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

In the Matter of	)	
Use of Returned Spectrum in the 2 GHz Mobile Satellite Service Frequency Bands	)	IB Docket Nos. 05-220 and 05-221

ORDER

Adopted: December 8, 2005 Released: December 9, 2005

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By the Commission:

I. INTRODUCTION

1. In this Order, we modify the spectrum reservations[1] of TMI Communications and Company Limited Partnership (TMI) and ICO Satellite Services (ICO), such that they are each assigned a total of 20 megahertz of spectrum in the 2 GHz mobile satellite service (MSS) band, or 10 megahertz in the uplink band and 10 megahertz in the downlink band.[2] We make these modifications consistent with the Commission's authority with respect to licenses under Section 316 of the Communications Act.[3] For reasons discussed in this Order, we find that modifying these two spectrum reservations will facilitate ICO's and TMI's provision of public safety and rural broadband services, and allow them to compete effectively in the market for mobile telecommunications services to the benefit of U.S. consumers.

II. BACKGROUND

2. In 2001, the International Bureau (Bureau) authorized eight satellite operators to provide MSS service in the 2 GHz bands.[4] By the end of 2004, three of those satellite operators

[1] A spectrum reservation is one possible procedural vehicle for a non-U.S.-licensed satellite operator to obtain access to the U.S. market. *See* Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Satellites Providing Domestic and International Service in the United States, *Report and Order*, IB Docket No. 96-111, 12 FCC Rcd 24094 (1997) (*DISCO II*).

[2] The spectrum designated for 2 GHz MSS is currently the 2000-2020 MHz and 2180-2200 MHz bands. 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, *Third Report and Order, Third Notice of Proposed Rulemaking, and Second Memorandum Opinion and Order*, ET Docket No. 00-258, 18 FCC Rcd 2223 (2003) (*Third AWS Order*).

[3] 47 U.S.C. § 316. Section 316 authorizes the Commission to modify any "station license or construction permit" if it finds that "such action will promote the public interest, convenience, and necessity ...". Neither TMI nor ICO have a Commission license, but rather have been granted spectrum reservations pursuant to the procedure adopted in *DISCO II*. ICO Services Limited, Letter of Intent to Provide Mobile-Satellite Service in the 2 GHz Bands, *Order*, 16 FCC Rcd 13762 (Int'l Bur., and OET, 2001) (*ICO Authorization Order*); TMI Communications and Company, Limited Partnership, Letter of Intent to Provide Mobile-Satellite Service in the 2 GHz Bands, *Order*, 16 FCC Rcd 13808 (Int'l Bur., 2001) (*TMI Authorization Order*). Thus, while we are not taking action directly under Section 316, since ICO and TMI do not hold Commission licenses, we are applying the procedural framework of Section 316, bearing in mind our World Trade Organization (WTO) commitments to treat satellite operators licensed in Canada, such as TMI, or Great Britain, such as ICO, no less favorably than we treat U.S.-licensed satellite operators.

[4] Those satellite operators included ICO and TMI. Prior to the issuance of these authorizations, Inmarsat

had their licenses cancelled for failure to meet milestone obligations.[5] In early 2005, three 2 GHz MSS satellite operators surrendered their authorizations--Iridium LLC (Iridium) on March 16, 2005, The Boeing Company (Boeing) on March 28, 2005, and Celsat America, Inc. (Celsat) on April 12, 2005--leaving only two satellite operators, ICO and TMI, with spectrum reserved to provide MSS in the 2 GHz band.[6] As a result, 12 of the 20 megahertz allocated for MSS in each direction in the 2 GHz band are not currently assigned to any system operator. Shortly after these surrenders, several parties filed letters making various recommendations for reassigning or reallocating the newly available spectrum. Generally, TMI and ICO proposed reassigning the spectrum to them. CTIA recommended that the Commission initiate a rulemaking to determine whether the terrestrial wireless service is the "highest and best use" for the spectrum, and, if so, to reallocate the spectrum to that service.[7]

3. On June 29, 2005, the Commission released the *First 2 GHz MSS Public Notice*, in which the Commission announced its intent to redistribute a portion of the unassigned 2 GHz MSS spectrum so that ICO's and TMI's spectrum reservations would be increased by 2.67 megahertz in each transmission direction, for a total of 6.67 megahertz in each direction.[8] By doing so, ICO and TMI would each be assigned to 1/3 of the total spectrum allocated to MSS in the 2 GHz band. The Commission explained that increasing these spectrum reservations in this way would be consistent with its authority under Section 316 of the Communications Act, which states that "any station license or construction permit may be modified by the Commission ... if in the judgment of the Commission such action will promote the public interest, convenience and

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had also applied for a 2 GHz MSS authorization, but withdrew its application before the other eight 2 GHz MSS authorizations were granted.

[5] *See* Applications of Mobile Communications Holdings, Inc. and ICO Global Communications (Holdings) Limited for Transfer of Control, Constellation Communications Holdings, Inc. and ICO Global Communications (Holdings) Limited for Transfer of Control, Mobile Communications Holdings, Inc. for Modification of 2 GHz License, Constellation Communications Holdings, Inc. for Modification of 2 GHz License, *Memorandum Opinion and Order*, 18 FCC Rcd 1094 (Int'l Bur. 2003) (cancellation of Constellation and MCHI licenses), *aff'd* Joint Application for Review of Constellation Communications Holdings, Inc., Mobile Communications Holdings, Inc. and ICO Global Communications (Holdings) Limited, *Memorandum Opinion and Order*, 19 FCC Rcd 11631 (2004); Globalstar, L.P., *Memorandum Opinion and Order*, 18 FCC Rcd 1249 (Int'l Bur. 2003) (cancellation of Globalstar license), *aff'd* Emergency Application for Review and Request for Stay of Globalstar, L.P., *Memorandum Opinion and Order*, 19 FCC Rcd 11548 (2004). In addition, TMI's spectrum reservation was cancelled, but later was reinstated. *See* TMI Communications and Company, Limited Partnership and TerreStar Networks Inc., Application for Review and Request for Stay, *Memorandum Opinion and Order*, 19 FCC Rcd 12603 (2004) (*TMI Reinstatement Order*).

[6] Letter from Peter D. Shields, Counsel to Iridium, to Secretary, FCC (dated Mar. 16, 2005); Letter from Joseph P. Markoski and Bruce A. Olcott, Counsel for The Boeing Company, to Secretary, FCC (dated Mar. 28, 2005). Letter from David D. Otten, Chairman and Chief Executive Officer, Celsat, to Secretary, FCC (dated Apr. 12, 2005).

[7] All these letters are listed in the Appendix.

[8] Commission Invites Comments Concerning Use Of Portions Of Returned 2 GHz Mobile Satellite Service Frequencies, *Public Notice*, IB Docket No. 05-220, 20 FCC Rcd 12231 (2005) (*First 2 GHz MSS Public Notice*).

necessity."[9] The Commission observed that it was not required to seek additional comment, but found nevertheless that it would be in the public interest to do so.[10]

4. Concurrently with the *First 2 GHz MSS Public Notice*, the Commission released the *Second 2 GHz MSS Public Notice* to invite comment on options for reassigning or reallocating the remaining 6.67 megahertz, in each direction, of unassigned 2 GHz MSS spectrum that was not addressed in the *First 2 GHz MSS Public Notice*.[11] In this public notice, the Commission invited comment on three options for redistributing or reallocating the remaining one-third of the 2 GHz MSS spectrum that was not addressed in the *First 2 GHz MSS Public Notice*. First, the Commission sought comment on TMI's and ICO's proposals and associated comments to divide the remaining one-third of the 2 GHz MSS spectrum between them. The Commission explained that, under this option, it would modify TMI's and ICO's spectrum reservations pursuant to a procedure consistent with Section 316 of the Communications Act.[12] The Commission also asked whether the remaining one-third should be made available to new MSS licensees. Under this option, the Commission would issue a public notice establishing a processing round. As a third option, the Commission requested comment on whether any of the remaining one-third of the spectrum should be made available for reallocation to another service, and if so, which specific frequency bands should be reallocated. Under this third option, the Commission would issue a Notice of Proposed Rulemaking inviting comment on such a reallocation.

5. In response to the *First 2 GHz MSS Public Notice*, eight parties filed comments on June 13, 2005, and seven filed replies on June 25, 2005. In response to the *Second 2 GHz MSS Public Notice*, 23 parties filed comments on or before July 29, 2005, and 15 filed replies on or before August 15, 2005. The record in this proceeding is comprised of these pleadings, together with the letters filed by interested parties prior to the release of the public notices. These letters and pleadings are listed in the Appendix.[13]

6. In Section III. below, we address preliminary issues -- the legal standards that we will use to evaluate the pleadings filed in response to the *First* and *Second 2 GHz Public Notice*, and whether we should resolve the issues raised in the *First* and *Second 2 GHz Public Notice* together in one Order or in separate proceedings. In Section IV., we address issues related to reassigning the spectrum to ICO and TMI. In Section V., we consider arguments related to starting a reallocation rulemaking proceeding. In Section VI., we determine whether to initiate a modified processing round for the currently unassigned spectrum. Finally, in Section VII., we resolve a number of miscellaneous issues.

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[9] 47 U.S.C. § 316(a)(1).

[10] *First 2 GHz MSS Public Notice*, 20 FCC Rcd 12231.

[11] Commission Invites Comments Concerning Use Of Portions Of Returned 2 GHz Mobile Satellite Service Frequencies, *Public Notice*, IB Docket No. 05-221, 20 FCC Rcd 12234 (2005) (*Second 2 GHz MSS Public Notice*).

[12] 47 U.S.C. § 316.

