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

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| In the Matter of | ) | |
| | ) | |
| 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 |
| | ) | |
| Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service | ) | ET Docket No. 95-18 |

# PETITION FOR RECONSIDERATION OF THE BOEING COMPANY


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## SUMMARY

The Commission should reconsider its decision to drastically alter the application approval process for mobile-satellite service ("MSS") licensees seeking authority to incorporate an ancillary terrestrial component ("ATC") into their networks. No legitimate justification exists for the Commission's modification of the ATC approval process. As the Commission acknowledges, no possibility exists that MSS licensees were confused about the restrictions proscribed by the Commission's original ATC conditional authorization process and no reason exists to presume that MSS licensees would abuse their ATC authority. Instead, for decades the Commission has issued conditional authorizations to licensees in various communications services without any problems or abuse.

As the Commission acknowledges, the new ATC approval approach adopted in the Order on Reconsideration ("*Order*") will introduce additional regulatory delay in the provision of new communications services to consumers. At the same time, the new approach will be more difficult for the Commission to administer and will increase uncertainty for MSS licensees. As a result, the new approach will increase further the likelihood that some MSS networks may never be constructed, potentially preventing the introduction of new services to consumers. The Commission should avoid this outcome by reinstating the ATC approval process originally adopted in its *Flexibility Order* and granting MSS licensees authority to provide integrated MSS ATC services conditioned on first satisfying their gating and milestone requirements and all other applicable Commission rules.

If the Commission declines to reinstate its original ATC application processing approach, the Commission should preserve parity in its licensing process by adopting a streamlined application approval process for non-operational MSS licensees that is comparable to the approach embodied in Section 25.149(f) of the Commission's rules applicable to operational

MSS networks. No justification exists for imposing a more time-consuming and difficult approval process for non-operational MSS networks. Instead, a comparable approach would hasten the provision of new mobile communications services to consumers.

Regardless of whether the Commission reinstates or makes further modifications to its ATC approval process, the Commission should clarify the significant ambiguities and resolve the conflicts that the *Order* introduces into its rules. Absent such changes, it will be needlessly difficult for MSS licensees to make the demonstrations necessary to secure authority from the Commission to provide integrated MSS ATC services to the public. For example, the Commission's revised rules require MSS licensees to demonstrate actual compliance with the gating requirement for replacement satellites prior to initiating integrated MSS ATC services. At the same time, the rules appropriately give MSS licensees using geostationary satellites up to a year after the initiation of MSS ATC services to complete construction on their replacement satellite. The Commission needs to resolve such conflicts in its rules in order to lessen the uncertainty and regulatory risks for MSS licensees striving to bring a new generation of services to consumers.

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To: The Commission

# PETITION FOR RECONSIDERATION OF THE BOEING COMPANY

The Boeing Company ("Boeing"), by its attorneys and pursuant to Section 1.429 of the Commission's rules, 47 C.F.R. § 1.429, submits this Petition for Reconsideration of the Commission's Order on Reconsideration ("*Order*") in this proceeding.[1]

## I. INTRODUCTION

In the *Order*, the Commission reaffirms its goal of preventing the ATC application process from delaying MSS operators "in offering ATC services once their MSS systems are commercially operational."[2] As the Commission observes, "the public interest lies in ensuring

[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 Bands*, Order on Reconsideration, FCC 03-162 (July 3, 2003) ("*Order*").

[2] *Id.*, ¶ 8.

that the Commission has adequate time to properly process and consider the application without unnecessarily delaying the offering of ATC services."[3]

Unfortunately, the *Order's* modified approach for considering ATC applications will increase significantly the delay and uncertainty involved in introducing integrated MSS ATC services to consumers. Acknowledging the potential for delay, the *Order* states that the Commission will "endeavor" to limit to three months the regulatory delays and accompanying uncertainty experienced by MSS operators and their customers.[4]

Notwithstanding the Commission's present intentions, it is likely that the additional regulatory delay could greatly exceed three months. Given the controversy that has surrounded MSS ATC proposals and the determination of the MSS industry's opponents in trying to preclude MSS ATC service offerings, the Commission should recognize that its newly adopted application processing approach provides a useful vehicle for delay and uncertainty that will adversely affect MSS licensees seeking to provide integrated services to consumers.

