SPRINT CORPORATION
CINGULAR WIRELESS LLC

December 2, 2002

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International Bureau
Federal Communications Commission
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Mr. Thomas J. Sugrue, Chief
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Mr. Edmond J. Thomas, Chief
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Federal Communications Commission
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Re: ***Written Ex Parte Communication***
Mobile Satellite Systems – Terrestrial Services
IB Docket No. 01-185; ET Docket No. 95-18

Dear Messrs. Abelson, Sugrue and Thomas:

Cingular Wireless LLC ("Cingular") and Sprint Corporation ("Sprint") submit this letter to discuss significant developments in the record evidence since the close of the comment cycle in this rulemaking proceeding.[1]

EXECUTIVE SUMMARY

Mobile Satellite Service ("MSS") licensees ask the Commission to grant them – and only them – the right to provide terrestrial services using MSS spectrum, which they style as an Ancillary Terrestrial Component, or ATC. MSS licensees originally asserted that it was technically possible for only them to provide terrestrial services in the MSS band. However, the Telcordia Analysis which Cingular and Sprint commissioned demonstrates that licensing

[1] *See Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Band,* IB Docket No. 01-185, *Notice of Proposed Rulemaking,* FCC 01-225, 16 FCC Rcd 15532 (Aug. 17, 2001)("*ATC NPRM*"). Reply comments were filed on November 13, 2001.

terrestrial operators separate from MSS licensees within the band "is quite feasible."[2] MSS licensee challenges to this demonstration lack merit.[3] Thus, the record evidence is that it is technically feasible to have separate ATC and MSS operators. As a result and as Cingular and Sprint demonstrate below, the Commission is legally required to auction terrestrial service rights in the MSS band (assuming it decides to permit terrestrial use in the MSS band).

The principal public policy issue facing the Commission is whether it should permit any terrestrial use in the MSS band. The record evidence is undisputed that the ATC dynamic frequency assignment sharing proposal is "not spectrum-efficient, compared to segmentation."[4] The record evidence is also undisputed that even small numbers of ATC customers would degrade satellite capacity and inhibit the availability of MSS in rural areas.[5] Given these facts, the Commission should reallocate that portion of the MSS band that is not needed to provide MSS rather than authorize ATC in the MSS band.

Cingular and Sprint also address the conditions the Commission should adopt if it nonetheless decides to permit ATC. Most important is the adoption of emission limits on the total output of ATC networks, so there can be confidence that ATC networks will not degrade satellite capacity and inhibit the availability of MSS in rural areas. The continued availability of MSS in insular areas should not be put at risk by the provision of ATC to a few dozen handsets in urban areas.

MSS licensees have made a variety of policy arguments in support of their position that only they should be permitted to provide ATC services. The simple response is that these arguments are irrelevant, because the Commission is required by law to auction terrestrial rights if it decides to permit terrestrial services in the MSS band. However, Cingular and Sprint demonstrate in the Attachment that these MSS policy arguments also lack merit.

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[2] Telcordia Analysis at 2 and 12, appended to Cingular/Sprint Ex Parte (May 13, 2002).

[3] *See* Cingular/Sprint Ex Parte (Aug. 5, 2002)(Response to Globalstar); Cingular/Sprint Ex Parte (July 31, 2002)(Response to ICO); Cingular/Sprint Ex Parte (Oct. 1, 2002)(Response to MSV).

[4] *See* Telcordia Analysis at 2 and 76. No MSS interest has challenged this demonstration.

[5] *See* Telcordia Analysis at 70-73.

I. THE COMMISSION SHOULD PROMPTLY COMMENCE A 2 GHZ MSS REALLOCATION PROCEEDING

The Commission asked in its *NPRM* whether "too much spectrum has been allocated for MSS."[6] MSS licensees have answered this question in the affirmative. ICO acknowledges there is "broad agreement that the MSS spectrum is currently underutilized."[7] In fact, the 2 GHz MSS spectrum has never been put into use. Furthermore, there is evidence that the market for MSS services is shrinking rather than expanding. For example, Globalstar recently advised investors that one of the reasons it has encountered financial difficulty is that the additional buildout of terrestrial networks "has reduced demand for Globalstar service," and that terrestrial networks have been "built more quickly than Globalstar anticipated; therefore, demand for Globalstar's service is expected to be reduced sooner than Globalstar assumed in formulating earlier business plans."[8]

