

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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In the Matter of

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Redesignation of the 17.7-19.7 GHz )  
Frequency Band, Blanket Licensing of )  
Satellite Earth Stations in the 17.7-20.2 GHz )  
and 27.5-30.0 GHz Frequency Bands, and the )  
Allocation of Additional Spectrum in the )  
17.3-17.8 GHz and 24.75-25.25 GHz )  
Frequency Bands for Broadcast Satellite- )  
Service Use )

IB Docket No. 98-172 /  
RM-9005  
RM-9118

PETITION FOR PARTIAL RECONSIDERATION

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October 6, 2000

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## SUMMARY

Hughes Electronics Corporation petitions for reconsideration of the Commission's Report and Order in this proceeding, in which the Commission took several actions regarding the 17.7 - 19.7 GHz band (the "18 GHz Band") and the 19.7 - 20.2 GHz band. Certain of the Commission's decisions in the 18 GHz Order are arbitrary and capricious and were otherwise adopted contrary to the requirements of the Administrative Procedure Act. Furthermore, several of the Commission's decisions in the 18 GHz Order will have extremely damaging effects on the ability of Hughes's SPACEWAY system and other Ka band satellite systems to fulfill their promise of ubiquitous broadband satellite services to every corner of the nation. Thus, those unlawful and unwise Commission decisions must be rescinded and reconsidered on an expedited basis.

The Commission's decision in the 18 GHz Order to designate only 220 MHz (instead of 500 MHz) of additional Ka band downlink spectrum that is suitable for deployment of small, ubiquitously-deployed satellite earth terminals is based on two flawed arguments: (1) that the Commission designated only 750 MHz of unshared primary uplink spectrum to the GSO/FSS in the 28 GHz proceeding and (2) that the Commission's overall band plan for the 18 GHz Band is a balanced accommodation of the various satellite and terrestrial fixed uses of that band. The former argument is illogical and arbitrary because the Commission completely fails to acknowledge or address that 1000 MHz of uplink spectrum in the 28 GHz band is currently, and was intended to be, *available* under the Commission's rules for ubiquitous GSO/FSS earth terminals. The latter argument is incorrect, insufficiently explained and ignores important record evidence in this proceeding. In fact, the 18 GHz Order arbitrarily places a disproportionate burden of its new 18 GHz band plan on the GSO/FSS industry, fails to meet the Commission-

recognized needs of that industry, and entirely spares several other industries any of the burden of the 18 GHz band plan.

The Commission's "Legacy List" policy is an unexplained departure from the Commission's current rules and was adopted without the mandatory notice and comment procedures. The Legacy List policy requires satellite licensees that utilize the 18.3 - 18.8 GHz band to pay to alleviate interference that any existing terrestrial fixed licensee in this band receives from the satellite licensee because the *terrestrial fixed licensee's receiver* is pointed within 2 degrees of the geostationary arc. The 18 GHz Order adopts this policy in spite of the existence, *since at least 1983*, of a specific pfd limit in place in the 18 GHz Band, which was designed to "pre-coordinate" spacecraft transmissions and terrestrial fixed service receivers regardless of the elevation angle and azimuth of the terrestrial receiver. Thus, the Commission's Legacy List policy would bestow a windfall on terrestrial licensees who deployed systems that are not robust enough to operate under long-established terrestrial/satellite sharing rules and would impose an arbitrary and unwarranted penalty on the satellite users of the 18.3 - 18.8 GHz band, who have reasonably relied on the Commission's existing rules and past precedent.