Protracted regulatory delay is never in the public interest. Once a licensee has made major investments in its network, even a brief regulatory delay may be sufficient to force a licensee into insolvency. Equally importantly, the increased uncertainty surrounding the timing of ATC authorizations will create additional business risks for potential investors in new MSS networks. These heightened risks may prevent some planned networks from ever providing new communications services to consumers.

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[3] *Id.* *Compare id.*, ¶ 11 (stating that the Commission "do[es] not intend, however, for this process to result in unnecessary delay or regulatory burden for licensees of MSS systems *that are operational* at the time an ATC application is filed") (*emphasis added*). There is no identifiable public interest benefit in limiting the Commission's goal of avoiding delay in the initiation of ATC services to MSS networks that are *operational* at the time an ATC application is filed.

[4] *Id.*, ¶ 7 n.27.

Nothing in the record of this proceeding justifies the Commission's modification of the ATC approval process. As the *Order* acknowledges, no possibility exists that MSS licensees were confused about the restrictions proscribed by the Commission's original ATC conditional authorization process[5] and no reason exists to presume that MSS licensees would abuse their ATC authority.[6] Moreover, as explained below, the Commission's new ATC approval process will be more difficult for the Commission to administer without providing MSS licensees with any greater clarity regarding the point at which they will be able to provide integrated MSS ATC services to consumers.[7] Instead, the new approach will create additional regulatory risks for MSS licensees and increase the likelihood that integrated MSS ATC services will never be provided to consumers on a competitive basis.

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[5] *See Order*, ¶ 10 n.28 (recounting the Commission's repeated warning that ATC authorizations were conditioned on first fulfilling the gating requirements and concluding that the *Flexibility Order* was "clear" in explaining this prohibition); *see also id.*, ¶ 8 (observing that ICO acknowledged the restrictions that would be placed on conditional ATC authorizations).

[6] *See, e.g., 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 Bands*, Report and Order and Notice of Proposed Rulemaking, FCC 03-15, ¶ 66 (Feb. 10, 2003) ("*Flexibility Order*") (acknowledging that "[w]e have no reason to believe that licensees will not comply in good faith with the service rules we adopt today").

[7] *Contra Order*, ¶ 10 (concluding that the new application processing approach would increase administrative convenience and provide greater clarity for MSS licensees).

Given the Commission's prior findings in its *Flexibility Order* that the expeditious introduction of ATC-enhanced MSS services will benefit the public interest,[8] the Commission should reconsider its decision to modify the ATC authorization process and reinstate the application approval approach originally adopted for MSS networks seeking ATC authority. Alternatively, the Commission should adopt a streamlined application approval process for non-operational MSS licensees that is comparable to the approach embodied in Section 25.149(f) of the Commission's rules applicable to operational MSS networks.

The Commission should also clarify the ambiguities and conflicts inherent in its new approval process for ancillary ATC services. These newly created ambiguities and conflicts will make it extremely difficult for MSS licensees to make the necessary showings to secure authority to provide integrated MSS ATC services to the public.

## II. THE COMMISSION SHOULD RETURN TO ITS PROVEN SYSTEM OF GRANTING APPLICATIONS CONDITIONED ON COMPLIANCE WITH A LICENSEE'S GATING AND MILESTONE REQUIREMENTS AND OTHER COMMISSION RULES

In its *Flexibility Order*, the Commission adopted straightforward and well-tested procedures to consider applications to provide ATC services. Under these procedures, the Commission would provide qualified MSS operators with conditional ATC authorizations that

[8] The Commission observed in its *Flexibility Order* that the availability of MSS ATC will "allow MSS operators to develop new and innovative service offerings that satellite-only MSS systems cannot offer today." *Flexibility Order*, ¶ 23. For example, ATC-enabled MSS networks can provide ubiquitous digital telecommunications and broadband services, along with interoperable nationwide public-safety systems. *See id.* ATC can also be used to improve the nation's overall ability to maintain critical telecommunications infrastructure in times of crisis or disaster. *See id.*, ¶ 29. The availability of ATC can also increase the spectral efficiency of MSS networks. As the Commission explained, "MSS ATC has the potential to transmit more information to more individual users within a given amount of spectrum than MSS alone." *Id.*, ¶ 21.

