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Before The  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

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In the Matter of )  
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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 )  
)  
Amendment of Section 2 of the )  
Commission's Rules to Allocate )  
Spectrum at 2 GHz for Use by )  
The Mobile-Satellite Service )  
\_\_\_\_\_ )

IB Docket No. 01-185

ET Docket No. 95-18

COMMENTS OF GLOBALSTAR, L.P. and L/Q LICENSEE, INC.

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## SUMMARY

Globalstar, L.P. (“GLP”), and L/Q Licensee, Inc. (“LQL”), support the Commission’s proposal to grant flexibility to MSS licensees to offer ancillary terrestrial services (“ATC”) over MSS spectrum. ATC will serve the public interest by broadening the services available to consumers in the United States and improving the financial stability of MSS systems. Granting flexibility to MSS licensees is consistent with Section 303 of the Communications Act of 1934, as amended, and should be offered to MSS.

The benefits of ATC should be achievable within the regulatory framework for MSS, and, therefore, minimal new regulations should be imposed on ATC. The Commission should require MSS operators to coordinate ATC among themselves, rather than attempting to adopt restrictions before the potential uses of the service are understood. MSS augmented with ATC will be a new and untested service, and should not be overburdened with regulations more appropriate for terrestrial services which have different financial and subscriber bases.

GLP and LQP oppose any rule that would allow non-MSS licensees to access spectrum allocated for MSS to offer terrestrial wireless services. To fulfill its promise, MSS must be maintained as a distinct service, even if some terrestrial service is provided. Integrated satellite-terrestrial services should be the responsibility of the MSS licensee and for technical reasons must be coordinated by the MSS licensee alone. Accordingly, it is critical for the Commission not to force MSS licensees into relationships with terrestrial carriers.

These benefits of ATC are neutral as to spectrum used. Therefore, the Commission should not distinguish among MSS services in granting flexibility and should permit all MSS licensees, without regard to assigned spectrum, to obtain ATC authority.

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**COMMENTS OF GLOBALSTAR, L.P. and L/Q LICENSEE, INC.**

Pursuant to Section 1.415 of the Commission's Rules, Globalstar, L.P. ("GLP") and L/Q Licensee, Inc. ("LQL"), by their undersigned attorneys, submit these comments in support of the Commission's proposal to authorize an ancillary terrestrial component ("ATC") for Mobile-Satellite Service ("MSS") licensees.<sup>1</sup>

GLP and LQL both have interests in this proceeding. LQL holds a 1.6/2.4 GHz MSS license for the Globalstar™ "Big LEO" satellite constellation.<sup>2</sup>

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<sup>1</sup> Notice of Proposed Rulemaking, FCC 01-225 (released August 17, 2001) ("NPRM").

<sup>2</sup> See Loral/Qualcomm Partnership, L.P., 10 FCC Rcd 2333 (Int'l Bur. 1995). The Globalstar system license was assigned to LQL by its parent, Loral Qualcomm Partnership, L.P.

Commercial service over the Globalstar system commenced in January 2000. As of June 30, 2001, Globalstar service was available in 109 countries, including the United States, through 25 gateway earth stations operated by Globalstar service providers. There were about 51,600 commercial subscribers as of June 30, 2001.

GLP owns and operates the international MSS business offered through the existing Globalstar constellation. GLP also holds a 2 GHz MSS license.<sup>3</sup> The 2 GHz MSS spectrum will be used to expand the service offerings available over the Globalstar system.

**I. THE COMMISSION SHOULD AUTHORIZE MSS LICENSEES TO OFFER ANCILLARY TERRESTRIAL SERVICES.**

GLP and LQL support the Commission's proposal to add flexibility to MSS systems by allowing licensees to obtain authorization for ATC. Existing Globalstar services have fulfilled the goals for MSS as envisioned in the Big LEO MSS proceeding, but the business has not shared in the tremendous growth of other sectors of telecommunications industry. ATC offers opportunities to expand the subscriber base for MSS, which would assist Globalstar and others to continue to provide valuable telecommunications services to rural and underserved areas.