[13] The abbreviations by which we refer to parties are also listed in the Appendix. For purposes of this Order, we refer to comments and replies filed in response to the *First 2 GHz MSS Public Notice* as "First Comments" or "First Reply." We refer to comments and replies filed in response to the *Second 2 GHz MSS Public Notice* as "Second Comments" or "Second Reply."

7. In summary, for reasons discussed further below, we consider the issues raised in the *First* and *Second 2 GHz Public Notice* together in this Order. We also decide not to apply the framework for returned spectrum developed in the *First Space Station Licensing Reform Order* to the unassigned spectrum in the 2 GHz MSS band.[14] Finally, we find that it would further the public interest to reassign the currently available spectrum to ICO and TMI.

III. PRELIMINARY ISSUES

A. Background

8. The commenters raise a number of issues that must be resolved before we can turn to the substantive issue of what to do with the unassigned spectrum currently in the 2 GHz MSS band. First, we must determine whether the rules and policies underlying the *First Space Station Licensing Reform Order* should be applied here. Second, we must address contentions that using the procedures specified in Section 316, as contemplated in the *First 2 GHz MSS Public Notice*, is not appropriate unless we conduct a rulemaking. Finally, we must decide whether to address the issues raised in the *First* and *Second 2 GHz MSS Public Notices* together or in separate proceedings. We address each of these issues below.

B. Applicable Rules and Policies

1. 2 GHz MSS Service Rules

9. When it adopted service rules for the 2 GHz MSS band in 2000, the Commission determined that it would divide the 70 megahertz of spectrum available in the band at that time, 35 megahertz in each transmission direction, among the proposed systems in the band, and established system implementation milestones for those systems.[15] In the context of its 2 GHz allocation and service rule proceedings, the Commission did not establish any policy or rule regarding 2 GHz MSS spectrum that might become available after milestone reviews are completed. Instead, the Commission announced its intent to evaluate whether to redistribute such spectrum or make it available to new entrants if and when returned spectrum became available.[16]

10. In 2003, the Commission adopted the *Third AWS Order*, which included a number of spectrum allocation decisions relevant to the 2 GHz band. Specifically, the Commission reallocated 30 megahertz of spectrum in the 2 GHz band from MSS to the Fixed Service and the Mobile Service, to facilitate Advanced Wireless Service (AWS).[17] The Commission also

[14] *See* Amendment of the Commission's Space Station Licensing Rules and Policies, *First Report and Order and Further Notice of Proposed Rulemaking*, IB Docket No. 02-34, 18 FCC Rcd 10760, 10788-90 (paras. 61-65) (2003) (*First Space Station Licensing Reform Order*).

[15] Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, *Report and Order*, IB Docket No. 99-281, 15 FCC Rcd 16127, 16138-39, 16177-80 (paras. 16-18, 106-111) (2000) (*2 GHz MSS Service Rules Order*); *Third AWS Order*, 18 FCC Rcd at 2239-40 (paras. 32-33). The Commission did not assign all the spectrum in the 2 GHz MSS bands to the eight authorized 2 GHz MSS system operators, but rather reserved some spectrum for expansion, as an incentive to provide rural service. *2 GHz MSS Service Rules Order*, 15 FCC Rcd at 16146 (para. 35).

[16] *See Third AWS* Order, 18 FCC Rcd at 2239-40 (para. 32), *citing 2 GHz MSS Service Rules Order*, 15 FCC Rcd at 16139 (para. 18).

[17] *Third AWS Order*, 18 FCC Rcd at 2238 (para. 28). Prior to this decision, the 2 GHz MSS band was

assigned 5 megahertz of previously unassigned spectrum to the 2 GHz MSS licensees, based in part on comments that the original spectrum assignments were inadequate.[18] Moreover, the Commission reaffirmed its plan to decide at a later date whether to redistribute returned 2 GHz MSS spectrum to other MSS system operators or to make it available to new applicants.[19]

2. Space Station Licensing Reform

11. Subsequent to the Commission's adoption of the 2 GHz MSS allocation and service rules, the Commission revised its satellite licensing procedures.[20] These new procedures reflect a significant shift in Commission satellite licensing policy. Previously, the Commission in many instances attempted to devise sharing plans that would accommodate all qualified applicants. To this end, the Commission afforded the applicants an opportunity to negotiate "mutually agreeable" compromises.[21] Those negotiations often required several months or even years of effort.[22] Scarce spectrum lay fallow during those negotiations, which imposed costs on satellite operators and their customers.[23] Accordingly, the Commission adopted rules to expedite the satellite licensing procedure.[24]

12. The Commission's revised satellite licensing procedures also addressed situations where spectrum becomes available for reassignment when licenses for non-geostationary satellite orbit (NGSO)-like systems are voluntarily surrendered by the licensee or declared null and void by the Commission. Section 25.157(g) of the Commission's rules[25] provides that the forfeited spectrum is to be redistributed to the remaining systems in the frequency band, unless the Commission determines that such a redistribution would not result in a sufficient number of systems remaining to make reasonably efficient use of the frequency band.[26] In the event that it makes such a determination, the rules further provide that the Commission would initiate a processing round for the returned spectrum.[27] There is a presumption that three satellite systems

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1990-2025 MHz and 2165-2200 MHz. *Third AWS Order*, 18 FCC Rcd at 2225 (para. 3).

[18] *Third AWS Order*, 18 FCC Rcd at 2239-40 (para. 32). *See also supra* text accompanying note 15.

[19] *Third AWS Order*, 18 FCC Rcd at 2239-40 (para. 32).

[20] *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10773 (para. 21).

[21] *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10764-65 (para. 3).

[22] *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10764-65 (para. 3).

[23] *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10765-66 (para. 4).

[24] *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10771 (para. 16).

[25] 47 C.F.R. § 25.157(g). Section 25.157(g) is applicable to "NGSO-like" satellite systems, which include non-geostationary satellite orbit (NGSO) satellite systems, and geostationary satellite orbit (GSO) satellites intended to provide mobile satellite service (MSS). *See First Space Station Licensing Reform Order*, 18 FCC Rcd at 10773 (para. 21).

[26] 47 C.F.R. § 25.157(g)(1). *See also First Space Station Licensing Reform Order*, 18 FCC Rcd at 10788 (para. 61).

[27] 47 C.F.R. § 25.157(g)(2).

in a frequency band are sufficient to make reasonably efficient use of the frequency band.[28] However, the Commission stated that it would not address in the *Space Station Licensing Reform* proceeding whether to apply this framework to 2 GHz MSS spectrum.[29]

3. Discussion

13. TMI and ICO argue that Section 25.157(g) applies to all NGSO-like licenses, including 2 GHz MSS licensees.[30] In contrast, CTIA claims that the Commission decided in the *Space Station Licensing Reform NPRM* that it would not apply Section 25.157(g) to returned 2 GHz MSS spectrum.[31] Alternatively, TMI maintains that, regardless of whether Section 25.157(g) applies directly to the 2 GHz MSS band, the reasoning in the *First Space Station Licensing Reform Order* supports applying that rule to the 2 GHz MSS band.[32] TMI also observes that the Commission stated in the *2 GHz Order* and the *AWS Order* that it would consider reassigning 2 GHz MSS spectrum to remaining satellite operators.[33] Inmarsat asserts that the Commission has not yet established a policy regarding returned 2 GHz MSS spectrum.[34] According to Inmarsat, even if the Commission were to find that Section 25.157(g) applies to the 2 GHz MSS band, the Commission has discretion to decide whether to apply that procedure in any particular instance.[35]

14. Since at least the year 2000 when the Commission adopted the *2 GHz MSS Service Rules Order*, it has addressed the spectrum needs of 2 GHz MSS providers in a series of decisions specifically focusing on this service and grappling with the question of how best to handle "abandoned" or "returned" spectrum from this band. Accordingly, when the Commission launched the *Space Station Licensing Reform* proceeding – a more general proceeding to revamp the space station licensing process – it clarified that it did not intend to address such issues: "We emphasize that we are not addressing this 2 GHz [returned spectrum] issue in this proceeding, nor

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[28] 47 C.F.R. § 25.157(g)(3). ICO has filed a petition for reconsideration of the *First Space Station Licensing Reform Order*, in which it seeks reconsideration of the three-licensee presumption, among other things. We will address ICO's petition in a future Order.

[29] Amendment of the Commission's Space Station Licensing Rules and Policies, *Notice of Proposed Rulemaking*, IB Docket No. 02-34, 17 FCC Rcd 3847, 3864 n.54 (2002) (*Space Station Licensing Reform NPRM*).

[30] *April 19 TMI Letter* at 2-4; *May 24 TMI Letter* at 1; *June 7 ICO Letter* at 1-2; TMI Second Comments at 28-29.

[31] *May 19 CTIA Letter* at 1-3; *June 1 CTIA Letter* at 1-2.

[32] TMI First Reply at 11-13.

[33] TMI First Reply at 8-11, *citing 2 GHz Order*, 15 FCC Rcd at 16138 (para. 18), *AWS Order*, 18 FCC Rcd at 2239 (para. 32).

[34] Inmarsat Second Comments, Exh. A at 12-14; Inmarsat Second Reply at 9-10.