MSS interests assert that the solution is to assist MSS licensees by permitting them – and only them – to provide terrestrial services using MSS spectrum. There are flaws with this proposal, not the least of which is that the Commission is required to auction the terrestrial rights. *See* Part III.A *infra*. In addition, the MSS industry's spectrum sharing proposal, including the dynamic frequency assignment sharing approach, is not as spectrally efficient as band segmentation:

> The fundamental reason is that with sharing, the allowable MSS and ATC terminal densities are both controlled by the very large area of the MSS beam footprint, whereas with segmentation, only the MSS terminal density depends on the beam footprint.[9]

Telcordia concluded following its exhaustive analysis that it is "spectrally inefficient for MSS operators to use more spectrum than is needed to support MSS-only operations, in order to be able to support 'shared' terrestrial operations.":

> A better approach would be to build terrestrial networks on dedicated spectrum. Not only would this be more efficient from a spectrum-usage perspective, it

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[6] *ATC NPRM*, 16 FCC Rcd at 15546 ¶ 15.

[7] ICO Ex Parte, IB Docket No. 01-185, Summary of Key Policy Issues at 1 (May 17, 2000).

[8] Globalstar Form 10Q at 28 (May 15, 2002).

[9] Telcordia Analysis at 76.

> would eliminate the need for any coordination of MSS and ATC frequency usage.[10]

Notably, no MSS interest has challenged this demonstration.[11]

The Commission should promptly reallocate to other services that portion of the MSS band that is not needed for satellite services.

II. THERE ARE SUBSTANTIAL RISKS TO MSS SERVICE BY PERMITTING A TERRESTRIAL SHARING ARRANGEMENT

A major risk posed by the ATC proposal is that the Commission's goal of providing service to rural areas would be foreclosed. The problem is that the number of terrestrial customers that could be served using shared MSS spectrum is severely limited; and once this low threshold is reached, additional terrestrial use begins to degrade MSS capacity. Thus, the provision of ATC threatens the very ability of MSS to provide services in rural areas.

The Telcordia technical paper documents that the fundamental problem with any MSS band sharing arrangement is interference from terrestrial handsets to MSS uplinks. Consequently, limits on the total power output of terrestrial networks must be established so as to preserve satellite capacity for rural service. As Dr. Padgett demonstrated, "when satellite and terrestrial systems share spectrum, even with frequency coordination to avoid cochannel in-beam interference, there is still a fairly restrictive limit on the total power that ATC terminals within a given beam footprint can be permitted to radiate into the sky":

> What this means is that either with or without coordination, MSS systems can share spectrum with only very small deployments of terrestrial systems. . . . [T]he capacity reduction to the MSS uplink depends directly on the total EIRP radiated by terrestrial terminals within the [spacecraft] beam footprint. A relatively small number (tens) of unblocked ATC terminals within the beam can significantly degrade MSS uplink capacity.[12]

The data submitted by MSS licensees confirm that serious degradation of MSS capacity would occur with the use of very few outdoor ATC handsets. For example, ICO states that with

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[10] *Id.* at 2.

[11] *See, e.g.,* Cingular/Sprint Ex Parte at 4 (Aug. 5, 2002)(Response to GLP); Cingular/Sprint Ex Parte at 2 (July 31, 2002)(Response to ICO).

[12] Telcordia Analysis at 71, 73 and 77. MSS interests agree with this fundamental point. *See* Globalstar Ex Parte Letter at 7 (June 27, 2002); ICO Ex Parte (June 13, 2002), Radio Dynamics Commentary at 5.

dynamic frequency assignment, it could serve only 27 outdoor ATC handsets per CDMA carrier pair per spot beam – an area larger than the State of Alaska. Based on Globalstar's own calculations, with dynamic frequency assignment, Globalstar could serve between 17 and 34 ATC handsets operating outdoors per CDMA carrier pair within one of its satellite beams – an area larger than the State of Texas.