With scant discussion of the Commission's underlying rationale and no reference to any record evidence, the 18 GHz Order arbitrarily deletes the secondary designations for NGSO/FSS in the 18.3 - 18.8 GHz GSO/FSS co-primary and primary bands and the secondary designations for GSO/FSS in the 18.8 - 19.3 GHz NGSO/FSS primary band. This haphazard action leaves the designations for Ka band FSS systems in confusion and disarray. The 18 GHz Order deletes the secondary designation in two of the three FSS downlink band segments (18.3 - 18.8 GHz and 18.8 - 19.3 GHz), but leaves the third FSS downlink band segment, 19.7 - 20.2 GHz, and the corresponding uplink band segments (28.35 - 28.6 GHz, 28.6 - 29.1 GHz, 29.25 -

29.5 GHz and 29.5-30.0 GHz) untouched and unmentioned. Instead, the most appropriate way to deal with the issue of secondary satellite designations in satellite-primary bands at Ka band is to issue a Further Notice of Proposed Rule Making on the topic and to deal comprehensively in that proceeding with the issue for both the Ka band uplink and downlink bands.

The 18 GHz Order takes no action either (i) with respect to blanket licensing of GSO/FSS earth stations in the satellite-only band of 29.25 - 29.5 GHz or (ii) with respect to streamlined licensing or registration of earth stations that would only receive, and not transmit, in the 18.3 - 18.58 GHz band. The 18 GHz Order provides no rationale for the Commission's refusal to establish blanket licensing in the 29.25 - 29.5 GHz band and decides that action on the 18.3 - 18.58 GHz band should be delayed to an unspecified future proceeding. The Commission should not delay action any longer on the 29.25 - 29.5 GHz band, and it should include Hughes's streamlined licensing proposal for the 18.3 - 18.58 GHz band in a prompt Further Notice of Proposed Rule Making in this proceeding, if the Commission does not accept Hughes's proposal to provide a full 1000 MHz for blanket licensed earth stations.

The Commission should reconsider or correct several technical aspects of the Ka band blanket licensing rules. The 18 GHz Order replaces current rule Section 25.208(c) with an amended Section 25.208(c) and adds new Sections 25.208(d), (e) and (f). Specifically with reference to GSO/FSS operations in 18.3 - 18.8 GHz, the Commission's new Section 25.208(d) applies a more stringent pfd limit at certain angles of arrival than the prior rule. The 18 GHz Order does not explicitly provide a rationale for the Commission's amendments to Section 25.208(c) and, more importantly, new Section 25.208(d) fundamentally contradicts the coordination threshold approach to blanket licensing taken by both the Commission and the Blanket Licensing Industry Working Group. Finally, the Commission should make two

technical corrections to its blanket licensing rules: (1) it should correct rule Section 25.138(a)(6) to apply to all GSO/FSS downlink bands in which the Commission permits blanket licensing and (2) it should amend the text of Section 25.138(b) to include the word “blanket” before “earth station license” in the first sentence of that section, which would conform the rule to the proposal of the Blanket Licensing Industry Working Group.

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17.3-17.8 GHz and 24.75-25.25 GHz	)	
Frequency Bands for Broadcast Satellite-	)	
Service Use	)	

PETITION FOR PARTIAL RECONSIDERATION

Hughes Electronics Corporation (“*Hughes*”) hereby petitions for reconsideration of the Commission’s Report and Order in the above-captioned proceeding,<sup>1</sup> in which the Commission took several actions regarding the 17.7 - 19.7 GHz band (the “*18 GHz Band*”) and the 19.7 - 20.2 GHz band. As set forth below, certain of the Commission’s decisions in the 18 GHz Order are arbitrary and capricious and were otherwise adopted contrary to the requirements of the Administrative Procedure Act (the “*APA*”).<sup>2</sup> Thus, those unlawful Commission decisions must be rescinded and reconsidered as set forth herein.

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<sup>1</sup> *Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use*, FCC 00-212 (rel. June 22, 2000) (the “*18 GHz Order*”).

<sup>2</sup> 5 U.S.C.A. 500, *et. seq.* (West 1996).