[35] Inmarsat First Comments at 13, 30-32, *citing* Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, *Report and Order, Fourth Report and Order, and Further Notice of Proposed Rulemaking*, IB Docket No. 02-364, 19 FCC Rcd 13356, 13378 n.132 (2004) (*Big LEO Spectrum Sharing Order*).

are we addressing any similar issues raised in any proceeding in which we have issued licenses in the past."[36] Similarly, in a later specific 2 GHz MSS decision, the Commission stated that "we have not established[,] nor do we do so here[,] any policy or rule regarding the use of additional abandoned spectrum that may result after future MSS milestone reviews are completed."[37] Rather, the Commission confirmed that its regulatory approach toward returned 2 GHz MSS spectrum would consist of evaluations of "whether to redistribute such spectrum or make it available to new entrants after achievement of each of our system implementation milestones."[38] Four months later, when it promulgated Section 25.157(g) in the *First Space Station Licensing Reform Order*, the Commission did not discuss 2 GHz MSS returned spectrum issues, thereby leaving undisturbed its decision to evaluate the appropriate disposition of returned 2 GHz spectrum after each milestone review rather than in accordance with a set rule or policy (like that which it ultimately established in the *Space Station Licensing Reform* proceeding).

15. Accordingly, Inmarsat is correct that the Commission did not limit its options in determining whether or how to reassign or reallocate returned spectrum in the 2 GHz MSS bands, in either the *First Space Station Licensing Reform Order* or the 2 GHz MSS Orders cited above. Thus, we are free to redistribute this returned spectrum in any way that would further the public interest, including but not limited to doing so in a way consistent with the application of Section 25.157(g). For reasons discussed below, we find that the public interest would be furthered by reassigning the spectrum at issue here to ICO and TMI. In addition, we find that the public interest would not be furthered as much if we were to reallocate the spectrum to another use, or if we started a new modified processing round.

C. Legal Authority

16. *Background*. In the *First 2 GHz MSS Public Notice*, the Commission stated that, in the event that it chose to reassign any spectrum to ICO and TMI, it would modify their reservations of spectrum using procedures consistent with those under Section 316 of the Communications Act.[39] CTIA asserts that Section 316 requires a finding that the modification is in the public interest.[40] Some commenters maintain that, to make this public interest finding, the Commission must conduct a rulemaking to determine what is the highest and best use for the spectrum.[41] Many also observe that the Commission has modified licenses in rulemakings in the past, such as in the Big LEO proceeding, and claim that those precedents require the Commission to conduct a rulemaking now.[42] Inmarsat contends that the Commission must conduct a rulemaking because it does not have a policy governing returned 2 GHz MSS spectrum.[43]

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[36] *Space Station Licensing Reform NPRM*, 17 FCC Rcd at 3864 n.54.

[37] *Third AWS Order*, 18 FCC Rcd at 2239-40 (para. 32).

[38] *Third AWS Order*, 18 FCC Rcd at 2239-40 (para. 32).

[39] 47 U.S.C. § 316.

[40] *June 1 CTIA Letter* at 2-3.

[41] *May 19 CTIA Letter* at 3; Cingular Second Comments at 6-7; Sirius Second Comments at 6, 14-15; Total RF Second Comments at 5.

[42] T-Mobile First Comments at 4-6; Sirius First Comments at 4; CTIA First Comments at 13-16, *citing Big LEO Spectrum Sharing Order*, 19 FCC Rcd at 13377 (para. 47).

17. ICO and TMI indicate that Section 316 does not require a full notice-and-comment rulemaking proceeding.[44] They further contend parties have no standing in this proceeding unless they have a license that will be modified by the spectrum reassignment under consideration here.[45] In addition, TMI replies that all interested parties were given ample opportunity to comment, and if the Commission were to conduct a rulemaking, it would be unlikely that any argument would be raised that has not already been placed in the record.[46] ICO also opposes a rulemaking because it would create regulatory uncertainty and deter investment.[47]

18. *Discussion*. As an initial matter, we emphasize that ICO and TMI are not U.S. licensees,[48] but rather are non-U.S.-licensed satellite operators that have obtained reservations of spectrum pursuant to the *DISCO II* process to provide service in the United States.[49] Section 316 is limited to "licenses," and so does not directly apply to the spectrum reservations before us now. Instead, consistent with our WTO commitments to treat satellite operators licensed in WTO-member countries no less favorably than we treat U.S.-licensed satellite operators, any modifications to ICO's or TMI's spectrum reservations that we adopt in this Order will be "no less favorable" to ICO or TMI than a license modification performed under Section 316 would be to a U.S.-licensed satellite operator.

19. We agree with CTIA that Section 316 requires the Commission to find that Section 316 modifications are in the public interest. However, we also agree with ICO and TMI that Section 316 does not require that this public interest finding be made in a rulemaking proceeding, for several reasons. As a general matter, administrative agencies have broad discretion to decide whether to proceed by rulemaking or adjudication. In the landmark *Chenery* case, the Supreme Court found that "the choice made between proceeding by general rule or by individual, *ad hoc* litigation is one that lies primarily in the informed discretion of the administrative agency."[50]

20. Furthermore, the plain language of Section 316 does not in any way include a requirement for a notice-and-comment rulemaking, and commenters advocating a rulemaking do not cite any specific language in Section 316 to support their position. In fact, Section 316 requires that the Commission provide a party whose authorization is modified (or one who believes its authorization would be modified by the Commission's actions) an opportunity to

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[43] Inmarsat First Comments at 12-14; Inmarsat Second Reply at 10-11.

[44] *May 24 TMI Letter* at 3-4; *June 7 ICO Letter* at 3-4; TMI Second Comments at 26-28; TMI Second Reply at 30-31.

[45] ICO First Comments at 3; ICO First Reply at 3-4; TMI First Reply at 20.

[46] TMI Second Reply at 32-33.

[47] *June 7 ICO Letter* at 4-5.

[48] ICO is licensed in Great Britain, and TMI is licensed in Canada.

[49] *See DISCO II*, 12 FCC Rcd 24094.

[50] *SEC v. Chenery Corp.*, 332 U.S. 194, 203 (1947) (*Chenery*).

protest, subject to the Section 309 petition to deny and hearing requirements.[51] The Commission had already developed a significant record on the issues in this proceeding prior to requesting additional comment in the *First* and *Second 2 GHz Returned Spectrum* public notices.[52] Moreover, TMI is also correct that interested parties were given more than sufficient opportunity to comment on the issues in this proceeding. Finally, although some parties correctly note that the Commission has made some Section 316 modifications in the context of rulemaking proceedings in the past, they incorrectly conclude that the Commission has always exercised its Section 316 authority in rulemakings or is required to do so.[53] As *Chenery* demonstrates, the mere fact that the Commission has chosen to proceed by rule making in some instances does not constitute a precedent that requires us to conduct a rulemaking here.[54]

21. In this case, we have made a reasonable choice in proceeding by a Section 316 process rather than by rule making. As discussed above, when the 2 GHz MSS system operators were first authorized, the Commission contemplated that the spectrum divided among the applicants, although sufficient to get the service started, might prove inadequate over the long run to support a licensee's system. Accordingly, the Commission built into the licensing framework a flexible process that would allow the Commission to assess the public interest benefits of redistributing spectrum (or not) among the surviving systems on a case-by-case basis if and when spectrum was returned. Indeed, the authorization of ICO, TMI and the other original 2 GHz MSS applicants specifically envisioned a likelihood of increasing the amounts of authorized spectrum to help them realize the full potential of their planned systems. In now providing ICO and TMI with access to returned 2 GHz MSS spectrum, we are modifying their authorizations as originally contemplated, not making any fundamental changes in those authorizations. Such modifications fall well within the scope of Section 316.

22. Consistent with the requirements of Section 316, it is our judgment that these modifications will promote the public interest, convenience and necessity.[55] As explained in detail below, we have determined that increasing ICO's and TMI's spectrum assignment to ten megahertz in each direction will better enable them to provide crucial communications services

[51] 47 U.S.C. §§ 309(d) - (e); 316(a).

[52] In this section, we decide only that a rulemaking is not required by Section 316 as a general proposition. In this Order below, we will address arguments that a rulemaking is needed to meet the public interest in this particular instance.

[53] *See* Modification of Licenses Held by Iridium Constellation, LLC and Iridium, US LP, For a Mobile Satellite System in the 1.6 GHz Frequency Band, *Order to Show Cause*, 18 FCC Rcd 10441 (Int'l Bur., 2003) (increasing MSS licensee's spectrum assignment pursuant to Section 316, outside of a rulemaking proceeding); New Skies Satellites, N.V., Request for Unconditional Authority to Access the U.S. Market, *Memorandum Opinion and Order*, 16 FCC Rcd 7482 (2001) (increasing license terms of U.S. earth stations authorized to communicate with New Skies satellites from three to ten years, pursuant to Section 316, outside of a rulemaking proceeding).

[54] *See Chenery*, 332 U.S. at 203. T-Mobile also asserts that the Commission has not delegated authority to the International Bureau to act on these issues. T-Mobile First Comments at 6-7. Because this is a Commission proceeding rather than a Bureau Order, we find that this issue is moot.

[55] 47 U.S.C. § 316(a) (authorizing Commission to modify any station license "if in the judgment of the Commission such action will promote the public interest, convenience, and necessity").

during times of national emergencies.[56] This action will also promote the public interest by improving ICO's and TMI's capabilities to increase their customer bases and to provide higher quality service (*e.g.*, mobile/wireless broadband), which, in turn, will enable them to compete more effectively.[57] The resulting dynamic should thereby spur the market to provide the public with a more responsive mix of prices, features and quality service.

D. Separate or Combined Proceedings

23. *Background.* Several parties contend that the Commission should consider uses for all the newly available 2 GHz MSS spectrum in one proceeding, rather than conducting two different proceedings.[58] Sirius maintains that conducting two proceedings might preclude the Commission from considering all options for all the returned spectrum.[59] ICO and TMI claim that the returned spectrum is subject to Section 25.157(g), and therefore, at a minimum, 1/3 of the spectrum in the 2 GHz band should be reassigned to ICO and TMI pursuant to that rule.[60] TMI also notes that the Commission has wide discretion to order its own docket as it deems appropriate.[61]

24. *Discussion.* ICO and TMI are correct that the Commission has a great deal of discretion to order its docket as it deems appropriate.[62] We determined above to consider the issues in this proceeding *de novo* rather than pursuant to the framework established in the *First Space Station Licensing Reform Order*. Similarly, we conclude that there is no basis for treating the spectrum discussed in the *First 2 GHz Public Notice* any differently than the spectrum discussed in the *Second 2 GHz Public Notice*. Therefore, we have decided to consider the issues in the two public notices together, in order to expedite the resolution of those issues.