"prohibited the provision of commercial ATC service prior to meeting the gating criteria and complying with MSS implementation milestones."[9]

For decades, the Commission has granted similar conditional authorizations to licensees in various communications services without problems, confusion or abuse by licensed spectrum users. Indeed, the Commission acknowledges that it foresees no possibility of confusion about the restrictions being placed on conditional ATC authorizations;[10] it similarly fails to identify any reason why MSS licensees might be expected to abuse their conditional ATC authorizations.[11]

Notwithstanding the absence of any problem or identifiable concern regarding the conditional ATC authorization process adopted in the *Flexibility Order*, the Commission decided *sua sponte* to drastically alter the ATC application process. Under the Commission's new approach, MSS operators will still be permitted to file applications for ATC authority prior to meeting all of their gating requirements. The Commission will no longer grant ATC authorizations, however, until a MSS operator has demonstrated "that it has, in fact, met all of the gating criteria."[12]

The Commission's claimed justifications for this radical change are that it "would be easier for the Commission to administer and would provide greater clarity regarding when an MSS operator seeking to provide ATC can engage [in] commercial operation."[13]

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[9] *Order*, ¶ 2 (*citing Flexibility Order*, ¶ 3).

[10] *See supra* note 5.

[11] *See supra* note 6.

[12] *Order*, ¶ 13, *see also id.*, ¶¶ 2, 10, 11 & 12; 47 C.F.R. § 25.149(e).

[13] *Id.*, ¶ 10.

Contrary to the Commission's claims, its new approach will *not* provide greater clarity regarding the point at which an MSS operator seeking to provide ATC can engage in commercial operations. Rather, the Commission's revised approach will inject substantial uncertainty into the process and timing for incorporating an ATC component into a MSS network. Such uncertainty will dramatically escalate the business risks for MSS licensees, making it increasingly difficult for licensees (particularly those that are publicly held corporations) to justify the tremendous costs of constructing and launching MSS networks without knowing when they will be permitted to provide integrated MSS ATC services to consumers.

In order to achieve the Commission's goal of "greater clarity regarding when a MSS operator seeking to provide ATC can engage [in] commercial operation," two conditions must exist: (1) a clear indication of the requisite event that must precede the provision of services; and (2) a clear indication of the timing of the requisite event. Admittedly, the Commission's new approach provides clarity regarding the event that must precede the provision of ATC services, *i.e.*, a decision approving "the MSS ATC applicant's application."[14] The Commission's new approach, however, creates substantial confusion and uncertainty regarding the timing of that event.

As the Commission is well aware, it is extremely difficult for the Commission to predict and, in many cases, control when an order in a controversial proceeding will be issued. The Commission has a statutory obligation to review and consider the comments and petitions that are filed by interested parties. The Commission must evaluate and resolve each of the issues raised and then transform its determinations into a formal written order. Depending on the number of parties and the complexity of the issues, the process can be lengthy.

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[14] *Id.*, ¶ 10.

The Commission volunteers that it "will *endeavor* to act on each perfected ATC application no longer than 90 days after the relevant ATC applicant actually meets all ATC gating criteria contained in our rules."[15] The Commission understandably refrains from making any guarantees, however, given the difficulties it has experienced concluding contested proceedings on tight deadlines, even when Congress or the Courts have imposed statutory or judicial deadlines.