**A. Globalstar Offers Global Telecommunications Services.**

Currently, Globalstar provides voice and data services globally from the Amazon River Basin to the Australian Outback to the American Plains to Siberia.

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<sup>3</sup> Globalstar, L.P., DA 01-1634 (Int'l Bur. released July 17, 2001).

In many places where Globalstar phones now provide global connectivity, the nearest telephone had been hundreds of miles away.

The services offered by Globalstar have fulfilled the Commission's desire to provide telecommunications services in unserved areas in the United States. Attached to these comments is a feature from the San Jose Mercury News that describes how Globalstar was able to provide both telephone and internet service on the Navajo reservation in Arizona. As this feature illustrates, MSS systems can offer an instant infrastructure in markets not covered by terrestrial wireline or wireless services, and can readily connect populations in these areas to basic and advanced telecommunications services.

In addition to serving unserved populations, Globalstar can provide service on demand, for example, connecting workers on oil platforms and at construction sites with their home offices. Globalstar offers a portable "office in a box" (telephone, data, fax) for companies that need to establish a business outpost far from landline telecommunications networks. Moreover, Globalstar serves locations where wireline services are not possible, on ships, pleasure boats and aircraft.

The need for Globalstar and other MSS providers is well known, but marketing the service has proved difficult. The cellular and PCS companies that have achieved success in the last decade have done so by marketing to the large, urban centers and populations along the national highway system that connects them. The people that need satellite telephone services do not necessarily inhabit these areas. Accordingly, MSS providers have not had access to large

concentrations of potential MSS users for development of substantial subscriber bases. In addition, as ICO has pointed out, MSS systems can have difficulty in marketing services to large population centers because transmissions between the handset and satellites can be blocked in “urban canyons” and inside concrete and steel buildings.

ATC offers an opportunity to improve the ability of MSS systems to market their services through an integrated combination of satellite and terrestrial services. Although ATC is unlikely to propel MSS into competition with cellular and PCS, ATC may result in an increase in subscribers which would allow MSS systems to decrease the cost of service not only in urban but also in rural areas. Authorizing ATC thus ultimately serves the public interest by making MSS more accessible to its core subscriber populations in rural and underserved areas.

**B. ATC Will Benefit MSS By Instigating New Capital Investments.**

The public interest benefits of MSS are just as applicable today as when the Commission allocated spectrum for MSS and assigned licenses in the L-band and 1.6/2.4 GHz bands. However, as had been widely reported, the MSS industry in the United States has not achieved the subscriber levels needed for broad support of the upfront investment in the systems. Both of the two Big LEO systems that are now operational, Iridium and Globalstar, have suffered through financial difficulties and subscriber shortfalls. As a result, the financial markets are unlikely to invest the substantial capital necessary to launch future new or second generation global

satellite systems. By authorizing ATC, the Commission can expand the potential subscriber base for MSS systems and boost their business plans.

If the subscriber base for MSS subscribers can be increased, MSS systems can lower their costs of service, and thereby, attract more subscribers. An increase in subscribers for MSS systems will gradually improve their financial stability and their long-term promise as a telecommunications service. Grant of ATC authority thus can have the effect of making MSS more attractive to investors and more likely to find new capital. Increased capital supplies, in turn, can be used to reduce the initial cost to prospective subscribers and to fund development of new features and functions, thereby further motivating an increase in sales of airtime.

Based on Globalstar's experience in the marketplace, MSS, like cellular, DBS and other services when new, may require substantial time to achieve a broad subscriber base. While the service is likely to achieve success in the marketplace, currently, the capital markets lack confidence in stand-alone MSS. ATC offers an opportunity to improve the perception of MSS with investors while retaining the benefits of MSS for populations unserved and underserved by terrestrial telecommunications. Even as an "ancillary" MSS service that does not compete with cellular or PCS, ATC can still play an important role in the MSS industry by improving its attractiveness to investors.

