The spectrum assigned to any single system by this formula can be capped at 35/2 = 17.5 MHz, in order to ensure that a single system doesn't capture the entire band, and that an opportunity is reserved for the entry of a second competitive system. The available spectrum should be recalculated whenever a 2 GHz MSS licensee turns in its authorization or when the Commission revokes an authorization.

The 2 GHz MSS bands should not be re-opened for other MSS applicants until the status of the current licenses are finally determined by their success or failure in meeting milestones, and whether the Commission determines that the operational MSS systems will not be adversely affected. In particular, these bands should not be opened for other services, such as those

[18] The current procedures for frequency selection and coordination should continue to be in effect.

proposed by Final Analysis,[19] since the intended use for the 2 GHz MSS bands is to support IMT-2000 which incorporates both voice and data. The Commission should not make 2 GHz MSS bands available for terrestrial-only services until after the status of 2 GHz MSS licensees is determined.

The Commission's proposal to retain a 40 MHz MSS allocation at 1990-2010 MHz and 2180-2200 MHz as a minimum MSS allocation will adversely affect the ability to implement MSS systems.[20] Many may view it only as an upper limit on the amount of spectrum assigned to MSS, with every expectation that the Commission will take the next opportunity to limit each MSS licensee to 3.5 MHz (or 3.75 MHz). Such a policy is not enforceable and would not provide credibility to the financial markets given the long time frame over which the initial investment must be recovered. Moreover, as stated by the Commission, this issue creates uncertainty that would adversely affect MSS financing, since the total amount of MSS spectrum would be subject to unpredictable changes in the future while financing was still being arranged.

C. The Commission Should Impose No Additional Limitations On 2 GHz MSS Assignments

Apart from clarification that the currently allocated 2 GHz MSS spectrum will be re-assigned among the remaining MSS licensees after a license is revoked, Constellation believes that the other provisions for frequency selection and coordination established by the Commission should remain in effect. Constellation does not believe that the Commission should impose additional limitations on MSS "selected assignments," such as specifying bandwidths for

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19 *See Further Notice* at para. 22.

20 *See Id.* at para. 29.

selected assignments,[21] preserving contiguous bands,[22] or "re-packing" procedures.[23] No technical basis has been presented or is in the record for any such additional limitations. Moreover, any such limitations would undercut the ability of MSS licensees to optimize their re-location costs. Absent specifically identified difficulties, the Commission should provide the remaining MSS licensees the flexibility to optimize their frequency selections and coordinate usage under the current procedures, including any adjustments to reflect the reassignment of spectrum when other 2 GHz MSS licenses are revoked for failure to satisfy due diligence milestones.

D. The Commission Should Provide MSS Licensees With Maximum Regulatory Flexibility In Financing Their Systems

Flexible marketplace approaches are required to achieve efficient use of 2 GHz MSS. Specifically, the Commission should allow MSS operators to share space platforms or consolidate operations.[24] The Commission should allow MSS licensees a wide latitude of flexibility in order to create innovative business arrangements to aggregate spectrum assigned to several licensees on a single platform. This will provide a greater opportunity for the successful implementation of multiple, competitive MSS systems.

Constellation believes that there are great public interests in providing such flexibility.[25] The Commission has consistently allowed creative approaches that have increased the likelihood

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21 *See Id.* at para. 30.

22 *See Id.* at para. 31.

23 *See Id.* at para. 31.

24 *See Notice* at para. 35.

25 *See* "secondary markets" Policy Statement cited in Flexible Spectrum NPRM at n.2.

of robust new industries. The Commission should follow a flexible policy, encouraging mergers and consolidations of applicants and licensees, since such consolidation is a common characteristic of many new satellite and radio services, e.g., DBS, wireline cellular carriers, specialized microwave carriers (e.g. MCI, DATRAN, etc.), et al.

The Commission's decisions in the DBS arena are particularly relevant to the conditions facing the MSS industry. Specifically, the Commission approved the joint requests of United States Satellite Broadcasting (USSB) and Hughes Communications Galaxy to share the same space station platform.[26] In this case, the Commission approved the shared space station platform proposal, concluding that it was a minor change because it did not require the use of any additional orbit/spectrum resources.[27]

In a later decision, the Commission granted Dominion Video Satellite Inc.'s request to commence operation of direct broadcast satellite service on its assigned channels by using the Echostar III Satellite.[28] In authorizing Dominion, the Commission concluded that the proposed arrangement with Echostar would (1) facilitate deployment of service to the public (2) expand programming choices for DBS subscribers, and (3) make efficient use of existing DBS infrastructure.[29] Each of these public interest attributes would be present if the Commission provided comparable flexibility to 2 GHz MSS licensees.

