

December 23, 2005

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**Via Hand Delivery**  
Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

DEC 23 2005

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

**Re: Hughes Network Systems Sub, LLC; Call Sign WD2XJU; File No. 0137-EX-ML-2005  
Aeronautical Radio Inc.; File No. 0327-EX-PL-2005**

Dear Ms. Dortch:

On November 28, 2005, Mobile Satellites Ventures Subsidiary LLC ("MSV") submitted letters in the above-captioned proceedings urging the Commission to condition grant of the above-captioned applications on (i) use of only Inmarsat-3 satellites; and (ii) use of only those frequencies that were coordinated for Inmarsat Ventures Ltd. ("Inmarsat") under the spectrum sharing arrangement negotiated in 1999 among the North American L band operators, exclusive of frequencies that were temporarily loaned but subsequently recalled by the lenders.<sup>1</sup> MSV explained that it is concerned that use of uncoordinated Inmarsat satellites may result in harmful interference and jeopardize the coordination process.

To date, MSV has not been served with a response from either Hughes or Aeronautical Radio. Inmarsat submitted a response on December 13<sup>th</sup> in which it attached an opposition to an MSV filing submitted in a related proceeding.<sup>2</sup> MSV hereby submits its Reply to this Inmarsat filing which fully addresses and refutes Inmarsat's claims.

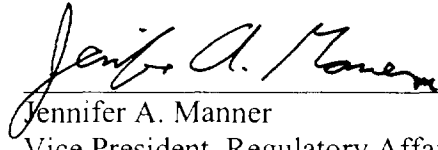
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<sup>1</sup> See Letter from Jennifer A. Manner, MSV, to Ms. Marlene H. Dortch, FCC, File No. 0137-EX-ML-2005 (November 28, 2005); Letter from Jennifer A. Manner, MSV, to Ms. Marlene H. Dortch, FCC, File No. 0327-EX-PL-2005 (November 28, 2005).

<sup>2</sup> See Letter from John P. Janka, Counsel to Inmarsat, to Ms. Marlene H. Dortch, FCC, File Nos. 0137-EX-ML-2005; 0327-EX-PL-2005 (December 13, 2005).

Please contact the undersigned with any questions.

Very truly yours,

A handwritten signature in cursive script, reading "Jennifer A. Manner", is positioned above a horizontal line.

Jennifer A. Manner  
Vice President, Regulatory Affairs  
**MOBILE SATELLITE VENTURES  
SUBSIDIARY LLC**  
10802 Parkridge Boulevard  
Reston, Virginia 20191  
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**Exhibit A**

Mobile Satellite Ventures Subsidiary LLC, Consolidated Reply to Oppositions, File Nos. SES-LFS-20050930-01352, SES-AMD-20051111-01564, ITC-214-20051005-00395 (December 19, 2005)



RECEIPT COPY

Jennifer A. Manner  
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December 19, 2005

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DEC 19 2005

Federal Communications Commission  
Office of Secretary

**Via Hand Delivery**  
Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

**Re: Reply of Mobile Satellites Ventures Subsidiary LLC to Oppositions to MSV's  
Petition to Hold in Abeyance or to Grant with Conditions Application of  
Telenor Satellite, Inc.  
File No. SES-LFS-20050930-01352  
File No. SES-AMD-20051111-01564  
File No. ITC-214-20051005-00395**

Dear Ms. Dortch:

Mobile Satellites Ventures Subsidiary LLC ("MSV") hereby files this redacted public version of a Reply to the Oppositions of Telenor Satellite, Inc. ("Telenor") and Inmarsat Ventures Limited to MSV's Petition to Hold in Abeyance or to Grant with Conditions the above-referenced applications of Telenor for Title III and Section 214 authorizations to operate terminals in the United States with an uncoordinated Inmarsat-4 L band satellite.<sup>1</sup> As discussed herein, certain information provided in the Petition should be treated as confidential.<sup>2</sup>

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<sup>1</sup> See Telenor Satellite, Inc., Application for Title III Blanket License, File No. SES-LFS-20050930-01352 (September 30, 2005); Telenor Satellite, Inc., Amendment, File No. SES-AMD-20051111-01564 (November 11, 2005); Telenor Satellite, Inc., Application for Section 214 Authorization, File No. ITC-214-20051005-00395 (August 26, 2005).

<sup>2</sup> 47 C.F.R. § 0.459(b).

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**47 C.F.R. § 0.459(b)(1) -- Identification of the specific information for which confidential treatment is sought**

MSV requests confidential treatment of information relating to the *Mexico City Memorandum of Understanding* and the on-going international L band frequency coordination process which is confidential to the parties to that coordination, which includes the Commission and MSV.<sup>3</sup> When considering other applications to use Inmarsat satellites in the United States, the Commission has acknowledged the confidentiality of this information and has afforded it confidential treatment.<sup>4</sup>

**47 C.F.R. § 0.459(b)(2) -- Identification of the Commission proceeding in which the information was submitted or a description of the circumstances giving rise to the submission**

This information is being filed in MSV's Reply to Oppositions to MSV's Petition to Hold in Abeyance or to Grant with Conditions the above-referenced Telenor applications.

**47 C.F.R. § 0.459(b)(3) -- Explanation of the degree to which the information is commercial or financial, or contains a trade secret or is privileged**

As the Commission has acknowledged, the *Mexico City Memorandum of Understanding* and related coordination documents are confidential.<sup>5</sup>

**47 C.F.R. § 0.459(b)(4) -- Explanation of the degree to which the information concerns a service that is subject to competition**

The information contained herein concerns the market for wireless services, in which MSV faces competition from other MSS providers as well as from terrestrial wireless operators.

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<sup>3</sup> See *Memorandum of Understanding for the Intersystem Coordination of Certain Geostationary Mobile Satellite Systems Operating in the Bands 1525-1544/1545-1559 MHz and 1626.5-1646.5/1646.5-1660.5 MHz*, Mexico City, Mexico, 18 June 1996.

<sup>4</sup> See *COMSAT Corporation et. al., Memorandum Opinion, Order and Authorization*, 16 FCC Rcd 21661, ¶¶ 111 (2001) ("*COMSAT Order*") ("The Mexico City Agreement and related coordination documents, such as minutes of coordination meetings, are considered confidential.").

<sup>5</sup> *Id.*

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- 47 C.F.R. § 0.459(b)(5) -- Explanation of how disclosure of the information could result in substantial competitive harm**

Disclosure of the information for which confidential treatment is sought would result in violation of the *Mexico City Memorandum of Understanding*.

- 47 C.F.R. § 0.459(b)(6) -- Identification of any measures taken by the submitting party to prevent unauthorized disclosure**

Disclosure to third parties of the information for which confidential treatment is sought has been pursuant to non-disclosure agreements.

- 47 C.F.R. § 0.459(b)(7) -- Identification of whether the information is available to the public and the extent of any previous disclosure of the information to third parties**

The information for which confidential treatment is sought is not publicly available. Disclosure to third parties of the information for which confidential treatment is sought has been strictly pursuant to non-disclosure agreements.

- 47 C.F.R. § 0.459(b)(8) -- Justification of the period during which the submitting party asserts that material should not be available for public disclosure**

The information for which confidential treatment is sought should remain confidential indefinitely or until the parties to the *Mexico City Memorandum of Understanding* agree that it can be made publicly available.

- 47 C.F.R. § 0.459(b)(9) -- Any other information that the party seeking confidential treatment believes may be useful in assessing whether its request for confidentiality should be granted**


N/A.

Ms. Marlene H. Dortch  
December 19, 2005  
Page 4

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Please contact the undersigned with any questions.

Very truly yours,



Jennifer A. Manner

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

In the matter of	)	
	)	
Telenor Satellite, Inc.	)	File No. SES-LFS-20050930-01352
Application for Title III Blanket License	)	File No. SES-AMD-20051111-01564
to Operate Mobile Earth Terminals with	)	
Inmarsat 4F2 at 52.75°W	)	
	)	
Telenor Satellite, Inc.	)	File No. ITC-214-20051005-00395
Application for Section 214 Authorization	)	
to Operate Mobile Earth Terminals with	)	
Inmarsat 4F2 at 52.75°W	)	

CONSOLIDATED REPLY TO OPPOSITIONS

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December 19, 2005



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**Summary**

MSV's Petition demonstrated that a grant of this application will result in harmful interference in the L band. The responses to MSV's Petition have done nothing to alleviate this fundamental concern. Indeed, the theme of the responses is "trust us" and "blame MSV" rather than an objective technical showing as to how interference will be avoided with the new, uncoordinated operations. With respect to each of the three specific concerns MSV described in its Petition, the record continues to provide compelling evidence either that harmful interference will definitely occur or cannot reasonably be expected to be avoided in advance of a coordination agreement covering Inmarsat's new satellite and services.