As a consequence, MSS licensees will be unable to advise potential customers on how many months (or potentially years) will transpire between the time the MSS operator satisfies its gating criteria (which MSS licensees can predict) and the date on which the Commission authorizes the initiation of integrated services (which MSS licensees cannot predict). Few customers would be willing to accept such uncertain service offerings. Given the realities of the current marketplace, the Commission's decision to bar MSS operators from providing integrated services until an authorization order is issued risks killing the very service offerings the Commission has decided to permit.

By contrast, the system adopted in the *Flexibility Order* would enable MSS licensees to control the timing of the start-up of their business by scheduling each of the events that must take place prior to the provision of integrated services to consumers. Thus, a MSS licensee would manage the program schedule including satellite launch and testing-completion dates, the timing for delivery of dual-mode terminals to distributors, the dates that base stations would be activated, and the scheduling for construction of the spare satellite. A licensee could even outline its network roll-out schedule in its application for ATC authority, clearly indicating to the

[15] *Id.*, ¶ 7 n.27 (*emphasis added*).

Commission that, barring any unexpected developments, each of the gating requirements would be satisfied by an identified date, permitting ATC operations to commence on that same date.

The only other reason identified by the Commission for abandoning such a straightforward approach is that its revised system "would be easier for the Commission to administer."[16] The goal of administrative convenience, however, should not be placed ahead of the Commission's statutory obligation to further the public interest, such as by promptly authorizing the efficient use of radio spectrum to provide new services to consumers.

In any event, the Commission's approach *will not* be easier for the Commission to administer. Under the original approach, the Commission simply needed to review a MSS licensee's ATC application (along with any comments or petitions that were filed) and, once the applicant demonstrated a viable approach for meeting each of its gating requirements, issue an ATC authorization expressly conditioned on meeting each of the gating requirements and all other relevant Commission rules.

Under the new approach, the Commission will still accept applications submitted by MSS licensees that have not yet met each of the gating requirements.[17] The Commission, however, will thereafter have to review additional materials subsequently filed by MSS licensees demonstrating that they have met each of the gating requirements. Many applicants may also choose to request antecedent declaratory rulings that their proposed service offerings truly are "integrated" prior to filing full ATC applications.[18]

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[16] *Id.*, ¶ 10.

[17] *See id.*, ¶ 9.

[18] *See id.*, ¶ 12.

The multiple filings by MSS applicants will inevitably be followed by numerous pleadings from opponents of the MSS industry objecting to each incremental submission by MSS licensees in the ATC application process. The Commission will likely receive an initial round of comments and petitions in response to any public notice that is issued regarding an ATC application. A separate round of public comments may also be necessary for any declaratory ruling requested by a MSS licensee prior to filing its underlying ATC application.

As a result, the Commission will be forced to sort through numerous pleadings and repeated rounds of public comment addressing issues that the Commission has acknowledged "could be complex and time consuming."[19] Far from being "easier for the Commission to administer," the Commission's new approach is likely to consume scarce administrative resources and will likely result in regulatory gridlock. At the same time, the Commission will be faced with its own goal of endeavoring to act on perfected ATC applications no longer than 90 days after a MSS licensee satisfies all of its gating requirements.[20] The resulting pressure to move quickly will create a poor environment for well-reasoned decisionmaking.

The Commission should therefore avoid the significant burden and delay that its revised approach will create for its staff, MSS licensees and, most importantly, consumers. Consistent with its goal of promoting the public interest and administrative efficiency, the Commission should reinstate its previously adopted system of issuing ATC authorizations conditioned on *ex ante* satisfaction of a MSS licensee's milestones and gating requirements and all other applicable Commission rules.

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[19] *Id.*, ¶ 2.