25. When considered together, the two public notices presented three options for the currently unassigned spectrum in the 2 GHz MSS band: (1) increase ICO's and TMI's spectrum assignments by 6 megahertz in each direction, to 10 megahertz in each direction; (2) increase ICO's and TMI's spectrum assignments by 2.66 megahertz in each direction, to 6.66 megahertz in each direction; and start a rulemaking proceeding to consider reallocating the remaining 6.66

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[56] *See infra* Section IV.B.1.

[57] *See infra* Section IV.B.3.

[58] Inmarsat First Comments at 25-26; Sirius First Comments at 3-5; CTIA First Reply at 4-5; Intel First Reply at 2-3; CTIA Second Comments at 9-10; Intel Second Comments at 3; U.S. Cellular Second Comments at 4-5. *See also* Sirius Second Comments at 6.

[59] Sirius Comments at 3-5, *cited in* CTIA Reply at 4-5; Intel Reply at 2-3.

[60] *May 24 TMI Letter* at 2-3; *June 7 ICO Letter* at 2.

[61] TMI Second Comments at 29; TMI Second Reply at 31. *See also* ICO Second Reply at 4 (claiming that commenters who discuss spectrum identified in the *First 2 GHz MSS Public Notice* in the Second Comments or Second Replies raise issues that are outside the scope of the proceeding).

[62] Telecommunications Resellers Association v. FCC, 141 F.3d 1193, 1196 (D.C. Cir., 1998), *citing* Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto. Ins. Co., 463 U.S. 29, 43 (1983); Personal Watercraft Industry Ass'n v. Dept. of Commerce, 48 F.3d 540, 544 (D.C. Cir. 1993); GTE Service Corp. v. FCC, 782 F.2d 263, 273-74 (D.C. Cir., 1986).

megahertz in each direction; and (3) increase ICO's and TMI's spectrum assignments by 2.66 megahertz in each direction, and start a modified processing round to invite new MSS applicants to apply for licenses for the remaining 6.66 megahertz. In addition, interested parties proposed two other options: (4) consider reallocating all the unassigned spectrum;[63] and (5) include all the unassigned spectrum in a processing round.[64] After considering all the options as discussed below, we have concluded that the returned 2 GHz MSS spectrum should remain allocated for MSS use, and that ICO's and TMI's spectrum reservations should be modified to authorize use of the entire amount.

IV. REASSIGNMENT

A. Background

26. In the *First 2 GHz MSS Public Notice*, the Commission invited comment on increasing ICO's and TMI's spectrum assignments from 4 megahertz to 6.67 megahertz in each direction.[65] In the *Second 2 GHz MSS Public Notice*, the Commission requested comment on, among other things, increasing ICO's and TMI's spectrum assignments further, to 10 megahertz in each direction.[66] For the reasons discussed in this section below, we find that increasing ICO's and TMI's spectrum assignments to 10 megahertz in each direction would further the public interest by better enabling them to provide crucial communications services during times of national emergencies, and to offer rural broadband services. In addition, we find that increasing ICO's and TMI's spectrum assignments is in the public interest because ICO and TMI will be able to bring the spectrum into use more quickly – and thus offer public safety and rural broadband services more quickly – than would be possible if the spectrum were assigned to another party.[67] Finally, we find that assigning the additional spectrum to ICO and TMI would further the public interest by allowing ICO and TMI to compete more effectively with other MSS competitors. We discuss these public interest findings further below.

B. Public Interest Findings

1. Public Safety

27. *Background.* TMI notes that MSS provides crucial communications capabilities during times of national emergencies, and states that it needs 10 megahertz of spectrum in each direction to meet the peak demand levels that occur during such emergencies.[68] ICO similarly contends that increasing its spectrum assignment would foster MSS competition, thereby

[63] *See, e.g.*, Intel First Reply at 12-13.

[64] *See* Letter from John P. Janka, Counsel for Immarsat, to Secretary, FCC, dated Aug. 24, 2005 (*August 24 Inmarsat Letter*) at 2.

[65] *First 2 GHz MSS Public Notice*, 20 FCC Rcd 12231.

[66] *Second 2 GHz MSS Public Notice*, 20 FCC Rcd 12234.

[67] Skyterra Second Reply at 9-10.

[68] *See, e.g.*, *April 19 TMI Letter* at 10-11.

expanding the MSS services available to first responders.[69] A number of state and local public safety officials agree with ICO and TMI.[70] CTIA and Sprint reply that neither ICO nor TMI have explained how assigning additional spectrum to them would promote public safety or homeland security, or why they cannot provide public services with their current spectrum assignments.[71]

28. *Discussion*. We share the public safety concerns discussed by TMI, ICO, and their first-responder supporters. The Commission has found that satellite technology can provide first responders with valuable service during emergencies.[72] For example, rescue workers used MSS telephones at the sites of the September 11, 2001 attacks on the World Trade Center and the Pentagon, while terrestrial wireless service was not available at those locations because transmission towers were destroyed.[73] Most recently, in the late summer and fall of 2005, satellite services played a critical role in maintaining and re-establishing communications in the wake of Hurricanes Katrina, Rita, and Wilma. In the immediate aftermath of the hurricanes in certain affected areas, satellite services provided the only reliable mobile telephony, data, and information services. Although CTIA and Sprint question whether ICO and TMI have adequately explained how increasing their spectrum assignments will help them provide service in times of national emergency, we find the first responders' assessment of their MSS needs to be compelling in this regard.[74] Moreover, as we have indicated in connection with our MSS 911 proceeding,[75]

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[69] ICO First Reply at 9.

[70] *See* EADS Second Comments at 1-2; Region 2000 Second Reply at 1; Joint National Police Organizations Second Reply at 1. In addition, several public safety officials filed *ex parte* letters supporting ICO and TMI after the close of the record. *September 16 Ohio Public Safety Letter*; *September 26 Hendry County Letter*; *September 26 Windermere Letter*; *September 29 Virginia Beach Police Letter*; *September 30 Norfolk Police Letter*; *October 5 Savannah Police Letter*; *October 19 Georgia Police Letter*; *October 19 Alaska Police Letter*; *October 19 ASA Police Letter*.

[71] Sprint Second Reply at 7-8; CTIA Second Reply at 7-8.

[72] Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Service in the Upper and Lower L-Band, *Notice of Proposed Rulemaking*, IB Docket No. 96-132, 11 FCC Rcd 11675, 11681 (para. 12) (1996) (*L-Band Service Rules NPRM*) (satellites provide emergency communications to any area in times of emergencies and natural disasters); Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile Satellite Service, *Notice of Proposed Rulemaking*, ET Docket No. 95-18, 10 FCC Rcd 3230, 3231 (para. 7) (1995) (*2 GHz Allocation NPRM*) (satellites provide nationwide public safety coverage, and could satisfy important requirements that cannot be satisfied economically by other means).

[73] *See* ICO Second Comments at 7-8, and n. 22, *citing, e.g.*, *Rescue Workers Get New Phones*, St. Petersburg Times, Sept. 18, 2001, at 9A, *Satellite Phone Interest Renewed After Attack Rescue Use*, Newsbytes, Sept. 25, 2001. *See also April 19 TMI Letter* at 10-11; *June 7 ICO Letter* at 4; *June 20 Globalstar Letter* at 2; ICO Second Comments at 7-8; Loral Second Comments at 2; Rydbeck Consulting Second Comments at 2; Microwave Circuits Second Comments at 1-2; EADS Second Comments at 1-2; BRN Phoenix Second Comments at 1-2; Globalstar Second Comments at 5-7; Hughes Second Comments at 5-6; Alcatel Second Comments at 1; TMI Second Comments at 7-9; Lockheed Second Comments at 1; Inmarsat Second Comments, Exh. A at 8, SIA Second Comments at 3-4.

[74] Many of the public safety officials supporting increasing ICO's and TMI's spectrum assignment to 10 megahertz in each transmission direction also emphasize that ICO's and TMI's MSS services will promote public safety if supplemented by ATC. *See* EADS Second Comments at 1-2; Joint National Police Organizations Second Reply at 1; *September 16 Ohio Public Safety Letter*. In addition, several public safety officials do not specifically refer to ATC, but instead refer to "hybrid satellite/terrestrial systems

satellite services with an ATC component may be capable of providing both basic and enhanced 911 services. We would expect that MSS providers that including an ATC component, such as those proposed for deployment in the 2 GHz band, will work toward providing basic and enhanced 911 features.[76] Accordingly, we find that these public safety considerations provide an independent, additional justification for reassigning 10 megahertz of spectrum in each direction to ICO and TMI. In reaching this conclusion, we emphasize that assigning this spectrum to ICO and TMI will enable them to bring it into use more quickly, and so they can offer public safety services more quickly than would be possible if the spectrum were assigned to another party.[77]

2. Rural Broadband

29. *Background.* A number of parties recommend assigning more spectrum to the remaining 2 GHz MSS system operators, because additional spectrum together with ATC would facilitate delivery of broadband services to first responders, or to rural areas.[78] Sprint questions

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[that would] allow a cell phone user to use a cell phone on existing cell towers or to use a satellite network if the cell phone network is inoperative." *October 19 Alaska Police Letter. See also September 26 Windermere Letter; September 26 Hendry County Letter; September 29 Virginia Beach Police Letter; September 30 Norfolk Police Letter; October 5 Savannah Police Letter; October 19 Georgia Police Letter.*

[75] Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems; Amendment of Parts 2 and 25 to Implement the Global Mobile Personal Communications by Satellite (GMPCS) Memorandum of Understanding and Arrangements; Petition of the National Telecommunications and Information Administration to Amend Part 25 of the Commission's Rules to Establish Emissions Limits for Mobile and Portable Earth Stations Operating in the 1610-1660.5 MHz Band, CC Docket No. 94-102, IB Docket No. 99-67, *Further Notice of Proposed Rulemaking*, 17 FCC Rcd 25576 (2002) and *Report and Order and Second Further Notice of Proposed Rulemaking*, 18 FCC Rcd 25340 (2003) (*Scope E911 Report and Order and Second Further Notice*).