*Inmarsat's continued use of spectrum that it agreed to return to MSV and MSV Canada.*

MSV demonstrated that Inmarsat's current operations on disputed spectrum are blocking MSV's operations *today* and that grant of the instant application, to the extent it authorizes Inmarsat operations on the disputed spectrum, would do the same. The cavalier responses of Inmarsat and the applicant are that any new operations will not change anything, since Inmarsat's existing operations already block MSV. To the contrary, operation of yet another uncoordinated Inmarsat satellite on these disputed frequencies will only compound the existing problem.

*Inmarsat's new satellite and new services are technically different from the satellites and services Inmarsat has coordinated previously.* MSV's Petition described what is obvious, that Inmarsat's new satellite and new services have different technical characteristics than those Inmarsat has coordinated previously, they have not been coordinated, and their uncoordinated operation likely will result in harmful interference. Inmarsat provides only the most superficial response, one which fails to address all the relevant characteristics of its proposed operations and which disingenuously mentions that Inmarsat "might" limit its operations, without describing or committing to any such limits. Moreover, how and why Inmarsat would use its new satellite and

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provide new services without taking advantage of the new satellite's higher power and narrower spot beams begs credibility and is never explained.

*Inmarsat claims the right to operate throughout the entire MSS L band.* MSV's Petition questioned how Inmarsat could commit to operate without causing harmful interference when it is simultaneously claiming the right to operate throughout the band without any clear limitation. In effect, Inmarsat is saying that without any "rules of the road" it can operate anywhere it chooses without causing a collision. This is an extraordinarily arrogant assertion for Inmarsat to make. In a congested L band, where there are already disputes that are preventing MSV from using its licensed spectrum in order to avoid interference to Inmarsat customers, Inmarsat's claim is particularly self-serving and outrageous. Inmarsat's response persists in failing to identify any rules of the road it will obey in order to effectively preclude harmful interference. As evidenced by its continued claim to be entitled to use the disputed spectrum, its ongoing use of global beams and older satellites that themselves have not been coordinated, and its plan to use the new satellites not to replace the older satellites but to supplement them, it would be unreasonable to expect that Inmarsat can and will operate its new satellite in a manner that does not lead to harmful interference.

The Commission's most important role is that of spectrum "traffic cop," enforcing reasonable rules of the road, in this case that new L band satellites and services must be coordinated before they are permitted to provide United States service. Such enforcement is entirely within its authority under the *WTO Basic Telecom Agreement* and *DISCO II* principles, and is consistent with its action in at least one other case, involving PanAmSat, in which there was a reasonable concern that authorizing use of an uncoordinated satellite would increase potential harmful interference. MSV cited the PanAmSat case in its Petition, but Inmarsat and

the applicant chose to ignore it. Enforcing reasonable rules of the road is also consistent with previous Bureau decisions to permit the use of foreign-licensed L band satellites. In those cases, the satellites in question had completed the ITU coordination process, the operators had mutually committed to using specific frequencies and other operating parameters that would prevent harmful interference, and the terms of their earth station licenses limited them to those operating parameters. In contrast, the new Inmarsat satellite and services have never been coordinated, Inmarsat claims the right to operate throughout the band, and the applicant seeks a license that is similarly unlimited. Inmarsat also fails completely to respond to any of the several reasons MSV provided for why Inmarsat's new satellite is not a "replacement" satellite under the *Mexico City MoU* and is thus not entitled to be treated as coordinated.

Inmarsat claims that MSV has been "vetoing" coordination agreements since 1999 and is fabricating interference concerns in an effort to keep Inmarsat from competing in the United States market, and that the solution to MSV's perceived problem is for MSV to agree to renewed multilateral meetings with Canadian, Mexican, and Russian operators. In fact, the break down in coordination talks in 1999 was largely the result of Inmarsat's failure

**REDACTED**, in particular MSV's need for sufficient spectrum to serve several large wholesale customers, and reduce its use of spectrum inefficient global beams. It is MSV, not Inmarsat, that has been proactive in trying to advance the coordination process. MSV and MSV Canada are in the process of constructing satellites that will provide more than 280 spot beams over the United States, enabling much higher capacity broadband services to smaller and less expensive user devices than Inmarsat's system can provide. It is Inmarsat that has blocked MSV's efforts to develop its system, presumably because it has only recently invested over \$1.5 billion in three Inmarsat-4 satellites

that have insufficient power to provide service to the kind of small, handheld user devices that can be served by the new satellites being built for MSV and MSV Canada. Moreover, Inmarsat's new satellite is capable of providing no more than a dozen spot beams over the United States from its orbit location over the Atlantic Ocean. Inmarsat thus has every incentive to take an anti-competitive position and continue to impede MSV's ability to gain stable, interference-free access to the spectrum needed for MSV's new system. It is Inmarsat that has breached the trust required for coordination, by refusing to recognize **REDACTED**, adding more satellites with inefficient global beams, causing unnecessary delay to the Commission's approval of ATC, refusing to return the spectrum it borrowed from MSV and MSV Canada, and, more recently, by refusing to negotiate for stable access to spectrum reconfigured into wider and more contiguous blocks consistent with the Commission's goal of promoting efficient use of spectrum.

Judging from its response, Inmarsat's current strategy is to cynically hold public safety hostage to its failure to coordinate its new satellite, similar to the approach Inmarsat has taken regarding its continued use of disputed spectrum. Instead of giving in to these demands, the Bureau should put the responsibility where it belongs--on Inmarsat--to make a sincere and concerted effort to coordinate all of its existing and planned L band satellites and services with those operating and planned by the other North American L band operators. Such an effort, to which MSV is committed, can be completed in a few months and is the only way to produce long-lasting, positive results for public safety and others.

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

In the matter of	)	
	)	
Telenor Satellite, Inc.	)	File No. SES-LFS-20050930-01352
Application for Title III Blanket License	)	File No. SES-AMD-20051111-01564
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Inmarsat 4F2 at 52.75°W	)	
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Telenor Satellite, Inc.	)	File No. ITC-214-20051005-00395
Application for Section 214 Authorization	)	
to Operate Mobile Earth Terminals with	)	
Inmarsat 4F2 at 52.75°W	)	

CONSOLIDATED REPLY TO OPPOSITIONS

Mobile Satellite Ventures Subsidiary LLC (“MSV”) hereby files this Consolidated Reply to the Oppositions filed by Telenor Satellite, Inc. (“Telenor”) and Inmarsat Ventures Limited (“Inmarsat”) to MSV’s Petition to Hold in Abeyance or to Grant with Conditions the above-referenced applications to operate earth stations with an uncoordinated Inmarsat-4 L band satellite.<sup>1</sup> By holding the Telenor applications in abeyance until the conclusion of a coordination

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<sup>1</sup> In the above-referenced applications, Telenor is seeking Title III and Section 214 authorizations to operate Broadband Global Area Network (“BGAN”) terminals in the United States with an uncoordinated Inmarsat-4 satellite located at 52.75°W (called “Inmarsat 4F2”). *See* Telenor Satellite, Inc., Application for Title III Blanket License, File No. SES-LFS-20050930-01352 (September 30, 2005) (“*Telenor Title III Application*”); Telenor Satellite, Inc., Amendment, File No. SES-AMD-20051111-01564 (November 11, 2005); Telenor Satellite, Inc., Application for Section 214 Authorization, File No. ITC-214-20051005-00395 (August 26, 2005). MSV is not opposed to the Section 214 Application on its own, but only to the extent that it involves the proposed use of the uncoordinated Inmarsat satellite.

In its initial Petition, MSV urged the Bureau, if it did grant the application despite the overwhelming evidence of harmful evidence that will occur, to condition any license on the distributor not using certain disputed frequencies. *See MSV Petition* at 14-17. On further reflection, MSV withdraws this alternative request. In light of the failure of recent efforts by the Bureau and MSV to secure any commitment from Inmarsat to cease operations on the disputed frequencies, MSV is now convinced that it is critical for the Bureau both to deny any authority to use Inmarsat’s new satellite as long as it remains uncoordinated

agreement, the Bureau will be appropriately exercising its spectrum management authority to prevent harmful interference.