**C. ATC Is Consistent with the Recognized Public Interest Benefits of MSS and Section 303 of the Communications Act.**

The Commission has repeatedly recognized the public interest benefits of the services provided by MSS systems, including offering “new and expanded regional and global data, voice and messaging services” and promoting “development of regional and global communications to unserved communities in the United States, its territories and possessions, including rural and Native American areas, as well as worldwide.”<sup>4</sup>

The Commission has also recognized the benefits of flexibility in service allocations. “[A] flexible allocation allows licensees to make efficient use of spectrum, especially if licensees are given greater freedom in determining the specific services to be offered.”<sup>5</sup> The Commission should combine the benefits of MSS with the benefits of service flexibility to ensure the most efficient use of MSS spectrum.

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<sup>4</sup> Establishment of Policies and Service Rules for the Mobile-Satellite Service in the 2 GHz Band, 15 FCC Rcd 16127, ¶ 1 (2000); see also, e.g., Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, 12 FCC Rcd 7388, ¶ 13 (1997) (“2 GHz MSS Allocation Order”), aff’d on recon., 13 FCC Rcd 23949, ¶ 10-11 (1998); 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, 9 FCC Rcd 5936, ¶ 3 (1994).

<sup>5</sup> Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, FCC 01-256, ¶ 24 (released Sept. 24, 2001) (“First 3G Report and Order”).

The Communications Act of 1934, as amended, authorizes the Commission to provide for flexible uses in allocations if:

- (1) such use is consistent with international agreements to which the United States is a party; and
- (2) the Commission finds, after notice and an opportunity for public comment, that –
  - (A) such an allocation would be in the public interest;
  - (B) such use would not deter investment in communications services and systems, or technology development; and
  - (C) such use would not result in harmful interference among users.<sup>6</sup>

With respect to MSS, these conditions are all fulfilled. The 2 GHz MSS allocations at 1990-2025 MHz and 2165-2200 MHz both have existing terrestrial fixed and mobile service allocations in ITU Region 2 on a primary basis. Therefore, adding a mobile allocation to the 2 GHz MSS frequency bands “is consistent with international agreements to which the United States is a party.”

The Big LEO downlink at 2483.5-2500 also is allocated on a primary basis in ITU Region 2 for terrestrial fixed and mobile services. The uplink band at 1610-1626.5 MHz is not allocated in any ITU region for terrestrial mobile and fixed services. However, because all Big LEO systems operating in the United States are U.S.-licensed systems, an ancillary terrestrial mobile allocation in the United States is unlikely to compromise transborder or international MSS operations. Therefore,

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<sup>6</sup> 47 U.S.C. § 303(y).

adding terrestrial mobile and fixed allocations in the Big LEO uplink band is not inconsistent with the international allocations.

Adding flexible allocations to the Big LEO and 2 GHz MSS bands also would not deter investment in MSS systems. As discussed above, improving the usability of MSS terminals with ATC is likely to increase their marketability among subscribers, thereby improving the financial standing of MSS systems. As with any product, broadening the service base for MSS systems and improving their prospects for success in the marketplace is more likely than not to “encourage investment in and the development of new and innovative technology and services,”<sup>7</sup> which is historically a critically important public policy goal.

GLP and LQL believe that terrestrial services can be introduced in the Big LEO and 2 GHz MSS bands without causing interference to MSS operations, assuming that the Commission restricts ATC operations in these bands to MSS licensees. MSS operators must coordinate the use of their assigned bands in any event. There is no reason that such a small group could not effectively coordinate terrestrial as well as satellite modes.<sup>8</sup> Moreover, as it has done in other contexts to satisfy this condition, the Commission may require that terrestrial operations in the Big LEO and 2 GHz MSS bands be introduced on a non-interference basis.<sup>9</sup>

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<sup>7</sup> First 3G Report and Order, ¶ 24.