[76] *See Scope E911 Report and Order and Second Further Notice*, 18 FCC Rcd 25340 at para. 110. We again emphasize here that we are not reaching the issue of whether ICO and TMI need additional spectrum to provide ATC, as they claim. *See, e.g.*, TMI Second Reply at 29-30; ICO Second Reply at 1-3. Rather, we find that increasing ICO's and TMI's spectrum assignments would serve the public interest by, *inter alia*, strengthening their ability to provide service during national emergencies, regardless of whether ICO or TMI are granted ATC authority. In fact, satellite services provided the only reliable mobile telephony, data, and information services in certain areas affected by hurricanes Katrina and Rita earlier this year. *See October 5 Savannah Police Letter; September 30 Norfolk Police Letter; September 26 Hendry County Letter; October 19 Georgia Police Letter; October 19 Alaska Police Letter. See also* ICO Second Comments at 7-8, and n. 23, *citing*, e.g., International Committee of the Red Cross, *Indonesia: The Humanitarian Response Since the Tsunami* (Apr. 13, 2005) (discussing use of satellite communications during Tsunami relief efforts in Indonesia in early 2005).

[77] Skyterra Second Reply at 9-10. To date, we have found that both ICO and TMI have met their milestone requirements.

[78] *April 19 TMI Letter* at 9-10; BRN Phoenix First Comments at 1-2; Rydbeck Consulting First Comments at 1-3; ICO First Reply at 4-9; TMI First Reply at 5, 7; TMI Second Comments at 14-16; ICO Second Comments at 3-7; Loral Second Comments at 2; Rydbeck Consulting Second Comments at 2; EADS Second Comments at 2; BRN Phoenix Second Comments at 1; Globalstar Second Comments at 7-8; Hughes Second Comments at 3-5; Alcatel Second Comments at 1; Lockheed Second Comments at 1;

whether ICO's and TMI's proposed satellite systems will have adequate power to provide broadband service in rural areas.[79]

30. *Discussion*. The Commission has previously found that satellite facilities provide a competitive platform for delivery of broadband services, which is especially well suited for extending these services to rural and unserved areas.[80] In other words, satellite services employ cost-effective technology to serve communities with low penetration rates, especially those in remote areas.[81] For example, satellites offer cost advantages over wireline access in rural and remote areas, where sparsely populated areas cannot provide the economies of scale to justify the deployment costs of wireline networks.[82] Satellites have large coverage areas and, in many cases, can reach an entire nation, thereby spreading the costs of deployment across a number of communities.[83] Satellites also provide communications opportunities for communities in geographically isolated areas, such as mountainous regions and deep valleys, where rugged and impassable terrain may make service via terrestrial wireless or wireline telephony economically impractical.[84]

31. Accordingly, we find that increasing ICO's and TMI's spectrum reservations would increase their capacity to provide broadband services in rural areas. Sprint does not provide any technical analysis for its assertion that ICO's and TMI's proposed satellite systems will not have sufficient power to provide broadband service in rural areas.[85] Thus, Sprint's assertion does not outweigh the Commission's previous determinations regarding satellite-based provision of broadband services.

Inmarsat Second Comments, Exh. A at 7-9, SIA Second Comments at 3-4; TMI Second Reply at 20-21; ICO Second Reply at 3; Globalstar Second Reply at 6-7; MSUA Second Reply at 2-3; Skyterra Second Reply at 5-6. *See also* Inmarsat First Comments at 7-10 (opposing reallocation, in part because MSS can be used to deliver broadband to first responders); Inmarsat Second Reply at 17-22 (2 GHz MSS spectrum better suited than other MSS spectrum to provide broadband services in any area).

[79] Sprint Second Reply at 8-9.

[80] *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10764 (para. 2), *citing* FWCC Request for Declaratory Ruling on Partial-Band Licensing of Earth Stations in the Fixed-Satellite Service that Share Terrestrial Spectrum, *First Report and Order*, IB Docket No. 00-203, 16 FCC Rcd 11511 (2001) (*FWCC/Onsat First Report and Order*).

[81] Extending Wireless Telecommunications Services To Tribal Lands, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 99-266, 15 FCC Rcd 11794, 11799 (para. 13) (2000) (*Tribal Lands Order*); *FWCC/Onsat First Report and Order*, 16 FCC Rcd at 11518 (para. 14).

[82] *Tribal Lands Order*, 15 FCC Rcd at 11799 (para. 13), *citing* Establishment of Policies and Service Rules For the Mobile Satellite Service in the 2 GHz Band, IB Docket No. 99-81, RM-9328, *Notice of Proposed Rulemaking*, 14 FCC Rcd 4843, 4886 (1999) (*2 GHz Notice*).

[83] *Tribal Lands Order*, 15 FCC Rcd at 11799 (para. 13).

[84] *Tribal Lands Order*, 15 FCC Rcd at 11799 (para. 13).

[85] Sprint Second Reply at 8-9.

3. Competition

a. Market Definition

32. *Background.* Inmarsat recommends against increasing ICO's and TMI's spectrum assignments, arguing that this would be tantamount to authorizing a duopoly in the 2 GHz MSS band.[86] Some commenters respond that this is not the case because TMI and ICO face competition from other MSS operators in the L-band and the Big LEO bands, and from terrestrial wireless operators.[87] Inmarsat replies that the 2 GHz MSS band is too new to determine whether the broadband services provided in that band should be considered part of the same market as other MSS services, or terrestrial wireless services, which may not offer broadband capability in all cases.[88]

33. *Discussion.* On the basis of the record in this proceeding, we find that ICO's and TMI's 2 GHz MSS offerings will compete in the same product market as the offerings of licensees in other MSS bands.[89] Accordingly, we disagree that reassigning the 2 GHz MSS spectrum to ICO and TMI results in a duopoly. By assigning this spectrum to ICO and TMI, we will make it easier for them to become effective competitors in the MSS segment of the mobile telecommunications services market, and, as noted above, better providers of homeland security and public safety services. We discuss this conclusion below.

b. Competitive Service

34. *Background.* Having determined that the relevant product market includes all MSS services, we will consider TMI's and ICO's spectrum assignments in this context. TMI contends that it needs 10 megahertz in each direction to be able to compete with other MSS operators, which generally have been assigned comparable amounts of bandwidth.[90] Similarly, ICO emphasizes that several MSS licensees in other bands have been assigned more than 20 MHz of spectrum in total.[91]

35. CTIA and T-Mobile argue that, in 1999, the Commission stated that 5 megahertz of spectrum total is sufficient for 2 GHz MSS system operators to commence service, and neither ICO nor TMI have provided demand growth projections or other data to justify assigning more

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[86] Inmarsat First Comments at 25-29, *citing First Space Station Licensing Reform Order*, 18 FCC Rcd at 10788-89 (para. 64). *See also* Globalstar Second Reply at 12-13 (modified processing round needed to ensure vigorous competition in the MSS market).

[87] *April 19 TMI Letter* at 4-5; Intel First Reply at 11-12; TMI Second Comments at 16-17; Intel Second Comments at 11-12. TMI Second Reply at 9-11 and Exh. 4 at 2-4. *See also* Skyterra Second Reply at 6-7 (increasing ICO's and TMI's spectrum assignments would enable them to compete better against other MSS and terrestrial wireless operators).

[88] Inmarsat Second Reply at 15-17.

[89] For the purposes of this order, we do not need to reach the issue of whether the offerings of licensees in other MSS bands are substitutes for terrestrial offerings.

[90] TMI Second Reply at 11-12. *See also* TMI First Reply at 5, 15-17.

[91] ICO First Reply at 10; 12-13.

spectrum to them.[92] Similarly, Inmarsat questions assertions that 4 megahertz in each direction are not adequate for a viable service when ICO and TMI both accepted their original spectrum assignments of 3.5 megahertz in each transmission direction.[93] In response, ICO cites its comments in the 2001 2 GHz rulemaking proceeding, in which it requested 15 megahertz in each direction.[94]

36. Several commenters also argue that neither ICO nor TMI have shown that they need more spectrum, particularly since they have not started to provide service.[95] CTIA notes that the Commission stated that it "may" assign newly available 2 GHz MSS spectrum available for expansion of *operational* systems, and asserts that the Commission is now prohibited from reassigning spectrum to ICO and TMI because their systems are not operational.[96] TMI replies, however, that the Commission implied that it would consider reassigning spectrum after each milestone, and that all milestones except the launch milestone occur before the satellite system is operational.[97] Thus, it argues, CTIA's assertion cannot be correct.