It is also important for the Commission to understand the consequences if MSS licensees were given unfettered flexibility to provide either MSS or terrestrial services in the MSS band. One can serve far more customers (a magnitude of several hundred) from a terrestrial network as compared to a satellite network. This is because a satellite "cell site" (or spotbeam) is huge and the number of customers that can be served in a spotbeam is limited by the amount of available spectrum. In contrast, with terrestrial networks, the number of customers that can be served in the same amount of spectrum is "limited only by the density of the cells that are deployed."[13] Globalstar, for example, asserts that with ATC authority, it could serve 490 terrestrial callers for every one MSS caller.[14] Despite claims that MSS licensees will balance the interests of satellite and terrestrial use, the economics of operation suggest that MSS licensees will have incentives to expand terrestrial services – with their greater revenue potential – at the expense of satellite operations. Simply put, giving MSS licensees the flexibility to provide either satellite or terrestrial services would have the practical effect of constituting a *de facto* reallocation of the MSS band to the terrestrial services.

To the extent that MSS licensees express continued commitment to the Commission's stated goal of MSS providing service in remote areas,[15] this mission would be severely compromised if MSS licensees are allowed to serve even a few dozen terrestrial handsets in urban areas.

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[13] Telcordia Analysis at 2.

[14] *See* Globalstar Ex Parte, Attachment A at 9 (June 27, 2002).

[15] *But see, e.g.,* Globalstar Form 10Q at 36 (Aug. 13, 2002) (stating that Globalstar' marketing focus is "to identify and sell into vertical markets and to deploy data products, rather than focusing more resources on areas formerly underserved by terrestrial systems.").

III. STEPS THE COMMISSION MUST ADOPT IF IT DECIDES TO PERMIT ATC USING THE MSS BAND

A straightforward cost-benefit analysis would suggest that the Commission not approve any ATC authority in the MSS band. ATC poses a real risk to the continued availability of MSS in rural areas, while the benefits of ATC are marginal and can be satisfied by existing terrestrial networks. Cingular and Sprint nevertheless identify below the conditions the Commission should adopt if it decides to authorize ATC networks.

A. The Commission Is Legally Required to Auction ATC Rights

Section 309(j) of the Communications Act "require[s] the Commission to grant licenses through the use of competitive bidding when mutually exclusive applications for initial licenses are filed."[16] Because the record evidence is undisputed that it is technically possible for entities other than MSS licensees to operate terrestrial services in the MSS band, the Commission is obligated to conduct auctions, should it decide to authorize terrestrial mobile services in the MSS band.

MSS interests have argued that auctions are prohibited by the Open-Market Reorganization for the Betterment of International Telecommunications Act ("ORBIT Act").[17] This argument is baseless. The Commission has ruled repeatedly that the ORBIT Act does "not prohibit the Commission from auctioning licenses for non-satellite services" and that when it "establishes a terrestrial service . . . the ORBIT Act is not a bar to auctioning licenses merely because the terrestrial services operates on the same frequencies as a satellite service."[18] Indeed, as the Commission reaffirmed only months ago:

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[16] *MDS/ITFS in the Gulf of Mexico*, WT Docket No. 02-68, FCC 02-101, 17 FCC Rcd 8446 ¶ 19 (May 3, 2002). *See also Second MVDDS Order,* 17 FCC Rcd 9614 at ¶ 239; *Implementation of Sections 309(j) and 337 of the Communications Act,* WT Docket No. 99-87, FCC 02-82, 17 FCC Rcd 7553 ¶ 6 (April 18, 2002); *Space Station Licensing Rules,* 17 FCC Rcd 3847, 3870 ¶ 65 (2002). There are certain statutory exceptions to this auction requirement, but they are not relevant in this context.

[17] *See, e.g.,* Constellation Comments at 21-22 (Oct. 22, 2001); ICO Comments at 39-40 (Oct. 22, 2001); Loral Comments at 15 (Oct. 22, 2001); Globalstar Reply at 16-19 (Nov. 13, 2001); ICO Reply at 13 (Nov. 13, 2001); Motient Reply at 20 (Nov. 13, 2001); Celsat Reply at 18-22 (Nov. 13, 2001); Globalstar Bondholders Reply at 33-34 (Nov. 13, 2001); Globalstar Creditors Committee Ex Parte at 4 (Mar. 22, 2002).