As the parent corporation of Hughes Communications Galaxy, Inc., licensee of the SPACEWAY™ Ka band satellite system,<sup>3</sup> and Hughes Communications, Inc., applicant for the SpacewayEXP and SpacewayNGSO satellite networks in the Commission's second Ka band processing round,<sup>4</sup> Hughes is vitally interested in this proceeding. Indeed, in March 1999, Hughes announced that its Board of Directors had made a \$1.4 Billion financial commitment to the development and deployment of the SPACEWAY system. Hughes's Board made this remarkable financial commitment in reliance upon the Commission's order in the 28 GHz proceeding,<sup>5</sup> the Commission-issued license for the SPACEWAY system,<sup>6</sup> and Hughes's expectation that the Commission's decisions in this proceeding would comport with the law.

Shortly after the March 1999 announcement, in June 1999, Hughes announced another important commitment to the SPACEWAY program, namely a \$1.5 Billion strategic alliance with America Online, Inc., of which the SPACEWAY system is a critical element. In line with those commitments, Hughes has moved forward rapidly with the construction and deployment of the SPACEWAY system<sup>7</sup> and is currently proceeding quickly toward the planned launch of the first phase of the system in the fourth quarter of 2002.

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<sup>3</sup> *Hughes Communications Galaxy, Inc.*, 13 FCC Rcd. 1351 (1997).

<sup>4</sup> *See Application of Hughes Communications, Inc. for SPACEWAY EXP*, FCC File No. SAT-LOA-19971222-00201, 205, 207, 209 (filed December 22, 1997); *Application of Hughes Communications, Inc. for SPACEWAY NGSO*, FCC File No. SAT-LOA-19971222-00210 (filed December 22, 1997).

<sup>5</sup> *In the Matter of Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5 - 29.5 GHz Frequency Band, to Reallocate the 29.5 - 30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, 11 FCC Rcd 19005 (1996) ("28 GHz Order").

<sup>6</sup> *Hughes Communications Galaxy, Inc.*, 13 FCC Rcd. 1351 (1997).

<sup>7</sup> *See Hughes Communications Galaxy, Inc., Annual Status Report to the Federal Communications Commission* (filed June 30, 2000).

Commensurate with Hughes's strong interest in this proceeding, Hughes participated fully and actively in both the formal comment cycle in this proceeding<sup>8</sup> and by way of written and oral *ex parte* presentations to the Commission, both by itself and with a coalition of Ka band GSO/FSS satellite licensees.<sup>9</sup> Hughes also participated extensively in the Blanket Licensing Industry Working Group, which recommended Ka band blanket licensing rules to the Commission.

Despite Hughes's extensive input, several of the Commission's decisions in the 18 GHz Order will have extremely damaging effects on the ability of SPACEWAY and other Ka band satellite systems to fulfill their promise of ubiquitous broadband satellite services to every corner of the nation. These Commission decisions effectively render (i) 50% of the promised 1000 MHz of spectrum for Ka band satellite systems unusable for the foreseeable future and (ii) 28% of it unusable on a permanent basis. SPACEWAY offers the promise of providing sufficient broadband capacity to all American consumers and businesses -- including those in tribal and rural areas -- namely, high-speed, fully interactive Internet connectivity on a distance-insensitive basis. But the substantial reduction in capacity resulting from this decision will significantly and adversely affect the American consumers and businesses who most need the broadband option offered by SPACEWAY. Moreover, those Commission decisions do not comport with the requirements of the APA.

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<sup>8</sup> See Comments of Hughes Electronics Corporation in IB Docket 98-172 (filed November 19, 1998) ("*Hughes Comments*"); Reply Comments of Hughes Electronics Corporation in IB Docket 98-172 (filed December 21, 1998) ("*Hughes Reply Comments*").

<sup>9</sup> See, e.g., Written *Ex Parte* Presentation of Hughes Network Systems filed in IB Docket 98-172 (May 19, 2000); Notice of *Ex Parte* Presentation by Hughes Electronics Corporation and Hughes Network Systems in IB Docket 98-172 (filed February 29, 2000); Notice of *Ex Parte* Presentation by GE American Communications, et al. in IB Docket 98-172 (filed February 27, 2000).

