Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Flexibility for Delivery of	)	IB Docket No. 01-185
Communications by	)	
Mobile-Satellite Service Providers	)	
In the 2 GHz Band, the L-Band, and	)	
The 1.6/2.4 GHz Band	)	
	)	

CONSOLIDATED OPPOSITION OF GLOBALSTAR, L.P.

Pursuant to Section 1.429 of the Commission's Rules (47 C.F.R. § 1.429), Globalstar, L.P. ("GLP"), submits this "Consolidated Opposition" to certain petitions for reconsideration filed regarding the "Report and Order" adopted in the above-referenced docket.[1]

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[1] Report and Order, FCC 03-15, 18 FCC Rcd 1962 (2003), summarized at 68 Fed. Reg. 33640 (June 5, 2003) ("Order"). The Commission identified petitions filed by The Boeing Company, the Cellular Telecommunications & Internet Association, Cingular Wireless LLC, Inmarsat Ventures plc, Mobile Satellite Ventures Subsidiary LLC, and the U.S. GPS Industry Council (two petitions).

GLP does not object to Boeing's request to make consistent the U.S. geographic coverage requirements for ATC systems and MSS licensees. The U.S. GPS Industry Council seeks adoption of more stringent out-of-band emissions limits only for MSS-ATC systems operating at L-band. Although the Globalstar system does not operate in L-band, GLP generally opposes imposition of more stringent out-of-band emissions limits for ATC than those adopted in the Order without justification that the limits are technically necessary to protect the Global Navigation Satellite System ("GNSS"). The GPS Council has not provided such technical justification.

MSV and Inmarsat filed petitions for reconsideration that generally focus on the requirements for ATC at L-band. The Globalstar system does not operate at L-band, and GLP is submitting no comments on L-band issues at this time. However, Inmarsat (Petition, at 15) suggested that the Commission adopt out-of-band limits for 1.6/2.4 GHz MSS ATC systems to protect L-band satellite operations. The Commission has already adopted power limits for

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In the Order, the Commission adopted rules governing the ancillary terrestrial component ("ATC") of Mobile-Satellite Service ("MSS") systems operating at the L-band, 2 GHz and 1.6/2.4 GHz. GLP is the global manager of the Globalstar MSS system operating at 1.6/2.4 GHz, and participated throughout this proceeding in support of ATC.

Two organizations that objected to the ATC concept in their initial comments on the proposed rules filed petitions for reconsideration again objecting generally to the rules adopted for ATC. Both the Cellular Telecommunications & Internet Association ("CTIA") and Cingular Wireless LLC seek to impose stringent operational parameters on ATC that would render ATC useless to MSS licensees and the public. Given that the Commission has found ATC to be in the public interest (Order, ¶¶ 2, 23-32), there is no reason for the Commission now to grant requests that would vitiate ATC capabilities before MSS licensees have even had the opportunity to deploy ATC systems.

I. CTIA'S AND CINGULAR'S PROPOSED "GATING" RULES FOR ATC ARE UNNECESSARY AND PROCEDURALLY BARRED.

CTIA and Cingular request that the Commission adopt a series of more stringent gating requirements for ATC. CTIA and Cingular claim that more stringent requirements are necessary to ensure that ATC remains "ancillary" to MSS and to prevent MSS-ATC carriers from converting spectrum assigned to MSS to terrestrial wireless use. (See CTIA Petition, at 3-5; Cingular Petition, at 3-7.)

Generally, the gating requirements proposed by CTIA and Cingular are (a) unnecessary to maintain the ancillary character of ATC, (b) unsupported by any theory of how ATC would

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1.6/2.4 GHz ATC (47 C.F.R. § 25.254), and Inmarsat has not demonstrated that these limits are inadequate to protect its L-band system.

operate, and (c) unreasonable by any standard of rational decisionmaking. They are, plain and simple, anticompetitive efforts to destroy the ability of MSS carriers to provide ATC based on irrational fears that an MSS carrier could somehow compete in local markets for CMRS with the five or six terrestrial wireless carriers that already exist in such markets.

ATC is a unique niche service that will allow subscribers to MSS systems to use dual satellite-terrestrial phones more readily in urban canyons and inside buildings. ATC capability will also be useful in "hot spots" unserved by cellular/PCS phones where access to wireless communications channels in excess of the number that can be served by the satellite system alone is essential to address whatever emergency situation has arisen.

As the Commission recognized in the Order (¶¶ 24-27, 32-42), the economic viability of an MSS-ATC system is not based on competing with the terrestrial cellular/PCS business model. Indeed, the Commission noted (Order, ¶ 39) that an MSS-ATC system would be "an imperfect substitute" for terrestrial CMRS. The Commission considered the uses of ATC and imposed restrictions consistent with its role within an MSS system. Therefore, it is not necessary to impose additional gating requirements on ATC in order to ensure that ATC is not a clone of cellular/PCS.

Additionally, the various proposals now advanced by CTIA and Cingular were discussed thoroughly and rejected in the Order (¶¶ 98-102). In rejecting these and similar proposals in the Order, the Commission determined that "the complexity, cost and inefficiency of these proposed conditions would outweigh any limited utility that they might have." (Order, ¶ 98.)