[18] *Subsidiary Terrestrial Use of the 12.2-12.7 GHz Band,* 16 FCC Rcd 4096, 4218 ¶ 326 (2000). *See also Transfer of Seven Government Bands,* 17 FCC Rcd 2500, 2529- ¶ 75 (2002); *Transfer of the 3650-3700 MHz Band,* 15 FCC Rcd 20488, 20498 n.64 (2000); *24 GHz Order,* 15 FCC Rcd 16934 (2000).

> Section 647 [of the ORBIT Act] does not prohibit the auction of spectrum licenses for terrestrial uses where the same spectrum may also be used for global or international satellite communications purposes by other licensees. The spectrum licenses at issue here would be "assigned" to licensees and auctioned only for domestic terrestrial use.[19]

The Commission should auction terrestrial rights in the MSS band even if it otherwise possessed flexibility in the matter. The Commission has recognized that spectrum "must be allocated and assigned in a manner that will provide the greatest possible benefit to the American public."[20] As the Commission reiterated in the context of terrestrial uses of bands also allocated to satellite services, "[a]ssigning licenses through competitive bidding also promotes efficient and intensive use of the spectrum and recovery for the public of a portion of the value of this scarce resource":

> As a general matter, we conclude that awarding licenses to the entities that value them most highly fosters Congress's policy objectives because those bidders are more likely to rapidly introduce new and valuable services and deploy those services quickly. . . . [A]ssigning licenses through competitive bidding will result in the most competitive provider being licensed and facilitate entry of a viable competitor into the . . . marketplace.[21]

MSS licensees, in asserting that they alone should have the right to provide terrestrial services using the MSS band, have not even attempted to demonstrate that they are more qualified than everyone else to provide terrestrial mobile services in the MSS bands. Indeed, the only "qualifications" of existing MSS licensees to provide terrestrial services is that they:

- Filed the necessary paper work to obtain MSS licenses for free (paperwork that did not include demonstration of any financial qualifications);
- Represented to the Commission that they would build and operate a viable satellite-only business; and

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[19] *Second MVDDS Order,* ET Docket No. 98-206, FCC 02-116, 17 FCC Rcd 9614 at ¶ 244 (May 23, 2002). The Spectrum Policy Task Force recently urged the Commission to recommend to Congress that it amend Section 647 of the Orbit Act to permit auctions for global and international satellite services. *See* Spectrum Policy Task Force Report, ET Docket No. 02-135 at 42 (Nov. 15, 2002).

[20] *Spectrum Policy Statement,* 14 FCC Rcd 19868, 19870 ¶ 7 (1999). In this regard, the FCC has a statutory responsibility to ensure the "efficient and intensive use of the electromagnetic spectrum." 47 U.S.C. § 309(j)(3)(D). *See also Implementation of Sections 309(j) and 337 of the Communications Act,* WT Docket No. 99-87, FCC 02-82, at 12 n.78 (Ap. 18, 2002).

[21] *Second MVDDS Order,* 17 FCC Rcd 9614 at ¶ 241.

- Have been unable to convince capital markets that their satellite business plans merit investment.

Chairman Powell has recognized that it is "the auction process and the market that should pick the winning and losing business models for the provision of spectrum-based services."[22] In this case, the Commission has already ruled that terrestrial rights using spectrum utilized by satellite operators must be auctioned as a matter of law.

B. The Commission Would Need to Adopt Emissions Levels on ATC Networks Prior to the Auction of ATC Rights

The Commission allocated spectrum to MSS because MSS "would provide communications to underserved areas, such as rural and remote areas where PCS, cellular, and other mobile services are less feasible."[23] The Commission has properly inquired into the conditions it should impose to ensure that the provision of ATC does not endanger the continued viability of MSS services.[24]

The discussion in Part II above demonstrates the critical need for the Commission to adopt emissions limits on ATC networks. Without such limits, ATC networks could very easily and very quickly use capacity that the satellite needs to provide MSS services. The public interest would not be served if MSS services in remote areas cannot be supported because spectrum allocated to MSS is instead being used to provide terrestrial services in urban areas.

If the Commission decides to permit ATC networks, emission levels would need to be established *before* the auction. Without knowing the exact limits that would be imposed on ATC networks, no one could reasonably place a value on the ATC rights being auctioned, because bidders could not size possible terrestrial networks using reallocated MSS spectrum. In addition, the Commission would be required to establish emission limits on ATC networks even if a MSS licensee acquires the ATC rights following an auction. As Globalstar has recognized:

> As the Telcordia Analysis points out, at any given time, there will be a maximum allowable number of ATC users because of the potential for interference into

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[22] Separate Statement of Commissioner Powell, *700 MHz Service Rules Order,* 15 FCC Rcd 5299, 5372 (2000).