<sup>8</sup> Globalstar has already successfully coordinated its use of the L-band with Iridium and its use of the 5 GHz feederlink band with ICO Global.

<sup>9</sup> See id., ¶ 26.

Interference into services adjacent to the Big LEO bands is unlikely. The Radio-Astronomy Service (“RAS”) in the 1610.6-1613.8 MHz band would not experience increased interference from Big LEO ATC transmissions. Since the ATC user terminals would be on the ground, existing rules applicable to MSS transmissions would protect RAS. Similarly, interference into Global Positioning System (“GPS”) receivers would not increase due to ATC. All MSS user terminals must comply with domestic and international standards to protect GPS. Thus, there should be no increased interference into GPS as a result of ATC.

Because the conditions for adding flexibility to the Big LEO and 2 GHz MSS bands are met, the Commission should allow licensees in these bands to request ATC authority. Each MSS licensee should be able to use its assigned spectrum for ATC and other spectrum in the same MSS band to the extent that such use can be coordinated with, and provided on a non-interference basis to, the operations of other MSS licensees.

## **II. ATC CAN BE AUTHORIZED WITHOUT INFRINGING UPON THE DEVELOPMENT AND DELIVERY OF MSS.**

Just as the Commission must not reallocate any MSS spectrum to terrestrial wireless services,<sup>10</sup> neither should it authorize ATC in a manner that results in a *de facto* reallocation of the spectrum to terrestrial services because ATC dominates MSS. There is or will be ample spectrum available for purely terrestrial systems to

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<sup>10</sup> GLP is filing comments on the “Further Notice of Proposed Rulemaking” in ET Docket Number 00-258, urging the Commission not to reallocate any of the 2 GHz MSS spectrum for licensing to terrestrial service providers.

expand and evolve. The objective for ATC is something else entirely. To achieve the public interest benefits of MSS, licensees must actually offer MSS to consumers with ATC retaining its status as an adjunct to MSS, not the reverse.

First, ATC must be offered only by MSS licensees. MSS licensees have an obligation to launch and operate MSS systems, and must meet certain implementation milestones to retain their licenses. By tying ATC to the MSS authorization, the Commission can ensure that the public will have access to the benefits of MSS without regard to the availability of ATC in MSS spectrum.<sup>11</sup>

Second, authority for ATC should be granted on a non-interference basis with respect to MSS. Obviously, at this point, there must still be study of the interaction of ATC and MSS and analysis of the potential services that can be offered through ATC. Some MSS licensees may decide not to offer ATC. However, the primary status of MSS in MSS bands should be maintained. By making ATC operate on a non-interference basis, at least initially, the Commission can offer flexibility without jeopardizing MSS operations.

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<sup>11</sup> MSS licensees should, of course, be able to “outsource” the construction of a terrestrial network and the provision of ATC through a spectrum lease or other contractual arrangement. As long as the MSS licensee is ultimately responsible for ATC, the terrestrial network will have to be integrated in some form with the MSS network.

Third, authority to offer ATC should be co-extensive with the authority covered by the MSS license.<sup>12</sup> The Commission has asked questions about whether ATC should be restricted to licensees that are already offering MSS. NPRM, ¶ 42. These issues are likely to be resolved by the economics of construction of the system. For example, there may be some benefit to allow MSS licensees to commence building out ATC prior to launch and operation of the entire satellite system.<sup>13</sup> However, a licensee is not likely to make a large investment in constructing a nationwide terrestrial system, while ignoring its obligation to meet implementation milestones on the satellite system. As long as retention of the MSS license is based first on an implementation schedule and then continued operation of the MSS system, the Commission should not impose artificial restrictions on use of the spectrum.