**Discussion**

**I. GRANT OF THE APPLICATION WOULD LEAD TO HARMFUL INTERFERENCE**

**A. Inmarsat and Its Distributor Have Failed to Respond to MSV's Showing of Harmful Interference**

As proponents of providing service in the United States with an uncoordinated satellite, the burden falls squarely on Inmarsat and its distributor to demonstrate that Inmarsat can operate its uncoordinated satellite on a non-harmful interference basis. Inmarsat and its distributors have utterly failed to meet this burden. Not only does the Telenor application fail to explain how Inmarsat intends to operate on a non-harmful interference basis, both Inmarsat and Telenor are deafeningly silent in response to the evidence of three separate types of harmful interference that will result both to other L band operators and to Inmarsat from operation of the Inmarsat 4F2 satellite prior to a coordination agreement.<sup>2</sup>

*Interference resulting from Inmarsat's continued use of spectrum that it agreed to return to MSV and MSV Canada.* The first type would result from the use of Inmarsat 4F2 to operate on the frequencies Inmarsat has refused to return to MSV and MSV Canada. *MSV Petition* at 10. Inmarsat's current use of these frequencies prevents MSV and MSV Canada from using those frequencies to test and deploy its new, hybrid system. This is a real, concrete example of interference that is already occurring today. The only response Inmarsat can muster is that this

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and to deny authority for the use of any Inmarsat satellite on the disputed spectrum, not just the new Inmarsat satellite. MSV intends to make this latter request in a filing to be submitted in the near future.

<sup>2</sup> See Mobile Satellite Ventures Subsidiary LLC, Petition to Hold in Abeyance or to Grant with Conditions, File Nos. SES-LFS-20050930-01352, SES-AMD-20051111-01564, ITC-214-20051005-00395 (November 23, 2005) ("*MSV Petition*"), at 7-14.

interference is already happening today, so it should not matter if it continues in the future.<sup>3</sup> This is no response at all. The fact that there is already interference from Inmarsat's operation of its existing satellites does not mean the Commission should authorize the use of still more Inmarsat satellites.<sup>4</sup> Moreover, Inmarsat's claim that MSV can avoid interference by continuing to refrain from using the loaned spectrum avoids the issue entirely, and serves only to highlight Inmarsat's disregard for the consequences of its actions. *Inmarsat Opposition* at 9, 19.

Telenor and Inmarsat do not dispute that Inmarsat presently uses L band frequencies that have been coordinated and assigned for use by MSV and MSV Canada nor do they dispute that Inmarsat will use these frequencies on Inmarsat 4F2; rather, they claim that the Commission has condoned such action by authorizing Inmarsat's existing satellites to operate on every L band frequency.<sup>5</sup> Even if the Commission condoned such operation in the context of requests filed several years ago to use Inmarsat-3 satellites and other foreign-licensed satellites that had completed the coordination process and were in the ITU Master Register, those facts do not apply to the instant application. Moreover, this interpretation of the Commission's order is simply wrong. In the *TMI Order* and *COMSAT Orders*, the Commission authorized earth

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<sup>3</sup> See Inmarsat Ventures Limited, Opposition, File Nos. SES-LFS-20050930-01352, SES-AMD-20051111-01564, ITC-214-20051005-00395 (December 7, 2005) ("*Inmarsat Opposition*"), at 9, 19.

<sup>4</sup> Given Inmarsat's admission that it is using loaned frequencies on its current-generation satellites, the Bureau should act *sua sponte* to clarify that existing L band earth station licensees are not permitted to use loaned but recalled frequencies. *MSV Petition* at 16 n.33.

<sup>5</sup> See Telenor Satellite, Inc., Opposition, File Nos. SES-LFS-20050930-01352, SES-AMD-20051111-01564, ITC-214-20051005-00395 (December 7, 2005) ("*Telenor Opposition*"), at 6; *Inmarsat Opposition* at 12-24 (citing *Applications of SATCOM Systems, Inc., TMI Communications and Company, LP, et al., Order and Authorization*, 14 FCC Rcd 20798 (1999) ("*TMI Order*"), *aff'd sub nom. AMSC Subsidiary Corp. v. FCC*, 216 F.3d 1154 (D.C. Cir. 2000) ("*AMSC*") and *COMSAT Corporation et. al., Memorandum Opinion, Order and Authorization*, 16 FCC Rcd 21661 (2001) ("*COMSAT Order*").



stations to operate with L band satellites subject to two conditions: the Non-Interference Condition<sup>6</sup> and the Spectrum Limitation Condition.<sup>7</sup> The same two conditions have been imposed on earth stations authorized to operate with MSV and MSV Canada as well. See Exhibit A. This has the practical effect of limiting each L band operator to using only those L band frequencies it “coordinated for” its satellites in the 1999 Spectrum Sharing Arrangement (“SSA”).<sup>8</sup>

Inmarsat, however, claims that the Spectrum Limitation Condition only applies when there is a coordination agreement in effect that assigns specific frequencies to specific operators. *Inmarsat Opposition* at 15. The plain language of the Spectrum Limitation Condition, however, reveals that it applies even when there is no such coordination agreement in effect. The *Comsat Order* unambiguously restricts Inmarsat to those portions of the L band coordinated for Inmarsat in the “most recent annual L-Band operator-to-operator agreement.” *COMSAT Order* at ¶ 115(c) (emphasis added). If the Commission had intended to require that the agreement be in effect at the time of the order, the use of the “most recent” modifier would have been unnecessary, since,

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<sup>6</sup> *COMSAT Order* ¶ 115(d) (“[i]n the absence of a continuing annual L-band operator-to-operator coordination agreement, operations of METs in the 1525-1559 and 1626.5-1660.5 MHz bands will be on a non-interference basis until a future operator-to-operator agreement is concluded”); *TMI Order* ¶ 64.

<sup>7</sup> *COMSAT Order* ¶ 115(c) (“[o]perations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordinated for the Inmarsat satellite system in the most recent annual L-Band operator-to-operator agreement”); *TMI Order* ¶ 64.

<sup>8</sup> L band frequencies that have been loaned between L band operators have not been “coordinated for” the borrowing operator. In order to have the right to “loan” frequencies, the lending operator must have “coordinated for” the right to use those frequencies in the first place. Thus, the terms of the *COMSAT Order* and similar decisions licensing L band earth stations only give the lending operator, and not the borrowing operator, the right to use loaned frequencies. The words “coordinated for” as used in the *COMSAT Order* and similar decisions licensing L band earth stations recognize the superior right the lending operator has to use these frequencies and that the lending operator may exercise its right to use the loaned frequencies at some point in the future.

by definition, any effective operator-to-operator agreement would be the “most recent” one. It is also significant that the Commission imposed the Spectrum Limitation Condition in 2001, with the full knowledge that the 1999 SSA – the “most recent” operator-to-operator agreement – had formally expired. In light of this historical context, the interpretation suggested by Inmarsat is illogical, as it would render the Spectrum Limitation Condition a nullity. Inmarsat’s own actions since 1999 demonstrate that it shared the view that the Spectrum Limitation Condition applied even in the absence of a coordination agreement that assigns specific frequencies to specific operators.<sup>9</sup> Moreover, the Commission has repeatedly confirmed that although the 1999 SSA may have formally expired, it continues to effectively govern the operations of L band MSS providers. *See Exhibit B.*<sup>10</sup> Accordingly, Inmarsat cannot legitimately claim that the Commission has endorsed the interference it is causing today and plans to continue to cause in the future.<sup>11</sup>

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<sup>9</sup> *MSV Petition* at 15-16 (noting that Inmarsat’s decision in 2003 to request an additional loan from MSV and MSV Canada is consistent with the Spectrum Limitation Condition, as is its statement in its April 2005 securities filing that “the amount of spectrum available to each operator is currently frozen at the levels agreed in 1999” (citing Inmarsat Global Ltd., Form F-20 (April 29, 2005), at 10 (“*Inmarsat April 2005 Form F-20*”) (available at: <http://www.sec.gov/Archives/edgar/data/1291401/000104746905012474/0001047469-05-012474-index.htm>)).

<sup>10</sup> To support its claim that the Spectrum Limitation Condition only applies when there is a coordination agreement in effect that assigns specific frequencies to specific operators, Inmarsat relies entirely on *dicta* from *AMSC v. FCC* in which the D.C. Circuit stated that the Spectrum Limitation Condition “comes into play, however, only where there is a coordination agreement in effect.” *Inmarsat Opposition* at 15 (citing *AMSC v. FCC*, 216 F.3d at 1158). In fact, this statement was made in the Background section of the opinion in which the court was characterizing the facts of the case as presented by AMSC. *See AMSC v. FCC*, 216 F.3d at 1158 (“If no new coordination agreement was reached, *AMSC argued*, then the new METs would be free to operate anywhere in the Upper L-band, potentially interfering with AMSC’s licensed MSS operations.”) (emphasis added).