[23] *2 GHz MSS Allocation Order,* 12 FCC Rcd 7388, 7395 ¶ 13 (1997).

[24] *See NPRM* at ¶¶ 29-32.

MSS. The maximum number would have to be enforced *regardless of which entity was operating the terrestrial service.*[25]

In summary, before any auction of spectrum for ATC networks, the Commission must establish emission levels on the total EIRP (effective isotropic radiated power) that ATC terrestrial networks can radiate into the sky.

C. Terrestrial Service in the MSS Band Should Be Regulated Like Other Terrestrial-Based CMRS

The Commission should also confirm that providers of terrestrial services in the MSS band, be they MSS licensees or other entities, will be subject to the same set of statutory requirements and regulations applicable to other terrestrial mobile services – including CALEA, E911, local number portability, number pooling, and TTY.

Although MSS is a commercial mobile radio service ("CMRS") under the Communications Act,[26] the Commission has excused MSS licensees from having to implement many of the regulatory requirements that have been imposed on terrestrial-based CMRS providers, including for example, the obligation to provide a Phase II E911 location capability.[27] Several MSS interests argue that this MSS exemption should be expanded to terrestrial services in the MSS band.[28] The Commission should not grant this request.

There is no basis to regulate terrestrial mobile services differently in this case. The terrestrial services that MSS licensees propose to provide would be indistinguishable from the mobile services provided by existing terrestrial service providers. MSS licensees presumably would use mobile switches just like those of terrestrial CMRS providers, and they also propose

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[25] Globalstar Ex Parte Letter at 7 (June 27, 2002)(emphasis added). *See also* Globalstar Reply Comments at 7-8 (Nov. 13, 2001)("[T]o ensure that terrestrial uses are truly ancillary to MSS, the Commission should specify that terrestrial uses must be offered on a non-interference basis with respect to satellite uses in the MSS band."); Globalstar Comments at 9 (Oct. 22, 2001)("[N]either should [the FCC] authorize ATC in a manner that results in a *de facto* reallocation of the spectrum to terrestrial services because ATC dominates MSS.").

[26] *See, e.g., 2 GHz MSS Service Rules Order,* 15 FCC Rcd 16127, 16174 ¶ 97 (2000); *Second CMRS Order,* 9 FCC Rcd 1411, 1457 ¶ 108 (1994).

[27] *See 2 GHz MSS Service Rules Order,* 15 FCC Rcd at 16185 ¶ 125.

[28] *See, e.g.,* Globalstar Comments at 12 (Oct. 22, 2001); Globalstar Bondholders Reply at 42 (Nov. 13, 2001).

to sell terrestrial-only handsets, which presumably would be similar to the terrestrial CMRS handsets in the market today.

Congress has "directed" the Commission to "achieve regulatory parity among services that are substantially similar," determining that "disparities in the current regulatory scheme could impede continued growth and development of commercial mobile services."[29] The Commission has similarly noted that regulatory symmetry "ensure[s] that consumer demand, not regulatory decree, dictates the course of the mobile services marketplace."[30] The Commission should, therefore, confirm prior to any ATC auction that ATC licensees will be subject to the same set of regulatory requirements imposed on other providers of terrestrial CMRS services.

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Cingular and Sprint respectfully submit that it is time for the Commission to commence a MSS reallocation proceeding. The Commission summarily denied CTIA's petition to reallocate the 2 GHz MSS band in two sentences – without even requesting public comment as FCC rules require.[31] The Commission should act on CTIA's reconsideration petition and, at a minimum, reallocate that portion of the MSS band that is not needed to provide MSS.[32]

The risks ATC networks would pose to the continued viability of MSS service outweigh the relatively small benefits that ATC would provide. If, however, the Commission decides to permit ATC service in the MSS spectrum that is not reallocated, it must establish rules for ATC service, including emission limits prior to the required auction the ATC rights. Without such emissions limits, MSS spectrum will be *de facto* reallocated to terrestrial services, and residents in rural areas, who do not have access to terrestrial networks, will be deprived of the benefits of MSS.