37. *Discussion.* We find that increases in ICO's and TMI's spectrum reservations would further the public interest by allowing ICO and TMI to compete more effectively with other MSS competitors. We also conclude that ICO and TMI will be able to use this additional spectrum in the future to provide more competitive new services, such as mobile broadband.[98] Moreover, as ICO observes, MSS licensees in other bands have been assigned more than 20 megahertz of

[92] *May 19 CTIA Letter* at 2; CTIA First Comments at 6-7, 8-10, 13-14; CTIA First Reply at 1-3; T-Mobile First Comments at 3-4.

[93] Inmarsat First Comments at 20; Inmarsat First Reply at 6-7.

[94] ICO First Reply at 9.

[95] *May 19 CTIA Letter* at 2; T-Mobile First Comments at 4; Inmarsat First Comments at 15-18, 23-25; Inmarsat Second Comments, Exh. A at 15-18, 27-29; Cingular Second Comments at 3-4; CTIA Second Comments at 3-7; Inmarsat Second Comments, Exh. B at 5-7; Sirius Second Comments at 9-10; Total RF Marketing Second Comments at 3-4; Sprint Second Reply at 9.

[96] CTIA First Comments at 6; CTIA First Reply at 2.

[97] TMI First Reply at 19.

[98] A number of parties argue that both MSS licensees and terrestrial wireless operators will require more bandwidth in the future as new applications are developed, and assert that ICO and TMI will not be able to compete as well with terrestrial wireless operators in the future unless both of their frequency assignments are increased to 10 megahertz in each direction. Alcatel Second Comments at 1; Loral Second Comments at 2; Rydbeck Consulting Second Comments at 2; Microwave Circuits Second Comments at 2; BRN Phoenix Second Comments at 2; Skyterra Second Reply at 7-8. *See also May 3 ICO Letter* at 2-3; ICO Second Comments at 9-11. Inmarsat contends that predictions regarding bandwidth needed for future applications are speculative, and future channelization bandwidths may decrease, and so these claims cannot justify increasing ICO's or TMI's spectrum assignment. Inmarsat Second Comments, Exh. A at 23. Although it is difficult to predict accurately the spectrum needs associated with future technologies, we disagree with Inmarsat to the extent that it contends that the need for additional bandwidth to take advantage of future technological advancements provides no support for our conclusion to assign more spectrum to ICO and TMI.

spectrum, 10 megahertz or more in each direction.[99] The additional assignments to ICO and TMI are thus fairly conservative when compared with other MSS spectrum assignments.[100]

38. We also note that ICO and TMI were not given a reasonable opportunity to increase their spectrum assignments in the secondary market, as NGSO-like satellite operators have been allowed to do since the Commission eliminated the satellite anti-trafficking rule in 2003.[101] In the *Space Station Licensing Reform* proceeding, the Commission eliminated the anti-trafficking rule to offset a potential drawback of our decision to divide up available spectrum for NGSO-like systems among all the qualified applicants in a given processing round; we recognized that this approach might leave some providers with insufficient spectrum for their needs, and that a good solution would be to remove the anti-trafficking impediment to obtaining spectrum in the secondary market.[102] While the Commission, in some respects, used a similar process for granting spectrum usage rights to the current 2 GHz MSS systems – principally, by dividing up the available spectrum equally among qualified applicants in a processing round – this occurred before the full licensing framework established in the *Space Station Licensing Reform* proceeding took effect.[103] As a consequence, the anti-trafficking rule applied to these systems until after they were required to make their CDR showings, which restricted their ability to obtain additional spectrum in the secondary market.[104]

39. Thus, rather than have the 2 GHz MSS operators rely on the secondary market to meet potential spectrum shortfalls, the Commission contemplated that they might have opportunities to gain spectrum access if some of their number surrendered their authorizations or otherwise had their authorizations cancelled.[105] What we did not contemplate, however, was applying a process that limited both our flexibility to assign returned spectrum to the incumbent 2 GHz MSS operators, and limited the operators' opportunities to secure additional spectrum usage

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[99] Specifically, as ICO states, Globalstar has access to 27.85 megahertz of spectrum in the L-band and S-band, and that MSV is assigned up to 20 megahertz of internationally coordinated spectrum in the L-band. ICO First Reply at 10, *citing* Establishing Rules and Policies for the use of Spectrum for Mobile Satellite Services in the Upper and Lower L-band, *Report and Order*, IB Docket No. 96-132, 17 FCC Rcd 2704, 2724 (para. 45) (2002). ICO also claims that Inmarsat has coordinated an amount of spectrum in the L-band comparable to the 20 megahertz assigned to MSV. ICO First Reply at 12-13.

[100] *See* ICO Reply at 10; 12-13; TMI Reply at 15-17.

[101] *See* Section III.B.3. above, *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10841-45 (paras. 215-23).

[102] *See First Space Station Licensing Reform Order*, 18 FCC Rcd 10776. We also imposed various safeguards to limit or prevent speculation that might otherwise occur in the absence of the anti-trafficking rule.

[103] *2 GHz MSS Service Rules Order*, 15 FCC Rcd at 16138-44 (paras. 16-30).

[104] *2 GHz MSS Service Rules Order*, 15 FCC Rcd at 16185-87 (paras. 128-34).

[105] Specifically, the Commission said that it would determine whether to redistribute spectrum or make it available to new entrants after each milestone. *See 2 GHz MSS Service Rules Order*, 15 FCC Rcd at 16138-39 (paras. 17-18). *See also Third AWS Order*, 18 FCC Rcd at 2239-40 (para. 32).

rights on the secondary market. Accordingly, we find that restricting ICO and TMI to their current spectrum assignments would put them at a competitive disadvantage.[106]

40. In response to these public interest considerations, commenters merely assert that ICO and TMI have not adequately shown that they need any additional spectrum.[107] We disagree with those commenters that argue that the Commission should make individualized determinations of the spectrum ICO and TMI will need to provide their proposed services to their customers.[108] Given rapidly changing satellite technology and the time needed to construct and launch a satellite, any assessment is likely to be obsolete by the time the satellite is ready to provide service. Further, given the innovative designs and unique markets targeted by each satellite operator, any proceedings to quantify specific requirements would be lengthy and inherently subjective. Recognizing this, the Commission has, over the past two decades, relied upon a variety of other mechanisms for assigning licenses that do not require a detailed evaluation of applicants' business judgments. These methods include requiring applicants to reach mutually-acceptable agreements,[109] requiring applicants to form a consortium,[110] imposing Commission-devised spectrum plans based on the record before it,[111] and simply dividing the spectrum by the number of qualified applicants, with market-based mechanisms in place to make any necessary corrections in the secondary market.[112] Significantly, satellite implementation milestone requirements ensure that licensees make the capital investments necessary to bring their assigned spectrum into use, and that we can quickly recover and reassign unused spectrum to other applicants.

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[106] *See Third AWS* Order, 18 FCC Rcd at 2239-40 (para. 32) (Commission stated that it would decide at a later time whether to redistribute the spectrum to existing operators or to make it available to new applicants).

[107] *See, e.g.*, Globalstar Second Reply at 11-12.

[108] *May 19 CTIA Letter* at 2; T-Mobile First Comments at 4; Inmarsat First Comments at 15-18, 23-25; Inmarsat Second Comments, Exh. A at 15-18, 27-29; Cingular Second Comments at 3-4; CTIA Second Comments at 3-7; Inmarsat Second Comments, Exh. B at 5-7; Sirius Second Comments at 9-10; Total RF Marketing Second Comments at 3-4; Sprint Second Reply at 9.

[109] Amendment of Part 25 of the Commission's Rules to Establish Rules and Policies Pertaining to the Second Processing Round of the Non-Voice, Non-Geostationary Mobile Satellite Service, *Report and Order*, IB Docket No. 96-220, 13 FCC Rcd 9111 (1997) (*Little LEO Second Processing Round Order*).

[110] Amendment of Parts 2, 22, and 25 of the Commission's Rules to Allocate Spectrum for and to Establish Other Rules and Policies Pertaining to the Use of Radio Frequencies in a Land Mobile Satellite Service for the Provision of Various Common Carrier Services, *Memorandum Opinion, Order and Authorization*, Gen. Docket No. 84-1234, 4 FCC Rcd 6041 (1989), *rev'd and remanded*, Aeronautical Radio, Inc. v. FCC, 928 F. 2d 428 (D.C. Cir. 1991).

[111] Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands, Report and Order, CC Docket No. 92-166, 9 FCC Rcd 5936 (1994) (*Big LEO Order*), *2 GHz MSS Service Rules Order*, 15 FCC Rcd at 16138-44 (paras. 16-30).

[112] *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10776 (para. 29).

41. Nothing in the *2 GHz MSS Service Rules Order* requires us to deviate from this longstanding policy and require 2 GHz MSS system operators to quantify specific spectrum requirements before assigning them additional spectrum. CTIA and T-Mobile both note that the Commission stated that 5 megahertz of spectrum, 2.5 megahertz in each transmission direction, would be sufficient to allow 2 GHz MSS system operators to get *started.*[113] However, the Commission did not reach the issue of whether this amount of spectrum would be sufficient to enable 2 GHz MSS system operators to provide service in competition with other MSS operators over the long run. In addition, nothing in the *2 GHz MSS Service Rules Order* requires 2 GHz MSS system operators to make any particular demonstration before they can be assigned additional spectrum, other than to show that the reassignment is in the public interest. In fact, as noted above, the *2 GHz MSS Service Rules Order* emphasized that it did not adopt any rule or policy regarding returned spectrum.[114] Thus, contrary to CTIA's and T-Mobile's assertions, the Commission's statement in the *2 GHz MSS Service Rules Order* regarding the spectrum needed to get started does not require TMI or ICO to quantify their need for spectrum, nor does it preclude us from increasing TMI's and ICO's spectrum reservations now.[115]

42. In summary, we find that increases in ICO's and TMI's spectrum reservations are warranted as a matter of promoting the public interest. Moreover, we see no reason to attempt to quantify either TMI's or ICO's individual spectrum needs at this time, or to tie our spectrum authorization decisions here to such assessments.[116]

V. REALLOCATION

A. Background

43. One of the options for the currently unassigned 2 GHz MSS spectrum is to start a rulemaking to consider reallocating the returned spectrum to other services. In this Section, we conclude that we need not start a reallocation rulemaking at this time, in part because we find that there are significant public interest benefits to keeping the current MSS allocation, in addition to strengthening competition in the market for mobile telecommunication services, as discussed above. These include public safety and national security benefits, promoting broadband service in rural areas, and maintaining globally harmonized 2 GHz MSS spectrum. In addition, the Commission only recently decided to allocate 20 megahertz in each transmission direction in the

[113] *See 2 GHz MSS Service Rules Order*, 15 FCC Rcd at 16138-39 (para. 17) (emphasis added).