[20] *See id.*

## III. IF THE COMMISSION DOES NOT REINSTATE ITS ORIGINAL ATC APPLICATION APPROVAL PROCESS, THE COMMISSION SHOULD ADOPT AN APPLICATION PROCESSING APPROACH FOR NON-OPERATIONAL MSS NETWORKS THAT IS COMPARABLE TO ITS APPROACH FOR OPERATIONAL MSS NETWORKS

In apparent recognition of the cumbersome nature of the ATC application process adopted by the *Order*, the Commission developed a streamlined approach for MSS licensees with commercially operational satellite networks. Under this more efficient approach, the Commission will grant ATC authority to a MSS licensee that makes a "satisfactory, prospective, substantial showing" that its planned ATC services will meet its integrated service and "in-band operation" gating requirements, as long as the MSS licensee is in actual compliance with its geographic and temporal coverage, replacement satellite and commercial service gating requirements.[21]

The Commission has not identified any reasons why operational MSS networks should benefit from the use of a streamlined approval process while non-operational MSS networks must follow a more cumbersome and time-consuming application process. The Commission should therefore employ parity in licensing by adopting an ATC approval approach for non-operational MSS licensees that is comparable to the streamlined approach for operational MSS networks.

Absent such parity, non-operational MSS licensees will be handicapped with two sources of delay: (1) the necessary time to construct and launch its satellite communications network and (2) the additional delay of securing authority from the Commission to provide integrated MSS ATC services. The Commission can and should permit MSS licensees to avoid this second source of delay by granting ATC authorization to non-operational MSS licensees shortly before

[21] 47 C.F.R. § 25.149(f).

their networks become operational, expressly conditioned on coming into actual compliance with each of its Section 25.149(b) gating requirements prior to providing ATC services.

Pursuant to such an approach, instead of requiring a MSS licensee to be in *actual compliance* with Sections 25.149(b)(1), (b)(2) and (b)(3) of the Commission's rules, the Commission should amend Section 25.149(f) so that it is applicable to MSS licensees that can demonstrate that, in less than a year, they *will be* in actual compliance with Sections 25.149(b)(1), (b)(2) and (b)(3) of the Commission's rules. Once a MSS licensee satisfies the specific requirements of Section 25.149(f) (*i.e.*, once it makes a satisfactory, prospective and substantial showing that its ATC service will satisfy Sections 25.149(b)(4) and (b)(5) of the Commission's rules), the Commission should grant ATC authorization expressly conditioned on the licensee first coming into *actual compliance* with Sections 25.149(b)(1), (b)(2) and (b)(3).

### A. Non-Operational MSS Licensees Should be Permitted to Demonstrate That They Soon Will Be in Actual Compliance With Their Geographic and Temporal Coverage Requirements

It would be relatively easy for the Commission to administer an approach that permitted non-operational MSS network operators to secure ATC authority using Section 25.149(f) of the Commission's rules. For example, in order to determine whether a MSS licensee likely soon will be in actual compliance with Section 25.149(b)(1) (Geographic and Temporal Coverage), the Commission could review the licensee's predicted spacecraft antenna gain contours, which must already be supplied to the Commission pursuant to Section 25.114(c)(7) of its rules.

Predicted spacecraft antenna gain contours provide the best indication of whether a MSS network will satisfy its geographic and temporal coverage requirements. Modern MSS spacecraft, such as the one designed for Boeing's network, use digital techniques to electronically form and shape the transmit beams that are produced by the spacecraft antenna.

The predicted spacecraft antenna gain contours are developed using computer simulation programs that replicate the signals that are produced on the satellite. These predicted antenna gain contours therefore provide an accurate and highly accessible indicator of the actual geographic and temporal coverage of the satellite (absent some unforeseen technical anomaly).

The Commission should therefore use the predicted spacecraft antenna gain contours to determine whether a licensee soon will be in actual compliance with Section 25.149(b)(1). The Commission could condition the grant of ATC authority on, *inter alia*, a licensee first coming into *actual* compliance with Section 25.149(b)(1) by successfully launching and bringing into operation its satellite network.