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[29] H.R. REP. NO. 103-111, 103d Cong., 1st Sess. 259-60 (1993).

[30] *Third CMRS Order,* 9 FCC Rcd 7988, 7992 ¶ 1 (1994). The regulatory parity mandate is not absolute, and disparate rules may be adopted if they "would promote competition and protect consumers." H.R. CONF. REP. No. 103-213, 103d Cong., 1st Sess. 491 (1993). However, imposing disparate regulatory obligations on terrestrial mobile providers based on the specific frequencies used in the mobile service would neither promote competition nor protect consumers.

[31] *See Advanced Services Reconsideration Order*, 16 FCC Rcd 16043, 16055 ¶ 25 (Aug. 20, 2001). *But see* 47 C.F.R. § 1.403 ("All petitions for rule making . . . will be given a file number and, promptly thereafter, a 'Public Notice' will be issued . . . .").

[32] *See* CTIA Reconsideration Petition, IB Docket No. 99-81, ET Docket Nos. 95-18 and 00-258 (Oct. 15, 2001).

Pursuant to Section 1.1206(b)(1) of the Commission's rules, one copy of this letter is being filed electronically with the Secretary's office for filing in IB Docket No. 01-185 and ET Docket No. 95-18.

Respectfully submitted,

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Attachment: A Response to the MSS Policy Arguments for Their Provision of ATC Networks

Cingular/Sprint Ex Parte
IB Docket No. 01-185
December 2, 2002

Attachment

The MSS Licensee Policy Arguments Are Unsupported and Lack Credibility

Cingular and Sprint have previously addressed the technical arguments that MSS licensees have made in this proceeding.[1] This attachment responds to their policy arguments.

MSS licensees have advanced several policy arguments to support their position that they – and they alone – should be permitted to provide terrestrial services using the MSS band. The simple response is that these policy arguments are legally irrelevant because the record evidence is undisputed that firms other than MSS licensees can provide ATC services, and the FCC is therefore required by law to auction ATC rights (assuming it decides to permit any ATC use). In any event, the MSS policy arguments are not simply unsupported, but are also not credible.

- *MSS Policy Argument:* "ATCs will improve service to rural and underserved areas . . . by improving the quality and pricing of the service."[2]

  Response: ATC will not improve the quality of MSS provided in rural areas. In fact, MSS interests concede that ATC poses the risk of degrading the capacity of satellites to provide MSS service: "ATC terminal transmissions will degrade satellite capacity."[3] As a result, MSS interests agree that limits would have to imposed on the total emissions of ATC handsets to minimize the degree to which MSS capacity would be degraded.[4] According to ICO, even using its dynamic frequency assignment approach, only 28 outdoor ATC terminals within one of its satellite beams (which covers an area larger than

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[1] *See* Cingular/Sprint Ex Parte (May 13, 2002); Cingular/Sprint Ex Parte (Aug. 5, 2002)(Response to Globalstar); Cingular/Sprint Ex Parte (Jul. 31, 2002)(Response to ICO); Cingular/Sprint Ex Parte (Oct. 1, 2002)(Response to MSV).

[2] ICO Letter at 2 (March 8, 2001). *See also* Globalstar Creditors Committee Ex Parte at 4 (July 26, 2002) ("ATC authority has the *potential* to enable Globalstar to reduce its per-minute and equipment costs to make MSS an affordable mobile service for rural customers nationwide.")(emphasis added). Unless otherwise noted, all documents cited in this attachment were filed in IB Docket No. 01-185.

[3] Globalstar Creditors Committee Ex Parte at 13 (March 13, 2002). *See also* ICO Ex Parte at 14 (March 8, 2002)("The radio interference from a terrestrial system into the satellite system is extreme and severe.").

[4] *See* Globalstar Ex Parte (May 29, 2002), Attachment at 5 ("[I]t will be necessary to limit the emissions of ATC terrestrial component user terminals."). Indeed, MSS interests concede that such limits on ATC emissions must be adopted "regardless of which entity is providing the terrestrial service." Globalstar Ex Parte at 7 (June 27, 2002).

the State of Alaska) would render its satellite incapable of providing MSS in the 2.5 MHz CDMA channel pair used by the ATC network.[5]

MSS interests also never explain how the pricing of MSS service in rural areas would be improved by the provision of ATC. Given the MSS position – they want to provide an ATC-only service using ATC-only handsets, and they oppose a requirement that they price MSS and ATC minutes at the same rate[6] – the inescapable conclusion is that MSS customers in rural areas would receive no financial benefit from MSS provision of ATC.