[114] *2 GHz MSS Service Rules Order*, 15 FCC Rcd at 16138 (para. 18).

[115] Furthermore, commenters who question ICO's and TMI's need for more spectrum are licensed to operate on significantly more spectrum than we assign to ICO and TMI as a result of this decision. *See* ICO Reply at 10; 12-13; TMI Reply at 15-17. Thus, to the extent that demonstrating a need for spectrum is relevant, it is at best unclear whether those commenters would be able to show that they have a greater need for the spectrum at issue here than ICO and TMI.

[116] In deciding to increase ICO's and TMI's spectrum assignments, we place no weight on a number of TMI's arguments, including whether additional spectrum would create "efficiencies" by allowing TMI to take full advantage of increased power on its satellite, or economies of scale in handset production. We also do not rely on contentions that TMI needs additional spectrum to deploy a network using ATC, or provide state-of-the-art air interfaces. *See, e.g., April 19 TMI Letter* at 6-9. Accordingly, we need not address any other party's criticism of these contentions.

2 GHz bands to MSS,[117] and the record does not support reopening that decision at this time. We also find that none of the advocates of starting a reallocation proceeding provide a sufficient justification for doing so.

B. Public Interest Benefits of Current Allocation

1. Public Safety

44. We noted above that a number of commenters argue that increasing ICO's and TMI's spectrum assignments would promote public safety.[118] Several more parties observe that retaining the current MSS allocation for this spectrum would promote public safety and homeland security applications, regardless of the MSS operator to which the spectrum is assigned.[119] We agree. As we have demonstrated above, the 2 GHz MSS allocation will serve as an invaluable avenue for the provision of communications services to first responders because of the inherent advantages that satellite-delivered services have over other technologies during wide-scale emergency situations where the terrestrial-based infrastructure is compromised. In that context, we noted that rescue workers used MSS telephones at the sites of the September 11, 2001 attacks on the World Trade Center and the Pentagon, while terrestrial wireless service was unavailable, and that satellite services played a critical role in maintaining and re-establishing communications in the wake of Hurricanes Katrina, Rita, and Wilma.[120] We find that the public safety and national security considerations discussed in this Order above weigh heavily in favor of maintaining the current MSS allocation in the 2 GHz MSS bands.

2. Broadband Services in Rural Areas

45. Further, a number of parties point out that 2 GHz MSS together with ATC could be used to deliver broadband services to rural areas.[121] The Commission has previously found that satellite facilities provide a competitive platform for delivery of broadband services, which is especially well suited for extending these services to rural and unserved areas.[122] In other words,

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[117] *Third AWS Order*, 18 FCC Rcd at 2239 (para. 31).

[118] *See* Section IV.B. above.

[119] TMI Second Reply at 22-25; ICO Second Reply at 3; MSUA Second Reply at 3; Globalstar Second Reply at 4-6; Skyterra Second Reply at 4-5; Region 2000 Second Reply at 1; Joint National Police Organizations Second Reply at 1.

[120] *See* Section IV.B. above.

[121] *April 19 TMI Letter* at 9-10; BRN Phoenix First Comments at 1-2; Rydbeck Consulting First Comments at 1-3; ICO First Reply at 4-9; TMI First Reply at 5, 7; TMI Second Comments at 14-16; ICO Second Comments at 3-7; Loral Second Comments at 2; Rydbeck Consulting Second Comments at 2; EADS Second Comments at 2; BRN Phoenix Second Comments at 1; Globalstar Second Comments at 7-8; Hughes Second Comments at 3-5; Alcatel Second Comments at 1; Lockheed Second Comments at 1; Inmarsat Second Comments, Exh. A at 7-9, SIA Second Comments at 3-4; TMI Second Reply at 20-21; ICO Second Reply at 3; Globalstar Second Reply at 6-7; MSUA Second Reply at 2-3; Skyterra Second Reply at 5-6. *See also* Inmarsat First Comments at 7-10 (opposing reallocation, in part because MSS can be used to deliver broadband to first responders); Inmarsat Second Reply at 17-22 (2 GHz MSS spectrum better suited than other MSS spectrum to provide broadband services in any area).

[122] *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10764 (para. 2), *citing* FWCC Request for

satellite services employ cost-effective technology to serve communities with low penetration rates, especially those in remote areas.[123] For example, satellites offer cost advantages over wireline access in rural and remote areas, where sparsely populated areas cannot provide the economies of scale to justify the deployment costs of wireline networks.[124] Satellites have large coverage areas and, in many cases, can reach an entire nation, thereby spreading the costs of deployment across a number of communities.[125] Satellites also provide communications opportunities for communities in geographically isolated areas, such as mountainous regions and deep valleys, where rugged and impassable terrain may make service via terrestrial wireless or wireline telephony economically impractical.[126] For these reasons, we conclude that maintaining the current MSS allocation in the 2 GHz MSS bands will promote broadband services in rural areas, by making broadband available in rural areas where there is no broadband service now, and by providing an alternative in other rural areas that have a broadband service provider.[127]

3. Globally Harmonized MSS Allocation

46. A number of parties assert that preserving the 2 GHz MSS allocation would facilitate the efforts of 2 GHz MSS licensees to expand their service offerings internationally.[128] We agree with these commenters, and conclude that this provides additional support for retaining the current MSS allocation for the 2 GHz MSS band. This is because the band consists mainly of globally harmonized MSS spectrum. As a result, ICO and TMI could build and operate 2 GHz MSS systems that employ handsets that are capable of providing service throughout the world. Achieving harmonized spectrum in the International Table of Frequency Allocations is the result of complex negotiations between the United States and other countries, and this spectrum is not

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Declaratory Ruling on Partial-Band Licensing of Earth Stations in the Fixed-Satellite Service that Share Terrestrial Spectrum, *First Report and Order*, IB Docket No. 00-203, 16 FCC Rcd 11511 (2001) (*FWCC/Onsat First Report and Order*).

[123] Extending Wireless Telecommunications Services To Tribal Lands, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 99-266, 15 FCC Rcd 11794, 11799 (para. 13) (2000) (*Tribal Lands Order*); *FWCC/Onsat First Report and Order*, 16 FCC Rcd at 11518 (para. 14).

[124] *Tribal Lands Order*, 15 FCC Rcd at 11799 (para. 13), *citing* Establishment of Policies and Service Rules For the Mobile Satellite Service in the 2 GHz Band, IB Docket No. 99-81, RM-9328, *Notice of Proposed Rulemaking*, 14 FCC Rcd 4843, 4886 (1999) (*2 GHz Notice*).

[125] *Tribal Lands Order*, 15 FCC Rcd at 11799 (para. 13).

[126] *Tribal Lands Order*, 15 FCC Rcd at 11799 (para. 13).

[127] Some of the commenters emphasizing the benefits of MSS in the provision of broadband service in rural areas assert that this is a basis for increasing ICO's and TMI's spectrum allocations. *See, e.g.*, *April 19 TMI Letter* at 9-10. In response to those contentions, Sprint claims that ICO's and TMI's proposed satellite systems will not have sufficient power to provide broadband service in rural areas. Sprint Second Reply at 8-9. We find that Sprint provides no technical analysis supporting its claim, and so does not provide a persuasive reason to revisit either the current MSS allocation for the 2 GHz MSS band or our decision above to reassign the spectrum to ICO and TMI.

[128] *June 7 ICO Letter* at 4; TMI Second Comments at 25; TMI Second Reply at 26-27; MSUA Second Reply at 2. *See also* SAP REG ESOA Second Reply at 2-3.

easily replaceable.[129]

4. Current Terrestrial Wireless Allocation

47. *Background.* Many commenters note that the Commission recently reallocated 30 megahertz of spectrum in the 2 GHz MSS bands, 15 in each transmission direction, from MSS to terrestrial wireless services, and assert that it would be unreasonable to reallocate additional spectrum to wireless services now.[130] Many parties maintain that the terrestrial wireless service already has sufficient spectrum.[131] Boeing and MSUA argue that any further reallocation would leave MSS with insufficient spectrum.[132] Sirius argues that it is not necessary to allocate more spectrum to the terrestrial wireless service, because that service is already competitive.[133]

48. *Discussion.* In the *Third AWS Order*, the Commission found that it was in the public interest to reallocate 30 megahertz in each direction to terrestrial wireless service, and to redistribute 20 megahertz of spectrum in each direction to the remaining 2 GHz MSS licensees.[134] Moreover, we found in this Order above that retaining the current MSS allocation for those 20 megahertz in each direction furthers the public interest because it helps strengthen competition in the market for mobile telecommunications services, it enhances the Nation's ability to respond to national emergencies, and it promotes broadband services in rural areas. In light of these conclusions, we see nothing in the record in the *Third AWS Order*, or in the record before us now, that persuades us reallocate more spectrum from MSS to the terrestrial wireless service at this time.[135]

C. Highest and Best Use

49. *Background.* Despite these public interest benefits of maintaining the MSS allocation, some commenters assert that a rulemaking is needed to ensure that the spectrum is put to its "highest and best use."[136] T-Mobile argues that the Commission must conduct a rulemaking

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[129] *See* International Telecommunication Union Radio Regulations, Art. 5.