It is well settled Commission law that reconsideration "will not be granted merely for the purpose of again debating matters on which the tribunal has once deliberated and spoken."[2] CTIA and Cingular have done nothing more than raise conditions found unnecessary and arguments already rejected in the Order. Accordingly, their Petitions for Reconsideration must be denied.[3]

II. ADOPTION OF USAGE LIMITS ON ATC IS CONTRARY TO THE PUBLIC INTEREST.

It is a given that the limited spectrum resources available to any wireless service should be used as efficiently as possible. On this basis alone the Commission can readily reject the proposals from CTIA and Cingular for imposition of an ATC usage limit, measured either in percentage of spectrum devoted to ATC or percentage of ATC versus MSS calls. (CTIA Petition, at 4-5; Cingular Petition, at 8-10.) Such regulatory intervention is spectrum inefficient rather than efficient.

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[2] WWIZ, 37 FCC 685, 686 (1964), aff'd sub nom. Lorain Journal Co. v. FCC, 351 F.2d 824 (D.C. Cir. 1965), cert. denied, 383 U.S. 967 (1966).

[3] Similarly barred is Cingular's attempt to reargue that it is technically feasible to segment satellite and terrestrial services within an MSS band. (Cingular Petition, at 16-22.) The Commission fully and carefully considered the technical and practical evidence regarding this issue and decided that an integrated MSS-ATC system provided the most efficient use of spectrum and best served the public interest. (Order, ¶¶ 47-55.) The Commission could not have been more clear in stating that "same-band, separate operator sharing is impractical and ill-advised." (Order, ¶ 49.) Cingular's attempt to resurrect this issue is simply "again debating matters on which the [Commission] has once deliberated and spoken."

Cingular is also incorrect that ATC grants "unjust enrichment" to MSS licensees. (Cingular Petition, at 22-23.) The Commission rejected a similar argument against introduction of a "mobile" allocation in the 2500-2690 MHz band, noting that the new permitted spectrum use "simply allows incumbent licensees an additional option," and the existing use may continue as the dominant use. Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services, 16 FCC Rcd 17222, 17237 (2001).

Contrary to Cingular's analysis (Petition, Att. A, at 1-3), the best method to maximize spectral efficiency is to allow each MSS-ATC system operator to determine dynamically the optimal mix of ATC and MSS spectrum allocations. For example, the satellite component has significant advantages in serving users in rural areas where cell sites are not easy to deploy, and in difficult terrains, such as hilly or maritime areas, where cell sites cannot be conveniently located. The satellite component is also likely to be invaluable in serving users during emergencies such as in the massive power outages that occurred in the U.S. Northeast and Midwest states and Canada on August 14, 2003. Additionally, spectrum for the satellite component must be reserved for users roaming into the United States that may not have ATC capabilities.

On the other hand, satellite capacity is often limited by the amount of power that current state-of-the-art satellite power subsystems can generate. Therefore, at times the satellite component of an MSS-ATC system uses spectrum less efficiently than the ATC component of the same system. One reason for this lower satellite spectral efficiency is that higher order modulation schemes which require more energy per bit are less easy to implement in the satellite component than in the terrestrial component, where the base station power limit is considerably higher. Also, since the satellite footprint is much larger than a base station coverage area, the interference seen by the satellite is potentially much greater, and, as a result, the capacity of the satellite component is more limited than the capacity of a set of base stations that cover the same area. A related effect is that the ATC component can reuse frequency more efficiently than the satellite component because the spectrum can be reused at shorter distances in the terrestrial mode.

These considerations for allocating spectrum between MSS and ATC vary by time and geography. Accordingly, the division of traffic between the satellite and ATC components must be left to the operator of the MSS-ATC system, and cannot be predetermined by the Commission. An excellent example of the dangers of imposing usage standards occurred on August 14, 2003. Following the massive power outage in the Northeast and Midwest U.S. and Canada, the number of calls served by Globalstar jumped to almost three times compared with the previous day, and the minutes of use almost doubled. The optimal MSS-ATC mix on the previous day August 13 -- ostensibly a "normal" day -- and on August 14 would clearly have been different. Globalstar would be in the best position to decide the optimal division of spectrum between MSS and ATC modes to serve users in this emergency if ATC were available.

The issue of predetermining satellite usage is certainly not, as Cingular suggests, one of monitoring satellite and terrestrial usage, which is possible. The problem lies in specifying what constitutes the "right" mix of satellite and terrestrial services, or what is the most spectrally efficient way of serving the most users. Recognizing the difficulty of predetermining the optimal mix of MSS and ATC traffic, the Commission declined (Order, ¶ 99) to adopt a "predominant" or "primary" use requirement for the satellite component. The Commission wisely allowed an MSS-ATC operator to determine the most spectrally efficient way of mixing satellite and terrestrial services on a dynamic basis. CTIA and Cingular have presented no reason to reverse this decision.