Fourth, the Commission should not consider ATC the regulatory equivalent of PCS or cellular. For the foreseeable future, MSS will continue to attract primarily those persons who live and/or work outside wireline or terrestrial wireless coverage areas. An ATC augmented MSS handset may be the portable phone of

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<sup>12</sup> GLP and LQL agree with the Commission that, if ATC authority is granted only to MSS licensees, the ORBIT Act applies, and Section 309(j) regarding competitive bidding for spectrum licenses is not implicated. See NPRM, ¶ 39.

<sup>13</sup> The Commission has repeatedly recognized that leasing of ITFS spectrum serves the public interest because it provides financial stream for ITFS licensees. See, e.g., First 3G Report and Order, ¶ 7 (“MMDS licensees often lease capacity from ITFS operators, which in turn allow ITFS licensees to fund their educational missions.”). Similar types of arrangements may prove beneficial to MSS.

choice for subscribers roaming out of the core MSS service areas and for subscribers that travel globally for business. Those are two valuable market segments that ATC may attract to MSS systems. However, persons who use mobile phones on a daily basis in the urban corridors are likely to demand the functions and prices available on cellular and PCS services because of their high volume, large capacity businesses. MSS/ATC will be a new service, requiring development of new equipment, and MSS systems will ultimately be constrained by the need to allocate spectrum resources to MSS. For ATC to achieve the benefits sought in this proceeding, the Commission should impose minimal regulatory requirements at least until ATC has had the opportunity to become established and the uses of the service are known.

### **III. AUTHORITY TO PROVIDE TERRESTRIAL SERVICES IN MSS SPECTRUM SHOULD BE RESTRICTED TO MSS LICENSEES.**

In addition to authorizing ATC by MSS licensees, the Commission has asked for comment regarding partnerships between MSS and terrestrial service providers. First, the Commission has asked whether agreements between MSS and existing CMRS providers adequately address the issues raised by ICO (“dual-band approach”) (NPRM, ¶¶ 27-28). Second, the Commission asks whether it should allocate some MSS spectrum for ATC that would be licensed to parties other than the in-band MSS licensees (“split-band approach”) (NPRM, ¶¶ 37-40). LQL and GLP believe that neither of these approaches provides the same benefits to MSS

systems and consumers as simply authorizing MSS licensees to offer ATC and MSS as integrated services.

**A. ATC Will Permit Integrated Satellite-Terrestrial Services.**

The ability to offer single-number, integrated satellite-terrestrial service handsets will expand marketing opportunities for MSS providers. Currently, MSS providers can offer satellite-only or dual-band satellite-cellular handsets. Each has its advantages, but neither appeals to a broad-based subscriber population in the United States. By authorizing ATC, the Commission can open new marketing opportunities for MSS providers that may ultimately lead to lower prices for MSS through an expanded subscriber base and to renewed interest from the financial markets for existing and planned MSS systems.

The utility of ATC for MSS providers, however, depends upon MSS providers obtaining authority for ATC through their MSS licenses. The key to integration of the satellite and terrestrial services is the coordination of frequency usage between the two components. In areas of co-coverage, it would be difficult to use the same frequency or channel for both the terrestrial and satellite components. Common frequencies between the components would have to be avoided in order to prevent degradation of performance.

The coordination of frequencies or channels could be accomplished through the use of a common network control center for both the terrestrial and satellite components of the system. The common network control center would assign frequencies to users, ensuring that common frequencies were not used in areas

where both the terrestrial and satellite components are active at any given time. The network control center would likely require an integrated database that would track the operation of the two components.

Due to the need for this close coordination, it would be extremely unlikely that different entities would be able to manage the frequency assignment responsibilities from their separate control centers. Thus, use of MSS bands by separate satellite and terrestrial licensees to offer MSS enhanced by ATC is not feasible, and, MSS licensees only should be authorized for ATC.