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26 *See United States Satellite Broadcasting Company, Inc.*, 7 FCC Rcd 7247 (1992).

27 *Id.* at para. 14.

28 *See Dominion Video Satellite, Inc.*, 14 FCC Rcd 8182 (1999).

29 *Id.* at paras. 8-11.

Constellation believes that the Commission should be flexible in applying its rules in reviewing innovative arrangements between 2 GHz MSS licensees. Any *a priori* criteria are more likely to inhibit innovation rather than protect the public. The public would be best served by a regulatory environment that allowed both established companies and new entrants the opportunity to succeed in the 2 GHz MSS market, since it is unlikely that the Commission will be able clearly identify *a priori* who is likely to succeed in building a system, since start-ups have succeeded in constructing satellite systems (e.g. Sirius, Echostar), while large companies have received licenses, but did not implement their systems (e.g. FedEx, Martin Marietta, Ford Aerospace).

III. Alternative Spectrum Options Exist For Satisfying Terrestrial Spectrum Requirements

The Commission is already considering the reallocation of more than 185 MHz for advance wireless services in this proceeding and other proceedings.[30] Although the Commission has recently decided that the 2500 – 2690 MHz band was not suitable for reallocation, at least a portion of the 1710 – 1850 MHz band proposed earlier in this proceeding remains possible for reallocation.[31] In addition, another 60 MHz of spectrum will be available from UHF channels 60-69. These alternatives provide sufficient additional spectrum for advanced wireless services.

Constellation supports the reallocation of the 1910-1930 MHz and 2390-2400 MHz bands that are currently allocated for unlicensed PCS (UPCS) operations for advance wireless

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30 *See New Advanced Wireless Notice of Proposed Rulemaking*, ET Docket 00-258, 16 FCC Rcd 596 (2001). The Commission is also considering 60 MHz reallocated from channels 60-69.

31 *See Notice of Proposed Rulemaking and Order*, FCC 00-455, released January 5, 2001. *See also Further Notice* at paras. 42 – 44.

services.[32] Constellation also supports the reallocation of 2150 – 2160 MHz for advanced mobile services.[33] Consequently, Constellation believes that the FCC should deny the WINForum petition to modify technical rules for unlicensed operations in 1910-1930 MHz and UTStarcom's proposal for community wireless service in the 1910 – 1920 MHz band.[34] As the Commission notes, there is little use or development of these bands.[35] Other bands are available for unlicensed operations, e.g. ISM bands, 5 GHz NII bands, etc. Constellation also does not believe that the designation of spectrum for community wireless service is desirable since specific designation of service applications is inefficient spectrum allocation. Moreover, the unique needs of small towns or tribal areas can be treated as permitted uses or through waivers of more conventional allocations.[36]

Conclusion

Constellation believes that re-allocation of any 2 GHz MSS spectrum at this time would be arbitrary and capricious and would adversely affect the development of the MSS industry. This would deprive the public, particularly those in rural and underserved areas, the benefits of this technology for basic and advanced wireless services. Instead, in reconsidering its 2 GHz MSS order, the Commission should provide the MSS industry with a flexible and stable regulatory environment needed for the long term development of the capital intensive MSS industry. In particular, the Commission should re-assign 2 GHz MSS spectrum among the

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32 *See also Further Notice* at paras. 9 – 13.

33 *See Id.* at paras. 37 – 41.

34 *See Id.* at para. 13.

35 *See Id.* at para. 10.

36 *See Tribal Lands Notice.*

remaining MSS licensees whenever an MSS license is revoked for failure to meet due diligence milestones. In the meantime, other allocation options identified in this proceeding can be pursued to authorize terrestrial advanced mobile services.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Patricia A. Gibson, hereby certify that a copy of the foregoing **Comments of Constellation Communications Holdings, Inc.**, was mailed this 22nd day of October, 2001, via the United States Postal Service, first class, postage pre-paid, to each of the following:

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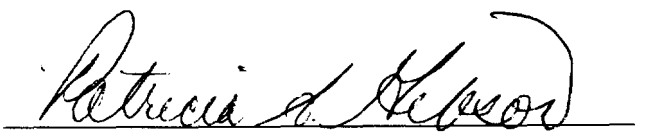

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