### B. Non-Operational MSS Licensees Should be Permitted to Demonstrate That They Soon Will Be in Actual Compliance With Their Replacement Satellite Obligations

It would also be relatively easy for the Commission to determine whether a MSS licensee soon will be in actual compliance with Section 25.149(b)(2) (Replacement Satellites). By the time that a MSS licensee is nearing the launch date for its satellite network, the licensee will undoubtedly have made contractual arrangements for the construction of its replacement satellite. This will be particularly true for MSS licensees using non-geostationary constellations, which must have an in-orbit spare satellite in place when commercial operations commence.[22]

A MSS licensee should be permitted to demonstrate that it will be in actual compliance with its replacement satellite requirement by supplying the Commission with a copy of the contract, or a certification from the satellite manufacturer, listing the scheduled construction completion date. Using this information, the Commission could conclude that the licensee likely soon will be in actual compliance with Section 25.149(b)(2), in the same way that the

[22] *See* 47 C.F.R. § 25.149(b)(2)(i).

Commission currently uses satellite contracts and certificates from manufacturers to determine whether a licensee is in compliance with its spacecraft construction milestone.[23] The Commission could further condition the grant of ATC authority on, *inter alia*, a licensee coming into actual compliance with Section 25.149(b)(2) by the required deadline for a GSO or NGSO satellite network.

### C. Non-Operational MSS Licensees Should be Permitted to Demonstrate That They Will Provide Commercially Available MSS

Finally, it would be relatively straightforward for the Commission to determine whether a MSS licensee likely soon will be in actual compliance with Section 25.149(b)(3) (Commercial Availability). By the time that a MSS licensee is nearing the launch date for its satellite network, the licensee will likely have entered into contracts for the design, assembly and distribution of user terminals, including both satellite-only terminals and integrated MSS ATC terminals. The MSS licensee will also likely have entered into contracts with one or more large customers for the provision of satellite-only and/or integrated MSS ATC services.

A MSS licensee should be permitted to demonstrate that it soon will be in actual compliance with its commercial availability requirement by providing the Commission with letters from some of its user terminal suppliers, or from customers that have contracted for the provision of satellite and/or integrated services. Using this information, the Commission could confirm that the licensee should be in actual compliance with Section 25.149(b)(3) once its satellite network is placed into operation. The Commission could condition the grant of ATC authority on, *inter alia*, a licensee first coming into actual compliance with Section 25.149(b)(2)

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[23] *See* 47 C.F.R. § 25.164.

by making its satellite services commercially available to consumers throughout the licensee's geographic coverage area.

In summary, Section 25.149(f) of the Commission's rules should be modified to apply to all MSS licensees, not just those with pre-existing satellite networks. Such an approach would provide regulatory parity for MSS licensees and would avoid unnecessary regulatory delays in the provision of integrated MSS ATC services to customers.

## IV. IF THE COMMISSION DECLINES TO ALTER ITS ATC APPROVAL PROCESS, THE COMMISSION SHOULD CLARIFY HOW MSS LICENSEES CAN DEMONSTRATE THAT THEY HAVE SATISFIED EACH OF THEIR GATING REQUIREMENTS

The Commission repeatedly states in its *Order* that it "will not grant ATC authority until the applicant has demonstrated that it has actually satisfied each of the gating criteria."[24] The Commission even codified this obligation in a new Section 25.149(e).[25] As explained above, the public interest would be best served by reinstating the approval process adopted in the *Flexibility Order* and thereby avoiding the unnecessary delay and administrative burden that the new system will create. If the Commission declines to alter its approach, however, Boeing urges the Commission to clarify how MSS licensees can "demonstrate" that they have satisfied the specific gating requirements of Section 25.149(b).[26] The gating requirements direct a MSS licensee to "demonstrate" that it has complied with its obligations for geographic and temporal coverage, replacement satellites, commercial availability, integrated services and in-band operations. As

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[24] *Order*, ¶ 7, *see also id.*, ¶¶ 10, 11, 12 & 13 (finding that "the public interest will best be served by not granting an MSS operator's ATC application until we are satisfied that the MSS operator is in compliance with each of the gating criteria").