**B. Dual-Band MSS Phones Are Effective But Not Ideal.**

As the Commission recognizes in the NPRM, it is currently possible for an MSS operator to partner with a CMRS operator to offer dual satellite-terrestrial services. Indeed, current Globalstar handsets use the dual-band approach. Subscribers can make calls on the satellite system or over the cellular/PCS network, using the same equipment, depending on their location. In the terrestrial mode, the Globalstar terminal has all the features and service capabilities of any other mobile telephone, including reception within buildings and urban canyons.

One significant disadvantage of the dual-band approach is that subscribers have two telephone numbers for the same handset, one for terrestrial service, one for satellite service. Subscribers must switch back and forth between satellite and terrestrial modes to send and receive calls. This is an inconvenience which ATC could eliminate.

Moreover, individual MSS service providers must negotiate roaming agreements with numerous cellular/PCS carriers to provide the terrestrial service. Thus, the availability and pricing of a customer's terrestrial service is dependent upon the location of the customer, his or her home service provider, and the varying terms of these roaming agreements. If an MSS service provider can offer its own bundled terrestrial and satellite services, it may be able to lower prices, and thereby attract more subscribers.

And, finally, in Globalstar's experience, cellular and PCS carriers have little interest in marketing MSS to their customers who may request it because revenues from MSS are miniscule compared with revenues from terrestrial services. Only a company whose primary business is MSS will endeavor to expand its customer base by adding ancillary terrestrial subscribers.

### **C. Split-Band MSS Would Not Serve the Public Interest.**

The Commission should definitely not implement a policy of splitting an MSS band with some spectrum licensed for MSS to one party and some spectrum licensed for ATC to another party. When considering flexibility for ITFS/MMDS spectrum, the Commission rejected segmentation in part because “[s]egmentation could affect the economics of current and planned ITFS/MMDS systems and lessen their ability to provide service to rural areas or smaller markets.”<sup>14</sup> Similarly, the split-band approach would ruin the MSS business.

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<sup>14</sup> First 3G Report and Order, ¶ 11.

There is no good rationale to force MSS licensees into partnerships with third parties for the provision of ATC. The underlying premise of the ATC proposal is to broaden the customer base and augment the potential sources of revenue for MSS licensees through ATC. It is not to undermine the economics of MSS by allowing huge, multi-billion dollar companies to cast their long shadows over the MSS industry. If the Commission were to segment MSS spectrum for licensing to third parties, ATC would be no longer “ancillary” to anything, and MSS licensees would lose a unique opportunity to improve and expand their businesses.

Moreover, the goal of a satellite-terrestrial service is to establish a technology that allows MSS calls to flow from the satellite to terrestrial network through dynamic band sharing. Thus, for example, persons moving into environments where satellite service is blocked would automatically be switched to terrestrial mode. Dynamic band sharing is technically feasible only with an integrated satellite-terrestrial network, under the control of one party.

Finally, the split-band approach to ATC necessarily takes valuable spectrum away from MSS operators. There is a minimal amount of spectrum available for MSS. Frequencies for MSS are extremely limited in the United States and are substantially below the amount that the ITU, for one, believes is necessary to meet MSS requirements.<sup>15</sup> The split-band approach not only makes it more difficult for MSS providers to offer MSS in conjunction with ATC, it also curtails the capacity of

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<sup>15</sup> See 2 GHz MSS Allocation Order, 12 FCC Rcd at 7394-95.

MSS providers that may choose not to offer ATC. The Commission rejected splitting the ITFS/MMDS band for fixed and mobile services for these same reasons.<sup>16</sup>

Therefore, it should not split up the MSS allocations in the United States into MSS and ATC segments.

#### **IV. THE COMMISSION SHOULD ALLOW ALL MSS LICENSEES, INCLUDING “BIG LEO” LICENSEES, TO OFFER ATC.**

If the Commission allows 2 GHz MSS and L-band MSS licensees to offer ATC, then it should also allow Above 1 GHz MSS licensees to offer ATC. The purpose of ATC is to promote the capacity of MSS licensees to serve consumers nationwide. Except for the spectrum used and system architectures, there should be no service-related distinctions among MSS licensees. Indeed, LQL plans to seek authorization for ATC in the event that ATC is permitted in the Big LEO bands. Accordingly, the Commission should adopt a neutral stance, give all MSS systems the same opportunities, and not favor one set of MSS licensees over another.