<sup>11</sup> Despite Inmarsat’s claim, the issue of use of loaned frequencies is not a private contractual dispute between Inmarsat and MSV. *Inmarsat Opposition* at 10. Moreover, because Inmarsat 4F2 is not a replacement satellite under the *Mexico City MoU*, the *Mexico City MoU* multilateral

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*Interference resulting from technically different of Inmarsat's new satellite and services relative to the satellites and services it has coordinated previously.* The second type of interference results from the technical differences between Inmarsat 4F2 and BGAN services relative to Inmarsat-3 and the services coordinated for operation on Inmarsat-3. MSV has demonstrated that these differences will result in greater interference both to other L band operators and to Inmarsat. *MSV Petition* at 10-13.<sup>12</sup> With respect to interference caused by Inmarsat 4F2 to other L band operators, MSV in its Petition provided evidence that BGAN terminals operating with Inmarsat 4F2 will use wideband carriers that are not contemplated in the *Mexico City MoU* or the subsequent SSAs. *Id.* at 10. Because the North American L band

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dispute resolution process is not applicable to the issue of use of loaned spectrum on Inmarsat 4F2. *Inmarsat Opposition* at 12. Inmarsat's distributors are currently using frequencies in the United States that they are not authorized to use under the terms of their licenses and which Inmarsat now proposes to use on its next-generation satellite. This is a simple case of the Commission enforcing an existing license condition and ensuring that it is obeyed in the future. Inmarsat attempts to mislead the Bureau by claiming that the spectrum it borrowed from MSV and MSV Canada is part of the "overall balance struck" in the 1999 SSA that cannot be undone without fundamentally altering the entire agreement. *Inmarsat Opposition* at 10. In fact, these frequencies were loaned on a temporary basis to meet Inmarsat's short-term, emergency needs. Indeed, Inmarsat complained in the coordination process

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. Inmarsat knew full well that these loans would be recalled at some point and it is unreasonable for Inmarsat to have expected to use these frequencies for the long term.

<sup>12</sup> Inmarsat asserts that the absence of interference to date is sufficient evidence that there will not be interference if the new application is granted. *Inmarsat Opposition* at 20. Given the technically different nature of Inmarsat 4F2 relative to Inmarsat-3 satellites, however, it is entirely irrelevant whether there have been any claims of interference resulting from the operation of Inmarsat-3 satellites. As discussed in MSV's Petition, there are material technical differences between the Inmarsat-3 and the Inmarsat 4F2 satellites and between the old services Inmarsat provides and the new services it has developed that make operation on a non-harmful interference basis far more problematic. Thus, Radio Regulation No. 9.6 *et seq* requires prior coordination of Inmarsat 4F2 and BGAN. In any event, there already has been actual harmful interference resulting from Inmarsat's continued illegal use of loaned frequencies on Inmarsat-3 satellites, which has the effect of precluding MSV and MSV Canada from using spectrum for which they have coordinated.

operators have never coordinated an envelope of frequency assignments, including necessary guard band requirements, within which Inmarsat can operate these wideband carriers, interference will result to other L band operators from operation of Inmarsat 4F2 absent a prior coordination agreement covering the satellite. *Id.* Inmarsat and Telenor appear to concede this point by not offering any substantive response.<sup>13</sup> MSV also explained that the aggregate EIRP of Inmarsat 4F2 is significantly higher than that of Inmarsat-3, raising the potential for increased interference in the downlink to other L band operators. *MSV Petition* at 10-11. Inmarsat's response focuses on individual carriers and avoids addressing the more fundamental concerns MSV raised regarding the overall system's aggregate interference levels. *Inmarsat Opposition* at 21-22. Moreover, the wideband carriers Inmarsat operates today on its existing satellites have never been coordinated, so any commitment to operate within those uncoordinated parameters is no comfort at all.<sup>14</sup> The only defense Inmarsat can muster (without any technical support

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<sup>13</sup> The Telenor application proposes the use of 200 kHz-wide carriers, which are much wider than the carriers that have been coordinated to date among the L band operators. *Telenor Title III Application*, Technical Description at 18 (Table A.10-1) and Form 312, Schedule B. Notably, Inmarsat does not deny that Inmarsat 4F2 will use wideband carriers.

<sup>14</sup>

**REDACTED**

Inmarsat has not yet undertaken this required coordination. Not surprisingly, MSV has suffered non-co-channel interference from Inmarsat's uncoordinated HSD transmissions due to Inmarsat's failure to provide sufficient guard bands with respect to MSV transmissions. BGAN transmissions have substantially wider bandwidth than HSD transmissions; consequently, they pose substantially higher risks of non-co-channel interference than HSD transmissions. In coordination of these MSS wideband carriers, the challenge is to suitably limit this interference risk while minimizing the size and number of guard bands in order to achieve the highest possible spectrum utilization efficiency. Moreover, the necessary guard bands must be equitably accommodated within the operators' frequency assignments. Establishment of the appropriate risk-efficiency balances and equitable placements of guardbands are not matters that should be decided unilaterally by Inmarsat.

Operation of wideband carriers on current-generation satellites is not the only example of operations Inmarsat has failed to coordinate despite its obligation to do so. According to its

whatsoever) is the weak claim that the design of the Inmarsat 4F2 “allows the satellite to be operated” so as to produce “no greater potential for interference” to MSV than that caused by Inmarsat-3. *Inmarsat Opposition* at 18.<sup>15</sup> In other words, under certain circumstances, Inmarsat could operate the Inmarsat 4F2 pursuant to the same exact technical parameters as Inmarsat-3. Inmarsat does not explain how such operation is possible given the technically different nature of the Inmarsat 4F2 relative to the Inmarsat-3 satellites, or how it could provide BGAN service without using the higher-power beams available on Inmarsat 4F2. And, not surprisingly, Inmarsat does not commit to operating exclusively in this manner (which would preclude it from deploying wideband carriers and, thus, from providing BGAN service as it has been described); it only offers this as an example of how it could operate the satellite in theory, not how it will actually operate the satellite. Inmarsat also ignores that its plan is not to operate Inmarsat 4F2 as a replacement to its existing satellites in the region but as a supplement to them, thus creating an undefined but significant amount of additional interference even if it were possible to operate the new satellite in exactly the same way as its existing fleet.

With respect to interference caused to Inmarsat, MSV provided evidence that Inmarsat may suffer significant interference upon operation of its new satellite. *MSV Petition* at 11-12.

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securities filings, Inmarsat also currently operates Inmarsat-2 satellites at 98°W and 142°W, none of which have been coordinated with other North American L band operators. *Inmarsat April 2005 Form F-20* at 39.

<sup>15</sup> Inmarsat also vaguely claims that it “plans” to operate Inmarsat 4F2 “within the technical envelope of the last coordination agreement” and to ensure that “the interference levels MSV receives from Inmarsat 4F2 are no higher than those already agreed for Inmarsat 3.” *Inmarsat Opposition* at 22. Again, Inmarsat does not explain what this means, let alone commit to anything specific, and, in any event, it offers no technical documentation to support its claim. According to the Telenor application, the characteristics of regional beams on an Inmarsat-4 satellite are not identical to those on an Inmarsat-3 satellite, so it is unclear how an Inmarsat-4 satellite might operate in the same technical envelope as an Inmarsat-3 satellite. *Telenor Title III Application*, Technical Description, Section A.3.