The APA imposes certain core requirements upon any Commission rulemaking action. In every informal notice and comment rulemaking proceeding, such as the 18 GHz proceeding, the Commission must, in its decision, (i) provide a reasoned basis for its actions, (ii) consider all of the evidence presented to it, and (iii) articulate a rational connection between the facts presented to the Commission and the choice it has made.<sup>10</sup> The Commission's decisions also must be supported by the record<sup>11</sup> and must respond to well-supported arguments that are contrary to the Commission's ultimate decision.<sup>12</sup> Thus, the Commission may not cavalierly dismiss arguments with which it does not agree.<sup>13</sup> Several important decisions in the 18 GHz Order fail to meet these APA requirements and therefore must be rescinded and reconsidered.

**I. THE SEGMENTATION OF THE 18 GHZ BAND IS ILLOGICAL AND AN UNEXPLAINED DEPARTURE FROM PREVIOUS COMMISSION DECISIONS**

Since 1993, when Hughes proposed the first Ka band commercial satellite system, and at each stage in the development of the Ka band for commercial satellite systems, Hughes has consistently maintained that 1000 MHz of spectrum for small, ubiquitously-deployed earth

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<sup>10</sup> See *Motor Vehicle Manufacturers Association of the United States v. State Farm*, 463 U.S. 29, 46-57 (1983); *Sithe/Independence Power Partners, L.P. v. FERC*, 165 F.3d 944, 949-50, 952 (D.C. Cir. 1999) (agency must provide clear explanation of rationale and reveal the data and assumptions underlying its findings); *Schurz Communications v. FCC*, 982 F.2d 1043, 1050 (7th Cir. 1992) (vacating an FCC rule because key concepts were left unexplained and key evidence was overlooked); *Flagstaff Broadcasting Foundation v. FCC*, 979 F.2d 1566 (D.C. Cir. 1992) (the court will set aside an action by the Commission when it fails to provide a reasoned basis for its decision); *Bechtel v. FCC*, 957 F.2d 873, 881 (D.C. Cir. 1992) (Commission must address serious challenges); see also *Action for Children's Television v. FCC*, 821 F.2d 741, 746 (D.C. Cir. 1987).

<sup>11</sup> See *Action for Children's Television v. FCC*, 852 F.2d 1332, 1341, 1343 (D.C. Cir. 1988).

<sup>12</sup> *Illinois Public Telecommunications Association v. FCC*, 117 F.3d 555, 564 (D.C. Cir. 1997).

<sup>13</sup> *Id.*

terminals is essential to the success of commercial Ka band satellite systems.<sup>14</sup> Throughout the 28 GHz proceeding in 1995 and 1996, Hughes reiterated its requirement that 1000 MHz of Ka band spectrum was necessary for ubiquitous deployment of earth terminals. Indeed, in the 28 GHz Order, the full Commission acknowledged the need to designate 1000 MHz of spectrum to support the provision of nationwide broadband services over GSO FSS systems using ubiquitously-deployed, small earth stations.<sup>15</sup>

Likewise, Hughes's submissions in this proceeding have reconfirmed the necessity of 1000 MHz Ka band spectrum for use by small, ubiquitously-deployed earth station terminals.<sup>16</sup> The record also reflects the significant and adverse impact that designating less than 1000 MHz of downlink spectrum (*e.g.* 720 MHz) for ubiquitous deployment will have on Hughes's SPACEWAY system and on the number of consumers -- both in rural and urban areas -- who can use satellite based broadband services.<sup>17</sup>

Despite the consistent position of Hughes and other Ka band satellite-industry companies, the 18 GHz Order designates only 220 MHz of additional Ka band downlink spectrum (for a total of 720 MHz) that is suitable for deployment of small, ubiquitously-deployed satellite earth terminals. At bottom, the Commission bases its decision in the 18 GHz Order to designate only 220 MHz (instead of 500 MHz) for such use on two flawed arguments: (1) that the Commission designated only 750 MHz of unshared primary uplink spectrum to the GSO/FSS in the 28 GHz proceeding and therefore a "similar" designation of downlink spectrum

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<sup>14</sup> See *Hughes Communications Galaxy, Inc.*, 13 FCC Rcd. 1351, 1352 (1997).