[130] *June 20 Globalstar Letter* at 2; Inmarsat First Reply at 3, 12; Globalstar Second Comments at 7; ICO Second Comments at 14; Hughes Second Comments at 7; ICO Second Reply at 4; TMI Second Reply at 13-14.

[131] SIA Second Comments at 4; TMI Second Comments at 24-25; Globalstar Second Reply at 7-9; Sirius Second Reply at 6-9.

[132] Boeing Second Comments at 3-4; MSUA Second Reply at 3-4.

[133] Sirius Second Reply at 9-10.

[134] *Third AWS Order*, 18 FCC Rcd at 2239-40 (para. 32).

[135] In addition, we find that we do not need to reach the issue of whether or to what extent other arguments add further support for our conclusion to retain the current 2 GHz MSS allocation, such as whether a reallocation rulemaking would cause delay in bringing the spectrum into use, or whether such a rulemaking would create regulatory uncertainty. *See* TMI First Reply at 5-6; TMI Second Comments at 20-21; TMI Second Reply, Exh. 4 at 5-6; ICO Second Reply at 3; Skyterra Second Reply at 9.

[136] CTIA First Comments at 4-5; Sirius First Comments at 2-3; Cingular First Reply at 2-4, 6-7; Intel First Reply at 3-4. We have already considered and rejected contentions that a rulemaking is required in all

to determine whether fixed and mobile service operators would value this spectrum more than MSS satellite system operators, or whether to develop new, "flexible use" service rules for this frequency band.[137] Alternatively, T-Mobile recommends conducting a rulemaking proceeding to explore the possibility of developing sharing criteria for MSS system operators and other licensees.[138]

50. Several parties generally argue that terrestrial wireless services are the best use for the spectrum at issue here.[139] In particular, some contend that terrestrial wireless is a growing service, and that additional spectrum should be reallocated to terrestrial wireless service to accommodate that growth.[140] T-Mobile argues further that small and mid-sized wireless service providers need additional spectrum to compete with larger wireless operators formed by recent consolidation in the mobile telephony market.[141] T-Mobile maintains that frequencies in the 2 GHz MSS band would be ideal for terrestrial wireless service because they are adjacent to the "J Block," the 2020-2025 MHz and 2175-2180 MHz band, which the Commission has allocated to the Advanced Wireless Service (AWS).[142] Intel asserts that reallocating all the newly available spectrum to terrestrial wireless services would allow a terrestrial wireless licensee to provide service to a given number of new customers with fewer new cell towers.[143] Sprint argues that the Commission should conduct a cost-benefit analysis to determine whether the marginal benefits of assigning additional spectrum to ICO and TMI outweigh the marginal benefits of reallocating the spectrum to another use, not simply focus on whether ICO's and TMI's proposed systems will further the public interest.[144]

51. A number of commenters question whether MSS can be the highest and best use for the spectrum at issue here because six of the original eight 2 GHz MSS licensees lost or surrendered their licenses.[145] Other parties maintain that the success or failure of some initial licensees is not relevant to whether 2 GHz MSS service is useful, noting that DBS service

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Section 316 proceedings in this Order above. Here, we address the issue of whether the public interest requires a rulemaking proceeding in this particular case.

[137] T-Mobile First Comments at 7-9. *See also* Intel First Reply at 4.

[138] T-Mobile First Comments at 9.

[139] CTIA Second Comments at 9-10; Intel Second Comments at 9-11.

[140] CTIA Second Comments at 10-11; U.S. Cellular Second Comments at 2-4; T-Mobile Second Reply at 3-4. *See also* Sirius Second Reply at 2-4 (terrestrial wireless growth likely to limit growth of MSS services).

[141] T-Mobile Second Reply at 4-5.

[142] T-Mobile Second Reply at 5-6.

[143] Intel First Reply at 6-8 and App. A.

[144] Sprint Second Reply at 2-7.

[145] *May 19 CTIA Letter* at 2; T-Mobile First Comments at 2-3; U.S. Cellular Second Comments at 3; Inmarsat Second Reply at 29-33.

required time to gain marketplace acceptance.[146] ICO and TMI reply that, for most wireless and satellite services, the Commission does not routinely consider reallocating spectrum to new services each time a license is returned or cancelled.[147] ICO further argues that the Commission did not immediately start a rulemaking to consider reallocation of Big LEO spectrum each time a Big LEO license was returned.[148] Inmarsat states that it and other satellite operators are interested in constructing 2 GHz satellite systems.[149] Inmarsat explains that, while there may not be a market for MSS-based telephony services, there definitely is a market for MSS-based broadband services.[150] MSUA replies that MSS customers continue to need MSS service, and the surrender of some 2 GHz MSS licenses does not affect the need of MSS customers.[151] Boeing contends that the 2 GHz licenses were surrendered because the economy was weak, not because the service is not viable.[152] TMI responds to questions whether TMI's and ICO's MSS services will be able to compete effectively with terrestrial wireless services, by stating that TMI's service will be superior to traditional MSS services because TMI will employ ATC to provide broadband capability.[153]

52. Several parties advocate a rulemaking proceeding to consider reallocating some or all of the spectrum at issue from MSS to a service other than terrestrial wireless, such as the Broadcast Auxilliary Service (BAS),[154] DARS,[155] private radio systems for the "critical infrastructure industry," *i.e.*, to monitor natural gas and oil pipelines,[156] or amateur radio.[157] CTIA asserts that the Commission must conduct a rulemaking to consider all the possible uses for the spectrum proposed by commenters.[158] On the other hand, Globalstar and Skyterra reply that none of the proposed alternatives for reallocating the spectrum at issue in this proceeding would

[146] Lockheed Second Comments at 2; Hughes Second Comments at 6-8; Globalstar Second Reply at 10.

[147] ICO First Comments at 3-4; TMI First Reply at 20.

[148] ICO explains that, originally, four Big LEO licensees were authorized to operate CDMA systems and to share part of the Big LEO spectrum. When the first and the second Big LEO licenses were returned, the remaining Big LEO licensees were allowed to continue operating in that band. ICO First Comments at 4-5.

[149] Inmarsat First Reply at 2-3.

[150] Inmarsat First Reply at 3-4.

[151] MSUA Second Reply at 3.

[152] Boeing Second Comments at 1-3.

[153] TMI Second Reply at 27-28.

[154] SBE Second Comments, *passim*; Total RF Second Comments at 6-7.

[155] Sirius Second Comments at 10-12, 14-16. *See also* Bert W. King Second Reply at 1-3.

[156] API Second Comments at 3; UTC Second Reply at 1-5.

[157] Ruhwiedel Second Comments at 1.

[158] CTIA Second Reply at 2.

further the Commission's policy goals of promoting broadband service or enhancing homeland security.[159] Several other parties criticize one or more of these specific proposals.[160]

53. *Discussion.* We do not believe that our spectrum management obligations require us to conduct a notice-and-comment rulemaking to determine the "highest and best use" for the unassigned spectrum in this case. When the Commission allocated this spectrum to MSS, it determined that doing so furthered the public interest.[161] The Commission does not generally consider revisiting spectrum allocation decisions every time a license is returned or cancelled. Doing so would severely impede the efficiency of the Commission's spectrum management functions. None of the commenters have explained why the unassigned spectrum at issue in this proceeding warrants a different result. Moreover, as discussed above, the record in this proceeding also reveals several public interest factors weighing in favor of retaining the MSS allocation in the 2 GHz MSS bands. Accordingly, we are not convinced that a reallocation rulemaking is warranted here.

VI. MODIFIED PROCESSING ROUND

A. Background

54. In the *Second 2 GHz MSS Public Notice*, the Commission requested comment on starting a modified processing round for the available spectrum.[162] If the Commission were to start a modified processing round for the 12 megahertz in each direction of currently unassigned spectrum, it would release a public notice inviting parties to apply for the spectrum. The 12 megahertz would be divided equally between all the qualified applicants.[163] For the reasons set forth below, we conclude that none of the parties supporting a modified processing round show that it would further the public interest more effectively than increasing ICO's and TMI's spectrum assignments to 10 megahertz in each direction.[164]

B. Expressions of Interest

55. *Background.* According to ICO, only Inmarsat and Globalstar have expressed interest in applying for 2 GHz MSS spectrum in a new modified processing round, and asserts that their expressions of interest are not credible.[165] Some parties question Inmarsat's interest

[159] Globalstar Second Reply at 9-10; Skyterra Second Reply at 8-9.

[160] *See* ICO Second Reply at 5-6; TMI Second Reply at 17-19; Globalstar Second Reply at 10-11.

[161] *Third AWS Order*, 18 FCC Rcd at 2239 (para. 31).

[162] *Second 2 GHz MSS Public Notice*, 20 FCC Rcd at 12234.

[163] *First Space Station Licensing Reform Order*, 18 FCC Rcd at 10782-90 (paras. 48-67).

[164] Inmarsat and Globalstar assert that a modified processing round is necessary to avoid authorizing a duopoly in the 2 GHz MSS bands. Inmarsat First Comments at 25-29; Globalstar Second Reply at 12-13. We disagree that a duopoly will be created, given our finding above that the 2 GHz MSS system operators will compete with MSS operators in other frequency bands. *See* Section IV. above.

[165] ICO Second Comments at 12-14; TMI Second Comments at 22-24; ICO Second Reply at 6-7.