[25] *See* 47 C.F.R. § 25.149(e).

[26] *See id.*

discussed below, it may be difficult, if not impossible, for a MSS licensee to "demonstrate" that it has fulfilled some of these requirements concurrently with, or immediately after, it brings its MSS network into commercial operation.

### A. The Commission Should Clarify that a Licensee's Predicted Spacecraft Antenna Gain Contours Provide the Most Accurate Demonstration of the Geographic and Temporal Coverage of a Satellite Absent a Technical Anomaly

Section 25.149(b)(1) of the Commission's rules requires a MSS licensee seeking ATC authority to demonstrate that its MSS network complies with the geographic and temporal coverage requirements for the particular MSS service in question (*i.e.*, L-band, Big LEO or 2 GHz MSS). As discussed in the previous section of this petition, the best way to determine whether a MSS network complies with its geographic and temporal coverage requirements is using the predicted spacecraft antenna gain contours for the satellite.

Boeing therefore urges the Commission to clarify that MSS licensees may use their predicted spacecraft antenna gain contours to demonstrate that, absent a technical anomaly, the satellite network satisfies the geographic and temporal coverage requirements of Section 25.149(b)(1). The MSS licensee should be required to disclose to the Commission any technical anomalies that are subsequently discovered in the performance of the satellite to the extent that the anomalies cause the geographic and temporal coverage of the satellite to deviate appreciably from the predicted levels. Such a requirement would be similar to Section 25.149(b)(2)(iii) of the Commission's rules, which requires MSS operators to report to the Commission anomalies that may require satellite replacement. Such a demonstration, coupled with a reporting requirement for technical anomalies, would enable the Commission to ensure that MSS licensees provide integrated MSS ATC services in full compliance with their geographic and temporal coverage obligations.

### B. The Commission Should Clarify That a Licensee Can Satisfy its Replacement Satellite Gating Requirement for a GSO Network Using a Contractual Agreement for the Construction of a Replacement Satellite

Section 25.149(b)(2) of the Commission's rules requires MSS licensees to "demonstrate that the applicant does *or will comply*" with its requirement to maintain a replacement satellite.[27] As noted above, however, Section 25.149(e) clearly states that the Commission will not grant ATC authority "until the applicant has demonstrated *actual compliance*" with its gating criteria.[28]

It may be difficult for a MSS licensee using a GSO network to demonstrate that it has actually satisfied its replacement satellite gating requirement at the time that its network becomes operational and the licensee begins providing MSS to the public. This is because Section 25.149(b)(2)(ii) of the Commission's rules permits GSO MSS network operators to maintain a spare satellite on the ground "within one year of commercial operations."[29]

The Commission's decision to give MSS operators using GSO networks up to a year to construct a replacement satellite appropriately acknowledges that satellite manufacturers generally stagger spacecraft construction schedules in order to make most efficient use of their manpower and facilities. As a consequence, a satellite operator may not be able to demonstrate that it has satisfied its replacement satellite gating requirement concurrently with the start of commercial operations, even though it would be in compliance with the intent of the milestone, owing to the construction in progress.

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[27] 47 C.F.R. § 25.149(b)(2) (*emphasis added*).

[28] 47 C.F.R. § 25.149(e); *see also Order*, ¶ 7 (stating that a MSS licensee must demonstrate that it has "actually satisfied" each of its gating requirements), *see also id.*, ¶¶ 10, 11, 12 & 13.

[29] 47 C.F.R. § 25.149(b)(2)(ii).

In order to resolve this conflict in the rules, the Commission should acknowledge that a MSS licensee may demonstrate compliance with its replacement satellite gating requirement at the time that it requests ATC authority from the Commission by showing that it has made arrangements for the construction of a replacement satellite, such as through the execution of a non-contingent satellite manufacturing contract. The Commission could grant ATC authority conditioned on the completion of construction of the replacement satellite within the one-year deadline.