Inmarsat has told the Commission numerous times in the ATC rulemaking that the Inmarsat 4F2 satellite is far more susceptible than the Inmarsat-3 satellites to co-channel<sup>16</sup> and adjacent channel interference<sup>17</sup> from the operation of current-generation L band satellite terminals operating with other L band systems. Inmarsat and Telenor are again silent in response to these points. To be sure, Inmarsat's previous statements were made in the course of the ATC proceeding where it was in Inmarsat's best interests to exaggerate its vulnerability to interference so as to preclude MSV from receiving authority for ATC. Now that it is in Inmarsat's best interests to claim that its new satellite can operate on a non-harmful interference basis, Inmarsat not surprisingly tries to hide from its previous statements. But Inmarsat cannot have it both ways. Inmarsat's only defense is the vaguely worded statement that "overall" the sensitivity of Inmarsat 4F2 to interference is "not much different" than it is with Inmarsat-3. *Inmarsat*

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<sup>16</sup> Based on evidence provided by Inmarsat, the Commission has explained that uplink co-channel interference resulting from MSV's current-generation satellite terminals will increase from 58.6%  $\Delta T/T$  to 794.1%  $\Delta T/T$  as Inmarsat transitions from the Inmarsat-3 satellites to the narrow spot beams on the Inmarsat-4 satellites used to support BGAN operations. *See Flexibility for Delivery of Communications by MSS Providers, Report and Order*, IB Docket No. 01-185, 18 FCC Rcd 1962 (February 10, 2003) ("*ATC Order*"), at Appendix C2, Table 2.1.1.C. The Commission's characterization of the interference environment in this section of the *ATC Order* was strictly limited to interference from satellite operations. The Commission's decision to permit operation of an Ancillary Terrestrial Component considered separately the potential impact of such terrestrial operations, concluding that terrestrial operations would be permitted if they added no more than an additional 1%  $\Delta T/T$  to the interference environment of co-channel operations of other, already-coordinated systems. *See Flexibility for Delivery of Communications by MSS Providers, Memorandum Opinion and Order and Second Order and Reconsideration*, IB Docket Nos. 01-185, FCC 05-30 (February 25, 2005) ("*ATC Reconsideration Order*"), ¶¶ 44-45. For uncoordinated systems such as the Inmarsat-4 satellites, the Commission left it to the operators to negotiate a combined interference limit and, in the absence of an agreement, indicated that it would permit a similar one percent additional rise in the noise floor, above whatever level the parties coordinate for satellite operations. *Id.*

<sup>17</sup> Inmarsat has claimed in another proceeding that the Inmarsat 4F2 satellite has not been designed to accommodate the level of adjacent band interference that can exist from operation of current L band systems based on the system parameters contemplated when Inmarsat-3 was coordinated. *See Inmarsat Ventures Ltd, Petition for Partial Reconsideration and Clarification*, IB Docket No. 01-185 (May 13, 2005) ("*Inmarsat Petition*"), at 9.

*Opposition* at 22. Not only does this statement directly contradict what Inmarsat told the Commission previously in the ATC proceeding, it should also fail to instill confidence in the Bureau that Inmarsat will not be back to the Commission in the near future complaining that MSV's operations are causing interference to its customers.

*Interference resulting from Inmarsat's proposal to operate throughout the entire MSS L band.* The third, and perhaps most troubling, type of interference results from Inmarsat's claim to be entitled to use any and all L band frequencies, subject only to an empty commitment to do so on a "non-harmful interference basis." *MSV Petition* at 12-13. Inmarsat and Telenor once again fail to even try to explain how this will be accomplished despite the existing interference in the band, the new technical characteristics of the proposed operations, and the contention among the operators regarding their need for additional spectrum. There is nothing in the Telenor application that contains any of the limits that would typically be negotiated in a coordination process to prevent interference. Inmarsat states in passing that it has never claimed that it will increase the amount of L band spectrum it uses once the Bureau authorizes Inmarsat 4F2, *Inmarsat Opposition* at 20, but such a statement is neither a denial that it will do so nor a commitment not to do so, and it certainly is not sufficiently detailed to provide any basis for concluding that it is meaningful in terms of preventing harmful interference. Again, in light of Inmarsat's past conduct and its refusal to be limited to the spectrum it coordinated in the 1999 SSA, its new statement is at best confusing and at worst disingenuous.

**B. Inmarsat and its Distributor Have Not Shown Any Precedent to Support Their Position**

Despite Inmarsat's claim to the contrary, Commission precedent does not establish an unequivocal right to operate an uncoordinated satellite in the United States on a non-harmful

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interference basis.<sup>18</sup> As the Bureau demonstrated in the *PanAmSat Order*, it will not license an uncoordinated satellite if there is evidence that interference will result.<sup>19</sup> In that case, the Bureau refused to permit the satellite to operate until after a coordination agreement had been reached with affected operators. The same facts are presented here by the proposed operation of the Inmarsat 4F2 satellite to provide BGAN services. In their replies, Inmarsat and Telenor fail to even mention this case, let alone distinguish it.

The facts of the *TMI Order* and the *COMSAT Order*, which Inmarsat cites, are far different than those presented here. See *Inmarsat Opposition* at 19-21, 22-24. In those cases, it was reasonable for the Commission to conclude that operation on a non-harmful interference basis was possible because the satellites at issue had been coordinated,<sup>20</sup> the operators had committed to using specific frequencies,<sup>21</sup> and the terms of their earth station licenses limited them to those frequencies.<sup>22</sup> By contrast, in this case, Inmarsat is proposing to operate a satellite and services that are not covered by any coordination agreement, are technically different than

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<sup>18</sup> *Inmarsat Opposition* at 13-17.

<sup>19</sup> See Letter from Thomas S. Tycz, FCC, to Joseph A. Godles, Counsel for PanAmSat, File No. SAT-STA-19980902-00057 (September 15, 1998) (refusing to permit PanAmSat to operate C band payload until after coordinating with affected Administrations) ("*PanAmSat Order*").

<sup>20</sup> While the 1999 SSA may have expired at the time the Commission permitted Inmarsat to provide service in the United States in the *COMSAT Order*, the *Mexico City MoU* was in effect at the time and is still in effect today. Thus, unlike in this case, the Commission in the *COMSAT Order* was asked to allow a satellite already subject to the *Mexico City MoU* to provide service in the United States. Here, there is no coordination agreement that covers Inmarsat 4F2.

<sup>21</sup> **REDACTED**

<sup>22</sup> *COMSAT Order* ¶ 115(c) ("[o]perations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordinated for the Inmarsat satellite system in the most recent annual L-Band operator-to-operator agreement"); *TMI Order* ¶ 64.



any satellite or services covered by the previous coordination agreement, has never been analyzed by other L band operators, and (according to Inmarsat) will not accept any limitations on the frequencies it will use. Thus, the proposed operation of Inmarsat 4F2 presents a far different question than that presented in the *TMI* and *COMSAT* cases. For this reason, despite Inmarsat's claims to the contrary, it is very relevant that Inmarsat 4F2 is not a replacement satellite under the *Mexico City MoU* because it distinguishes this case from the *TMI Order* and the *COMSAT Order*. *Inmarsat Opposition* at 25. As discussed in MSV's Petition, Inmarsat 4F2 is not a replacement under the *Mexico City MoU* because (i) it is not replacing another satellite; (ii) it will cause greater interference to other L band operators; and (iii) it will require greater protection from other L band operators. *MSV Petition* 8-9. Because Inmarsat 4F2 is not a replacement satellite under the *Mexico City MoU*, it has no rights under that agreement. Inmarsat's vaguely worded claim that the Inmarsat 4F2 will operate within the "umbrella of technical parameters" of Inmarsat-3 is unsupported and, regardless, is irrelevant in light of the fact that Inmarsat is adding the new satellite to its existing constellation, not using it to replace the Inmarsat-3 at 54°W. *Inmarsat Opposition* at 24. As MSV noted in its Petition, Inmarsat has stated that it will continue to use the Inmarsat-3 satellite currently located at 54°W well after Inmarsat 4F2 is in operation, until as late as 2014, which disqualifies that satellite from being treated as a "replacement" under the *Mexico City MoU*. *MSV Petition* at 17-18. In its *Opposition*, Inmarsat does not refute or retract this statement.

The Bureau's decisions to license MSV's next-generation satellites conditioned on operation on a non-harmful interference basis do not serve as precedent for grant of the present earth station application to operate with the launched but uncoordinated Inmarsat 4F2 satellite. *Inmarsat Opposition* at 7-8, 22-24; *Telenor Opposition* at 4-5. As MSV explained in its

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Petition,<sup>23</sup> an explanation which neither Inmarsat nor Telenor addresses in their Oppositions, these satellite licensing cases are inapposite here because the satellites are years away from launch<sup>24</sup> and there was no claim that the satellites would cause interference.<sup>25</sup> An earth station application such as that presented here, however, is fundamentally different because it means that operation of the satellite is imminent. The Bureau cannot avoid the interference concerns presented by the imminent operation of an uncoordinated satellite such as Inmarsat 4F2.