In summary, ATC as proposed by MSS licensees would not reduce service costs to MSS customers in rural areas, but ATC would jeopardize the ability of MSS customers to make and receive calls. Accordingly, the public policy question that the FCC should be asking is whether it should permit ATC at all.

- *MSS Policy Argument:* "MSS service will disappear" without ATC.[7]

  Response: It is important for the FCC to distinguish between MSS generally and individual MSS providers. It is not surprising that individual MSS licensees are facing financial difficulty and may "disappear." The FCC awarded MSS licenses to anyone upon request, without any financial qualification showing. Indeed, the FCC understood that individual MSS licensees would fail, and it designed its 2 GHz licensing plan specifically to accommodate this situation.[8]

  The simple fact is that the FCC has issued too many MSS authorizations given the size of the market for MSS. Globalstar's CEO, Olof Lundberg, recognized recently that the MSS market "isn't large enough for 5, 6 or 7 players."[9] Similarly, the President of the Mobile Satellite Users Association, Ahmand Ghais, recently stated:

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[5] ICO states that using a cochannel frequency approach to MSS band sharing, the maximum number of outdoor active ATC handsets that could be supported within one of its satellite beams "is at most 18." ICO further states that its dynamic frequency assignment approach would result in a "50% network improvement in ATC capacity." ICO Reply Comments (Oct. 22, 2001), Appendix A at A-1 and A-6.

[6] Globalstar Creditors Committee Ex Parte at 19 (May 9, 2002). *See also* ICO Reply Comments (Nov. 13, 2001), Appendix A at A-8 (It would be a "large policy mistake for the Commission to require that this [MSS-ATC dual band handset] solution be adopted."). Given their desire to provide an ATC-only service, the MSS assertion that "MSS-ATC will not compete with stand-alone cellular or PCS services" is not credible. *See* Globalstar Response at 4 (March 22, 2002).

[7] ICO Letter at 6 (March 8, 2001). *See also* Globalstar Creditors Committee Ex Parte at 1 (July 26, 2002) ("Without ATC authority, Globalstar may not be able to continue as a viable business."). *But see* ICO Reply Comments at 11 (Nov. 13, 2001) ("MSS systems will be extremely attractive to a large number of people who are currently underserved, and for that reason New ICO will enjoy commercial success" without ATC.).

[8] *See 2 GHz Service Rules Order,* 15 FCC Rcd 16127, 16139 ¶¶ 17-18 (2000) ("[A]lthough we are hopeful that all authorized systems will be built, we recognize this might not occur."); *2 GHz Service Rules NPRM,* 14 FCC Rcd 4843, 4858 ¶ 29 (1999)("[E]ven though we are hopeful that all authorized systems will be built, we recognize that this may not occur.").

[9] COMMUNICATIONS DAILY, *Globalstar Attempts Rebound by Adding ATC Component* (July 22, 2002).

> The MSS market has been glutted with too many aspiring suppliers chasing too few customers. This consolidation is good news for potential MSS users.[10]

In addition, certain MSS licensees are facing financial difficulty, because, as their own investors acknowledge, they have been using a "demonstrably poor business case."[11]

- *MSS Policy Argument:* "ATC significantly improves the economics of MSS operation."[12]

  Response: The MSS argument is that ATC will result in new revenues from additional customers. However, MSS interests have never addressed in the record the costs of building and operating an ATC network (*e.g.,* terrestrial MSCs and base stations, landline facilities), and they have never alleged that the revenues from ATC operations would exceed ATC capital investment and operational costs. (As a point of comparison, most PCS licensees are still not cash flow positive after several years of operations.) Thus, there is no record evidence that ATC would be a profitable enterprise that would improve the economics of MSS operations.

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[10] SATELLITE NEWS, *ICO Merges with Two Financially Troubled Operators* (July 22, 2002).

[11] Globalstar Creditors Committee Ex Parte at 9 (July 26, 2002).

[12] Globalstar Ex Parte at 12 (July 19, 2002).