##### **A. The Rationale for ATC at 2 GHz MSS Also Applies to the Big LEO MSS Service.**

The Commission has asked whether the same economic, technical and policy issues apply to Big LEO licensees as 2 GHz and L-band MSS licensees. With respect to economic issues, the operational Big LEO licensees obviously are the

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<sup>16</sup> First 3G Report and Order, ¶ 11 (noting the report on ITFS sharing found “segmentation would raise significant technical and economic difficulties for incumbents”), ¶¶ 28-29.

source of the concerns about MSS viability raised by ICO in its proposal. The Commission licensed five Big LEO MSS systems. One licensee returned its license for cancellation prior to construction. One had its license cancelled for failure to meet its implementation milestones, and one has recently requested an extension of its milestones. Two systems are operational, Iridium and Globalstar. Iridium filed for bankruptcy in 1999, and Globalstar has suffered widely-reported financial difficulties throughout 2001, its second year of operation. If MSS can receive a financial boost from the availability of ATC, then the Big LEO systems certainly should have the opportunity to take advantage of ATC, in their current systems if feasible or for their replacement or second generation systems.

**B. The Commission Should Not Modify the Big LEO Band Plan.**

The Big LEO band plan has been in effect for over five years, and the remaining Big LEO systems have relied upon the format of the plan to design, construct and launch systems. Throughout this time period, the Big LEO systems have operated on the premise that they must coordinate operations with other licensees. That model should continue to apply even if ATC is permitted.

The Commission's suggestion that ATC must be authorized for Big LEO systems on the same model as 2 GHz MSS systems is mistaken. The technical aspects of providing ATC will vary more for each individual system than among MSS service bands. A technical plan for ATC at 2 GHz may not necessarily work for the Big LEO licensees. As the Commission notes, Iridium was assigned a separate segment of the 1610-1626.5 MHz band for service uplinks and downlinks,

while the remaining Big LEO licensees were committed to a coordinated approach to sharing spectrum. LQL and GLP believe that a similar coordinated approach for ATC can be arranged among the CDMA licensees in the Big LEO band.

Moreover, as long as ATC components meet the existing restrictions on protection for radio-astronomy in the lower portion of the Big LEO L-band and for radio-navigation satellite systems in the lower adjacent band, ATC operations should not affect inter-service coordination. Similarly, out-of-band restrictions in the Big LEO S-band should also protect adjacent services.

Therefore, the Commission should not modify the band plan in any way for ATC, nor should it attempt to take spectrum from Big LEO licensees for reassignment to third parties specifically for ATC. The CDMA-designated L-band segment is not readily divisible into equivalent segments. The CDMA L-band is encumbered at the lower end because the 1610.6-1613.8 MHz band is shared with the radio-astronomy service. Protection of GPS and GLONASS is also of greater concern for transmissions from the lower portion of the band. Attempting to equitably apportion the L-band into Selected Assignments would be impossible.

In any event, the CDMA applicants have already established a band-sharing arrangement, and they should be allowed to determine how to offer ATC consistent with that plan. It would be substantially more efficient for the handful of Big LEO licensees to coordinate ATC within the existing band plan than for the Commission to regulate the technical aspects of ATC based on parameters 2 GHz MSS, or terrestrial PCS, which have different characteristics.

**V. CONCLUSION**

For the reasons set forth above, GLP and LQL urge the Commission to adopt rules permitting ATC in MSS bands, including the Big LEO band with minimal additional regulatory requirements. ATC will help the MSS industry and improve and expand service to MSS subscribers.

Respectfully submitted,

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Date: October 22, 2001

## ATTACHMENT A