Moreover, because the Bureau has not yet had to consider an earth station application to operate with MSV's next-generation satellites, the Bureau will not be violating the national treatment obligations of the United States under the *WTO Basic Telecom Agreement* if it were to hold the BGAN earth station application in abeyance pending the outcome of a coordination agreement covering Inmarsat 4F2. *See Inmarsat Opposition at 24.*<sup>26</sup>

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<sup>23</sup> *MSV Petition at 14 n.26.*

<sup>24</sup> The Bureau licenses domestic satellites several years prior to launch so that operators have the certainty needed to develop their systems as well as to establish construction and launch milestones and complete any necessary international frequency coordination.

<sup>25</sup> While Inmarsat now claims that operation of MSV's next-generation satellites may present an interference concern that the Bureau did not consider (*Inmarsat Opposition at 7-8, 22-24*), Inmarsat never raised these issues previously. Inmarsat nonetheless weakly claims that the Commission was "well aware" of these interference concerns (*Inmarsat Opposition at 24*), but the fact is that no one objected to these applications on grounds of potential interference. Thus, there were no interference concerns for the Bureau to consider.

<sup>26</sup> In general, the Bureau's exercise of its spectrum management authority to deny this application is consistent with the Chairman's Note to the World Trade Organization ("WTO") Basic Telecommunications Agreement, which states that WTO Members may exercise their domestic spectrum and frequency management policies when considering whether to allow foreign-licensed satellites to service the U.S. market. *See MSV Petition at 7* (citing *Chairman of the World Trade Organization Group on Basic Telecommunications, Chairman's Note, Market Access Limitations on Spectrum Availability*, 36 I.L.M. at 372 ("under the GATS each Member has the right to exercise spectrum/frequency management")).

**C. Inmarsat Must Bear Responsibility for Failing to Coordinate Its Satellite in a Timely Manner**

Having failed in its legal case to establish that it has a right to operate an uncoordinated satellite, Inmarsat reverts to blaming MSV for its coordination difficulties. *Inmarsat Opposition* at 8-9. This is wrong as to both the problems with the existing coordination and Inmarsat's failure to coordinate its new satellite. As to the breakdown in L band coordination in 1999, the primary culprit was Inmarsat, which refused to abide by the terms of the *Mexico City MoU*

REDACTED ; in this case, spectrum needed by MSV to satisfy the requirements of large wholesale customers that, with sufficient spectrum access, were prepared to invest in the development of new facilities and services.<sup>27</sup> To make matters worse, Inmarsat persisted in continuing to use substantial amounts of spectrum for inefficient global beam service and to operate an uncoordinated Inmarsat-2 satellite that had been moved to 98°W, REDACTED<sup>28</sup>

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If launch of BGAN service in the United States is delayed due to the interference concerns presented here by MSV, this is the fault of Inmarsat and not MSV.<sup>29</sup> Inmarsat has had

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<sup>27</sup>

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<sup>28</sup> Apart from the *Mexico City MoU*, as the satellite licensing authority for Inmarsat, the administration of the United Kingdom is required to coordinate the new Inmarsat 4F2 satellite network and BGAN services prior to their implementation. *See* ITU Radio Regulations, No. 9.6 *et seq.* Neither Inmarsat nor Telenor explains why this treaty obligation should be waived for Inmarsat 4F2 and BGAN services. Instead, the record demonstrates that this coordination obligation is essential, especially in this case where Inmarsat is asking to be allowed to unilaterally decide spectrum usage and interference issues that normally are subject to negotiation.

<sup>29</sup> Despite the claims of Inmarsat and Telenor, MSV is not raising these interference issues in order to gain leverage in coordination or to prevent Inmarsat from offering its new BGAN

ample opportunity over the past several years while the Inmarsat-4 satellites were being constructed to complete coordination with other L band operators. Indeed, MSV has been more than willing to discuss coordination with Inmarsat and has reached out to Inmarsat on numerous occasions to discuss coordination issues on a bilateral or a trilateral basis. The blame for the failure to make any progress towards coordinating the Inmarsat-4 satellites in North America rests solely with Inmarsat, which continues to make unreasonable demands, such as its refusal to stop its illegal use of loaned spectrum.<sup>30</sup> It is Inmarsat – not MSV or the Bureau – that holds the key to coordinating Inmarsat-4 satellites and thus permitting their use in the United States.

Inmarsat's motivation is plain. While Inmarsat has claimed that its BGAN service will provide new and innovative broadband satellite services, the usefulness of this new service to the American public, as well as the ability of the Inmarsat 4F2 satellite to make efficient use of L band spectrum, are both very limited. Despite costing over \$1.5 billion, the three Inmarsat-4 satellites lack the power to provide service to small, handheld terminals.<sup>31</sup> Moreover, as the Telenor application reveals, the Inmarsat 4F2 satellite puts only 12 spot beams over the United States and coastal waters, at a look angle that is likely to significantly reduce their ability to

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service. *Inmarsat Opposition* at 2; *Telenor Opposition* at 2. MSV's only interest is to ensure that L band spectrum can be used in an efficient and equitable manner by all L band operators without having to endure mutual interference.

<sup>30</sup> While Inmarsat claims that MSV has not responded to Inmarsat's recent efforts to coordinate (*Inmarsat Opposition* at 9), MSV has tried to initiate coordination discussions with Inmarsat on numerous occasions. Inmarsat's continued illegal use of loaned frequencies has prevented these discussions from progressing.

<sup>31</sup> Indeed, in its recent failed attempt to obtain an authorization to provide MSS in the United States in the 2 GHz band, Inmarsat proposed a satellite with roughly five times the power of the Inmarsat 4F2 satellite. See *Inmarsat Global Limited, Application, File No. SAT-PPL-20050926-00184* (September 26, 2005).

deliver maximum power to these areas.<sup>32</sup> As a result of these problems, one expert estimates that by 2010 Inmarsat will have barely 4000 land-transportable broadband terminals of any kind operating in all of North America.<sup>33</sup> In contrast, the satellites MSV and MSV Canada launch will have several times more power than Inmarsat's satellite and put roughly 280 spot beams over the United States and coastal waters, at a look angle that will permit delivery of maximum power.<sup>34</sup> As a result, MSV will be able to efficiently provide 20-30 times more service to United States customers, who will be able to use small, handheld terminals, similar in size to terrestrial mobile devices. By depriving its competitor, MSV, of stable access to spectrum and refusing to engage in serious discussions about improving the utility of the L band for broadband services by coordinating wider and more contiguous frequency blocks, Inmarsat apparently hopes to choke investment in MSV's new system. The Commission has identified the promotion of "efficient and effective" use of spectrum as one of its strategic objectives,<sup>35</sup> and it has recognized the assignment of contiguous frequency blocks as a means of achieving this efficiency.<sup>36</sup> Needless to say, if the Bureau authorizes the use of Inmarsat's new satellite and new services without insisting that they first complete coordination, there are no reasonable prospects that such coordination will ever be successfully completed. The Commission's goals of increasing

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<sup>32</sup> See *Telenor Title III Application*, Attachment A (Technical Description) at 6 (Figure A.3-1).

<sup>33</sup> See Northern Sky Research, *Next Generation Mobile Satellite Services*, Table 3-15.

<sup>34</sup> See Letter from Randy Segal, MSV, to Ms. Marlene H. Dortch, FCC, File No. SAT-PPL-20050926-00184, IB Docket No. 05-220, IB Docket No. 05-221 (December 1, 2005).

<sup>35</sup> See *FCC, Strategic Plan: 2006-2011* (September 30, 2005).

<sup>36</sup> See generally *Improving Public Safety Communications in the 800 MHz Band, Report and Order*, 19 FCC Rcd 14969 (August 6, 2004); *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, Third Report and Order, Third Notice of Proposed Rule Making, and Second Memorandum Opinion and Order*, 18 FCC Rcd 2223, ¶ 68 (2003).

efficient use of spectrum and promoting broadband services, particularly in rural areas and for the public safety community, will be thwarted. Having said that, however, it is also reasonable to expect that if the parties commit to a good faith effort to complete a comprehensive regional coordination agreement, MSV's view is that it can be completed in a matter of a few months.

**II. THE BUREAU SHOULD ADDRESS THE OTHER ISSUES PRESENTED BY THE TELENOR APPLICATIONS**

Inmarsat and Telenor are non-responsive on the additional issues raised by MSV that warrant further scrutiny. First, they continue to miss the point and argue that Inmarsat 4F2 is a replacement under the Commission's satellite processing rules, while failing to even address MSV's point that Inmarsat 4F2 cannot properly be considered a replacement satellite under the *Mexico City MoU*.<sup>37</sup> Accordingly, the Bureau should make clear that whatever decision it may make regarding whether Inmarsat 4F2 is a replacement satellite under the Commission's rules, it should clarify that such a decision does not mean the satellite is a replacement under the *Mexico City MoU*.