No risk exists that a satellite licensee might abuse such a conditional approach. A satellite operator that has already invested in a MSS satellite and supporting ground network will have every incentive to complete the construction of its replacement satellite in conformance with the required schedule. A licensee's failure to satisfy such a requirement would place at risk the operator's ATC authority, potentially undermining the business case for the operator's entire network.

### C. The Commission Should Clarify That a Licensee Can Demonstrate MSS Commercial Availability Using Contracts With Suppliers of User Terminals or Letters From Confirmed Customers

Section 25.149(b)(3) of the Commission's rules requires MSS licensees to demonstrate that their MSS services are commercially available in accordance with the geographic coverage requirements for its particular MSS service. As explained above, by the time that a MSS licensee submits an application to the Commission for ATC authority, the MSS licensee will likely have already entered into contracts for the design, assembly and distribution of user terminals. The MSS licensee will also likely have entered into contracts with one or more large customers for the provision of satellite-only and/or integrated MSS ATC services once the network is operational.

The Commission should therefore clarify that a MSS licensee can demonstrate that it has satisfied its commercial availability requirement either by providing the Commission with letters from its suppliers of user terminals, or from customers that have contracted for the provision of satellite and/or integrated services. Based on such letters, the Commission could conclude that, once its satellite network is operational, the licensee will have met its obligations under Section 25.149(b)(3) and is therefore eligible to provide integrated MSS ATC services.

### D. The Commission Should Clarify That a Licensee Can Demonstrate Compliance With the In-band Operation Requirement Using a Certificate of Compliance

In addition to the Commission's other gating requirements for MSS licensees seeking ATC authority, Section 25.149(b)(5) of the Commission's rules requires 2 GHz MSS licensees to demonstrate "that the applicant does or will comply" with the requirement that its MSS ATC operations will be limited to the licensee's selected spectrum assignment.[30] Other Commission rules, however, do not permit 2 GHz MSS licensees to identify their selected spectrum assignments until their first satellite reaches its intended orbit.[31] By that time, most 2 GHz MSS licensees will have already designed and contracted for the assembly of integrated MSS ATC user terminals. As a practical matter, this means that MSS licensees will probably have designed their user terminals to be tunable across all or most of the available 2 GHz MSS band. Such an approach would be consistent with the design of 2 GHz MSS spacecraft, which, as required by

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[30] 47 C.F.R. § 25.149(b).

[31] *See Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, Report and Order, FCC 00-302, ¶ 16 (Aug. 25, 2000).

the Commission, must be capable of operating over at least 70 percent of the 2 GHz MSS service link bands.[32]

In light of the flexible capabilities that are likely to be built into integrated MSS ATC terminals, the Commission should permit 2 GHz MSS licensees to demonstrate compliance with Section 25.149(b)(5) by providing an executed certificate to the Commission attesting that the licensee's ATC transmissions will be limited solely to the licensee's selected spectrum assignment. Such certificates should be adequate to demonstrate compliance with the Commission's "in-band operation" gating requirement, particularly since any violation of the Commission's rules for integrated MSS ATC operations may result in fines, other penalties and the potential loss of a licensee's ATC and/or MSS authority.

## V. CONCLUSION

For the reasons set forth above, the Commission should reconsider its decision to alter significantly the application approval process for MSS ATC services. As the Commission acknowledges, the new approach will introduce additional regulatory delay in the provision of new communications services to consumers. At the same time, the new approach will be more difficult for the Commission to administer and will increase uncertainty for MSS licensees. As a result, the new approach will increase further the likelihood that some MSS networks may never be constructed, potentially preventing the introduction of new services to consumers.

If the Commission declines to reconsider its changes to the ATC approval process, the Commission should nonetheless clarify the significant ambiguities and resolve the conflicts that have been introduced into its rules. Absent such changes, it will be needlessly difficult for MSS

[32] *See id.*, ¶ 52 (imposing this requirement in order to address coordination and band arrangement contingencies).

licensees to make the demonstrations necessary to secure authority from the Commission to provide integrated MSS ATC services to the public.

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