III. THE COMMISSION MUST NOT MANDATE A "LOOK FOR THE SATELLITE FIRST" REQUIREMENT FOR ATC.

CTIA and Cingular both recommend that the Commission adopt a "look for the satellite first" requirement for MSS-ATC systems. (CTIA Petition, at 5-6; Cingular Petition, at 10-11.) The Commission has already considered and rejected the various restrictions sought by terrestrial

carriers to ensure that ATC services are truly "ancillary," including whether to require a certain priority for satellite calls. (See Order, ¶ 100.) By requiring that MSS licensees implement their licensed satellite systems prior to receiving ATC authority, the Commission has imposed an economic imperative that will dictate use and marketing of the satellite system without imposing a requirement to use satellite capacity. Beyond this general obligation, the business and system design decisions for implementing an MSS-ATC system, including the allocation of spectrum resources, must be left to individual licensees in order to ensure that the benefits of ATC can be obtained.

In any event, a "look for the satellite first" requirement is an inefficient use of spectrum resources. For example, Cingular suggests (Petition, Att. A, at 3-5) that this requirement could be implemented by measuring both satellite and terrestrial signal strength and choosing satellite service whenever it is above a certain threshold. Such a system would imply that, in most cases when a user is outdoors, there would be no way for the MSS-ATC operator to direct the call to connect via an ATC base station, no matter what the traffic conditions. Thus, in an emergency, when large numbers of users try to use the system, overloading the satellite component beyond its regional capacity, the Cingular proposal would force the MSS-ATC operator to deny service to users rather than allowing them to use the terrestrial base stations to complete their calls. This result is clearly not in the public interest. Instead, the MSS operator must have the discretion to operate as Globalstar dual-mode handsets currently operate, that is, to allow each individual user to select whether to use the satellite mode first, or the terrestrial mode first, or to use whatever default mode the operator decides to implement as the preferred mode.

Cingular is correct (Petition, Att. A, at 3) that a "handset can easily be designed to always look to the satellite service as the primary communication channel, and then to the ATC

component on an ancillary basis." Cingular neglects to mention that this system would mean every call would take longer to set up than a satellite-only or an ATC-only call. MSS and terrestrial CMRS systems go to great lengths to minimize call set-up time, so as to improve the user's experience as well as maximize capacity by minimizing overhead time. Cingular's suggestion would unnecessarily add a few seconds to every call set-up time. That delay would be a perceived negative result for subscribers as well as an actual negative result for emergency calls.

The Commission recognized (Order, ¶ 100) that dictating the use of satellite mode would "greatly limit the spectrum efficiency gains that will occur under ATC." The Commission was correct. Therefore, the "look for the satellite first" proposal must be rejected.

IV. THE OTHER GATING REQUIREMENTS PROPOSED BY CTIA AND CINGULAR ARE UNNECESSARY.

CTIA also proposes that the Commission forbid ATC-only subscribers and impose marketing restrictions on ATC service. (CTIA Petition, at 6.) The former rule is unnecessary since the Commission has required ATC applicants to demonstrate an integrated service, and the subscribers to the ATC service would generally end up paying for both services. With respect to the marketing restrictions, there are already sufficient safeguards to preclude ATC from becoming the dominant use of MSS systems, and there is no reason for the Commission to enter the business of regulating the commercial speech of MSS providers.

CTIA (Petition, at 7-8) and Cingular (Petition, at 12) both suggest that the Commission should specifically include computers, laptops and Personal Data Assistants ("PDAs") in the integrated service requirement. Exempting computers, laptops and PDAs from the integration requirement does in fact serve the public interest because of the varying usage patterns of these devices from handheld mobile phones. For example, if a desktop computer will only be used

indoors in urban areas, the customer should have the option of taking an ATC-only service at a high data rate, since it is unlikely that the computer would ever need to use satellite service. At the other extreme, the service provider may want to provide PDA users with the option of deciding which mode (satellite or ATC) they want to buy, depending on their usage habits. For PDAs in particular, it would not be desirable to add unnecessary power requirements, which means it would be unwise to add ATC for users who want only satellite or the other way around.

Both CTIA and Cingular also suggest that the Commission explicitly state that the gating requirements are band specific and cannot be applied across spectrum bands. (CTIA Petition, at 8; Cingular Petition, at 14-16.) Since this is implicit in the ATC rules adopted and the authorized ATC bands will be specified by the Commission in the grant of ATC authority, there is no need for the Commission to adopt such a requirement.

Finally, Cingular (Petition, at 12-13) asks the Commission to require an MSS licensee to meet all implementation milestones for the satellite system prior to obtaining ATC authority. The Commission imposed a requirement that the satellite service be "commercially available" before the licensee can receive ATC authority. (47 C.F.R. § 25.149(b)(3).) The Commission has imposed a condition that is consistent with the goal of making ATC ancillary to the satellite service, rather than simply meeting a milestone without providing satellite service. Therefore, there is no need to change this requirement.

V. CONCLUSION

For the reasons set forth above, the Commission must deny the petitions for reconsideration filed by CTIA and Cingular.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, William D. Wallace, hereby certify that I have on this 20th day of August, 2003, caused copies of the foregoing "Consolidated Opposition of Globalstar, L.P." to be delivered by U.S. mail, postage prepaid, to the following:

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