Second, while MSV agrees with Inmarsat and Telenor that the Commission's rule requiring Fixed Satellite Service ("FSS") satellites to operate with  $\pm 0.05^\circ$  East-West station keeping does not apply to MSS satellites, MSV's concern here is only that the Bureau apply this rule consistently, which Inmarsat and Telenor ignore. Thus, to the extent the Bureau authorizes Inmarsat 4F2 for service in the United States with  $\pm 0.1^\circ$  East-West station keeping without seeking a waiver, the Bureau must afford similar treatment to other MSS satellites proposing to serve the U.S. market, such as MSV-1 and MSV-SA.

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<sup>37</sup> Under the *Mexico City MoU*, a new satellite is given the right to use the spectrum assigned to the satellite it is replacing **REDACTED**

As discussed above, Telenor and Inmarsat has failed to demonstrate that Inmarsat 4F2 meets this criterion.

Third, MSS operators in the past have been required to file with the Commission the Implementation Plans negotiated with the Executive Branch. If Telenor is not required to do so, the Bureau must make clear that other MSS operators are not required to do so either.

Finally, Telenor and Inmarsat note that E911 requirements do not currently apply to MSS operators. *See Telenor Opposition* at 9; *Inmarsat Response* at 27. The Bureau should make clear that Inmarsat's unilateral choice to locate gateway earth stations overseas does not excuse it from having to comply with any E911 requirements the Commission may adopt in the future.

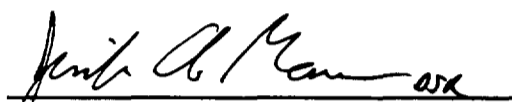
**Conclusion**

Based on the foregoing, the Bureau should hold in abeyance the Telenor applications until the conclusion of an L band coordination agreement.

Respectfully submitted,



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Dated: December 19, 2005

Exhibit A

Spectrum Limitation Conditions and Non-Interference Conditions  
Imposed on L Band MET Licenses

MET Licenses to Access Inmarsat

- *COMSAT Corporation et. al., Memorandum Opinion, Order and Authorization, FCC 01-272, ¶ 115(c)-(d) (2001) (granting application of Stratos, Telenor (f/k/a COMSAT Mobile), Honeywell, and Deere to operate with Inmarsat):*

“115. IT IS FURTHER ORDERED that the applications listed in Appendix C to operate mobile earth terminals to provide domestic and international Mobile Satellite Service via the privatized Inmarsat system ARE GRANTED subject to the following conditions:

\* \* \*

\* \* \*

- c. Operations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordinated for the Inmarsat satellite system in the most recent annual L-Band operator-to-operator agreement;
- d. In the absence of a continuing annual L-band operator-to-operator coordination agreement, operations of METs in the 1525-1559 and 1626.5-1660.5 MHz bands will be on a non-interference basis until a future operator-to-operator agreement is concluded. In this instance, each licensee must notify the other four operators in these frequency bands that it will be operating on a non-interference basis. Each licensee must notify its customers that its operations are on a non-interference basis.”

- *Richtec Incorporated, Order and Authorization, 18 FCC Rcd 3295 (Chief, Satellite Division, International Bureau, March 7, 2003) (granting application to operate D+ terminals with Inmarsat):*

“17. IT IS FURTHER ORDERED that Richtec's mobile earth station operations shall be limited to the portions of the 1525-1544 and 1626.5-1645.5 MHz band coordinated for the satellite being accessed in the most recent annual L-band operator-to-operator agreement. In the absence of a continuing annual L-band operator-to-operator coordination agreement, Richtec's operation in the 1525-1530 MHz, 1530-1544 MHz, 1626.5-1645.5 MHz frequency bands (lower L-bands) will be on a non-interference basis until a future operator-to-operator agreement is concluded. Richtec shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon notification of such interference. Furthermore, Richtec must notify all other operators in these frequency bands that it will be operating on a non-interference basis. Richtec must also notify its customers in the United States that its operations are on a non-interference basis.”



**MET Licenses to Access MSV and MSV Canada L Band Satellites**

- *Vistar Data Communications, Inc., Order and Authorization, 17 FCC Rcd 12899 (Deputy Chief, Satellite Division, International Bureau, July 2, 2002) (granting authority to operate half-duplex METs with MSV):*

“17. IT IS FURTHER ORDERED that Vistar Data Communications, Inc.’s MET operations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordinated for the satellite being accessed in the most recent annual L-band operator-to-operator agreement.

18. IT IS FURTHER ORDERED that in the absence of a continuing annual operator-to-operator coordination agreement, Vistar Data Communications, Inc.’s operation in the 1525-1559 and 1626.5-1660.5 MHz band will be on a non-harmful interference basis. Consequently, in the absence of a coordination agreement, Vistar Data Communications, Inc. shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon written notification of such interference. Furthermore, Vistar Data Communications, Inc. must notify all other operators in these frequency bands that it will be operating on a non-harmful interference basis. Vistar Data Communications, Inc. must also notify its customers in the United States that its operations are on a non-harmful interference basis.”

- *Mobile Satellite Ventures Subsidiary LLC, Memorandum Opinion, Order and Authorization, 19 FCC Rcd 4672 (Chief, International Bureau, March 12, 2004) (granting authority to operate additional half-duplex METs with MSV and MSV Canada satellites):*

“7. IT IS FURTHER ORDERED that Mobile Satellite Ventures Subsidiary LLC’s MET operations shall be limited to 2.0 MHz of spectrum in each direction of the 1626.5-1645.5 MHz and 1530-1544 MHz band coordinated for the satellite being accessed in the most recent annual L-band operator-to-operator agreement, and that no additional spectrum will be requested or used.

8. IT IS FURTHER ORDERED that, in the absence of a continuing annual operator-to-operator coordination agreement, Mobile Satellite Ventures Subsidiary LLC's operation in the 1626.5-1645.5 MHz and 1530-1544 MHz band will be on a non-harmful interference basis. Consequently, in the absence of a coordination agreement, Mobile Satellite Ventures Subsidiary LLC shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon written notification of such interference. Furthermore, Mobile Satellite Ventures Subsidiary LLC must notify all other operators in these frequency bands that it will be operating on a non-harmful interference basis. MSV, Inc. must also notify its customers in the United States that its operations are on a non-harmful interference basis.”

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- *Mobile Satellite Ventures Subsidiary LLC, Memorandum Opinion and Order*, 17 FCC Rcd 12894 (Deputy Chief, Satellite Division, International Bureau, July 2, 2002) (granting authority to operate additional half-duplex METs with MSV):

“9. IT IS FURTHER ORDERED that Mobile Satellite Ventures Subsidiary LLC’s MET operations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordinated for the satellite being accessed in the most recent annual L-band operator-to-operator agreement.

10. IT IS FURTHER ORDERED that, in the absence of a continuing annual operator-to-operator coordination agreement, Mobile Satellite Ventures Subsidiary LLC’s operation in the 1525-1559 and 1626.5-1660.5 MHz band will be on a non-harmful interference basis. Consequently, in the absence of a coordination agreement, Mobile Satellite Ventures Subsidiary LLC shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon written notification of such interference. Furthermore, Mobile Satellite Ventures Subsidiary LLC must notify all other operators in these frequency bands that it will be operating on a non-harmful interference basis. MSV, Inc. must also notify its customers in the United States that its operations are on a non-harmful interference basis.”

- *National Systems & Research Co., Order and Authorization*, 17 FCC Rcd 12011 (Deputy Chief, Satellite Division, International Bureau, June 28, 2002) (granting authority to operate METs with MSV):

“11. IT IS FURTHER ORDERED that National Systems & Research Co.’s MET operations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordination for the satellite being accessed in the most recent annual L-band operator-to-operator agreement.

12. IT IS FURTHER ORDERED that in the absence of a continuing annual operator-to-operator coordination agreement, National Systems & Research Co.’s operation in the 1525-1530 MHz, 1530-1544 MHz, 1626.5-1645.5 MHz frequency bands (lower L-band) and the 1545-1559 MHz and 1646.5-1660.5 MHz (upper L-band) frequency bands will be on a non-interference basis until a future operator-to-operator agreement is concluded. National Systems & Research Co. shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon written notification of such interference. Furthermore, National Systems & Research Co. must notify all other operators in these frequency bands that it will be operating on a non-interference basis. National Systems & Research Co. must also notify its customers in the United States that its operations are on a non-harmful interference basis.”

- *Infosat Communications, Inc., Order and Authorization*, 17 FCC Rcd 1610 (January 25, 2002) (granting authority to operate METs with MSV Canada satellite):

14. IT IS FURTHER ORDERED that Infosat Communications, Inc. IS AUTHORIZED to operate in the 1525-1530 MHz, 1530-1544 MHz, and 1626.5-1645.5 MHz frequency bands (lower L-band) subject to the following conditions:

\* \* \*

b. Operations shall be limited to the portions of the lower L-band coordinated for TMI satellite network in the most recent annual L-band operator-to-operator agreement;

15. IT IS FURTHER ORDERED that in the absence of a continuing annual L-band operator-to-operator coordination agreement, Infosat's operations of METs in the 1530-1559 and 1631.5-1660 MHz band will be on a non-harmful interference basis until a future operator-to-operator agreement is concluded. Infosat Communications, Inc. shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon notification of such interference. Furthermore, Infosat Communications, Inc. must notify all other operators in these frequency bands that it will be operating on a non-harmful interference basis. Infosat Communications, Inc. must also notify its customers in the United States that its operations are on a non-harmful interference basis."

- *TMI Communications and Company, L.P., Order and Authorization*, 15 FCC Rcd 18117 (Chief, Satellite and Radiocommunication Division, September 25, 2000) (granting authority to operate METs with TMI):

"8. Accordingly, IT IS ORDERED that Application File No.SES-LIC-19990318-00435 IS GRANTED and TMI Communications and Company, L.P. IS AUTHORIZED to operate up to 100,000 full-duplex tracking and asset management data services mobile earth terminals through the Canadian licensed MSAT-1 space station in portions of the 1545-1558.5 and 1646.5-1660 MHz band coordinated for the TMI satellite network in the most recent annual L-band operator-to-operator coordination agreement, in accordance with the technical specifications set forth in its application and its Radio Station Authorization, and consistent with the Commission's rules.

9. IT IS FURTHER ORDERED that in the absence of an annual operator-to-operator coordination agreement, TMI's operation in the 1545-1558.5 and 1646.5-1660 MHz band will be on a non-interference basis. Consequently, in the absence of a coordination agreement, TMI shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall immediately cease operations upon notification of such interference. Furthermore, TMI must notify the other four space station operators in these frequency bands that it will be operating on a non-interference basis. TMI must also notify its customers in the United States that TMI's operations are on a non-interference basis."

- *SatCom Systems, Inc., Order and Authorization*, 14 FCC Rcd 20798 (November 30, 1999) (granting authority to operate METs with MSV Canada satellite):

"63. Accordingly, IT IS ORDERED that Application File Number 647-DSE-P/L-98; IBFS File Number SES-LIC-19980310-00272E9808159 IS GRANTED and SatCom Systems, Inc. IS AUTHORIZED to operate up to 25,000 mobile earth terminals through the Canadian licensed MSAT-1 space station in the portions of the 1545-1558.5 and 1646.5-1660 MHz band coordinated for the TMI satellite network in the most recent

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annual L-band operator-to-operator coordination agreement, to the extent indicated herein, in accordance with the technical specifications set forth in its application and its Radio Station Authorization, and consistent with the Commission's rules. In the absence of a continuing annual L-band operator-to-operator coordination agreement, SatCom's operation in the 1545-1558.5 and 1546.5-1660 MHz bands will be on a non-interference basis until a future operator-to-operator agreement is concluded. In this instance, SatCom must notify the other four operators in these frequency bands that it will be operating on a non-interference basis. SatCom must also notify its customers that SatCom's operations are on a non-interference basis.

64. IT IS FURTHER ORDERED that Application File Number 730-DSE-P/L-98; IBFS File No. SES-LIC-19980330-00339E980179 IS GRANTED and TMI Communications and Company, L.P. IS AUTHORIZED to operate up to 100,000 mobile earth terminals through the Canadian licensed MSAT-1 space station in the portions of the 1545-1558.5 and 1646.5-1660 MHz band coordinated for the TMI satellite network in the most recent annual L-band operator-to-operator coordination agreement, to the extent indicated herein, in accordance with the technical specifications set forth in its application and its Radio Station Authorization, and consistent with the Commission's rules. In the absence of a continuing annual operator-to-operator coordination agreement, TMI's operation in the 1545-1558.5 and 1646.5-1660 MHz band will be on a non-interference basis until a future operator-to-operator agreement is concluded. In this instance, TMI must notify the other four operators in the these frequency bands that it will be operating on a non-interference basis. TMI must also notify its customers in the United States that TMI's operations are on a non-interference basis.”

Exhibit B

Commission Statements Acknowledging Applicability of Spectrum Limitation Condition

- *Flexibility for Delivery of Communications by MSS Providers, Report and Order*, IB Docket No. 01-185, 18 FCC Rcd 1962 (February 10, 2003) (“*ATC Order*”).

“The parties to the MoU last revised spectrum assignments in 1999 and, pending further negotiations, continue to operate under those assignments today.” (¶ 92)

“Although annual meetings were to have taken place under the terms of the Mexico City MoU, these meetings have not occurred since the parties last agreed to a complex spectrum-sharing arrangement in London in 1999; therefore, the parties continue to operate under the 1999 assignments pending further negotiations.” (n. 144)

- *Mobile Satellite Ventures Subsidiary LLC, Order and Authorization*, DA 04-3553 (Int’l Bur. 2004):

“The parties to the MOU last revised the spectrum assignments in 1999 and, pending further negotiations, continue to operate with those assignments today.” (n.8)

- *Flexibility for Delivery of Communications by MSS Providers, Memorandum Opinion and Order and Second Order and ATC Reconsideration Order*, IB Docket Nos. 01-185, FCC 05-30 (February 25, 2005) (“*ATC Reconsideration Order*”):

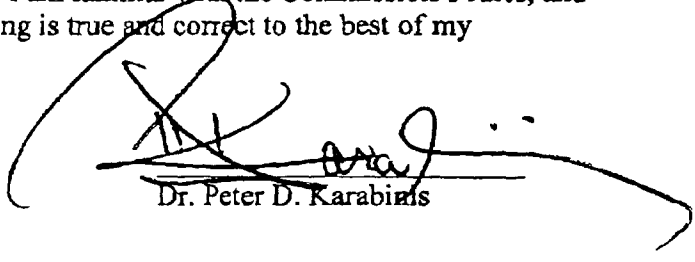
“These negotiations have not occurred since 1999, and the 1999 coordination agreement remains in effect.” (¶ 38)

“The current coordination agreement under which Inmarsat and MSV share L-band spectrum was finalized in 1999. Ideally, the L-band MSS operators should renegotiate their coordination agreement every year. Indeed, changes to the existing coordination agreement could help avoid some of the potential interference issues that could arise from deployment of MSS/ATC. At the same time, however, we acknowledge that it could take a great deal of time and effort to conduct further coordination negotiations. For this reason, *in the case of any L-band frequency that is currently the subject of a coordination agreement and is shared between an MSS operator and an MSS/ATC operator*, we will permit an MSS/ATC to cause a small increase in interference to another MSS operator’s system above the coordinated interference level when the coordinated interference level is already greater than 6% T/T. This measure accounts for the reality that MSS is currently operating in the L-band, and that it may be necessary and appropriate to allow a slightly higher level of interference than currently coordinated levels allow in order to permit ATC to begin operations. When L-band MSS operators enter into a new coordination agreement, this additional interference allowance will no longer apply, and MSS/ATC operators will be required to operate its ATC within the limits coordinated by the parties.” (¶ 44) (emphasis added)

**Technical Certification**

I, Dr. Peter D. Karabinis, Senior Vice President and Chief Technical Officer of Mobile Satellite Ventures Subsidiary LLC, certify under penalty of perjury that:

I am the technically qualified person with overall responsibility for the technical information contained in the foregoing. I am familiar with the Commission's rules, and the information contained in the foregoing is true and correct to the best of my knowledge and belief.



Dr. Peter D. Karabinis

Dated: December 19, 2005

**CERTIFICATE OF SERVICE**

**I, Cherie Mills, hereby certify that on this 23rd day of December 2005, served a true copy of the foregoing by first-class United States mail, postage prepaid, upon the following:**

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