<sup>15</sup> 28 GHz Order at ¶¶ 57-58, 78.

<sup>16</sup> Hughes Comments at 5-8; Notice of *Ex Parte* Presentation by Hughes Network Systems in IB Docket 98-172 (filed February 8, 2000).

<sup>17</sup> *Id.*

is appropriate<sup>18</sup> and (2) that the Commission's overall band plan for the 18 GHz Band is a balanced accommodation of the various satellite and terrestrial fixed uses of that band.<sup>19</sup>

The former argument is illogical and arbitrary and an unexplained break from previous Commission decisions, as a fundamental premise of the compromise 28 GHz Band Plan was ensuring the availability of 1000 MHz of bandwidth for ubiquitously deployed GSO FSS earth stations. The latter argument is incorrect, insufficiently explained and ignores important record evidence in this proceeding. Each of these failings of the Commission's decision provides a separate infirmity under the APA. Therefore, the Commission should reconsider this action and designate the 500 MHz between 18.3 - 18.8 GHz as unshared primary spectrum for satellite downlinks to ubiquitous earth terminals.

**A. The Commission's Designation of Spectrum Illogically Provides Unequal Uplink and Downlink Spectrum for GSO/FSS Systems**

The 18 GHz Order acknowledges that the FCC generally designates equal amounts of uplink and downlink spectrum for GSO/FSS systems.<sup>20</sup> The reason is that FSS systems, including the Ka band GSO/FSS systems, generally require equal paired capacity for their uplinks and downlinks. The Commission's designation of only an additional 220 MHz of primary spectrum for GSO/FSS (for a total of 720 MHz) is an arbitrary and unexplained departure from both this general principle of pairing uplink and downlink spectrum for GSO/FSS systems and the Commission's decision in the 28 GHz proceeding to afford 1000 MHz of spectrum to GSO/FSS systems utilizing ubiquitous earth terminals.

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<sup>18</sup> 18 GHz Order at ¶ 59.

<sup>19</sup> See 18 GHz Order at ¶¶ 30, 33-34, 60.

<sup>20</sup> 18 GHz Order at ¶ 59.

A fundamental tenet of the Commission's 28 GHz Order was that Ka-band GSO/FSS systems would have access to 1000 MHz of spectrum for ubiquitous earth stations.<sup>21</sup> All relevant parties including Hughes, Motorola/Iridium, GE, Lockheed, Loral, TRW, and other GSO/FSS interests endorsed the band plan and the associated sharing rules that the Commission ultimately adopted in the 28 GHz Order.<sup>22</sup> The Commission is correct when it notes in the 18 GHz Order<sup>23</sup> that 250 MHz (the 29.25-29.50 GHz band) of the 1000 MHz of uplink spectrum designated for GSO/FSS is shared on a co-primary basis with MSS feeder links. However, the Commission completely fails to acknowledge or address that the 29.25-29.50 GHz band is currently, and was intended to be, *available* under the Commission's rules for ubiquitous GSO/FSS earth terminals on a shared basis with MSS feeder links.

In the 28 GHz Order, the Commission adopted the coordination guidelines and sharing rules for the 29.25-29.50 GHz band with the full understanding that ubiquitous earth stations would operate in the band (using SPACEWAY or any of the other twelve licensed or

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<sup>21</sup> See, e.g., 28 GHz Order at ¶¶ 17, 58; see also *id.* at ¶¶ 27-25 (concluding that the GSO FSS could not share with LMDS because of the proposed ubiquitous GSO FSS terminals). The NPRM in 28 GHz proceeding also supports the need for 1000 MHz of Ka band spectrum for ubiquitous GSO FSS terminals. See *Third Notice of Proposed Rulemaking*, 11 FCC Rcd. 53, ¶¶ 17, 19, 54 (noting benefits of ubiquitous broadband satellite service and that FCC's proposal to provide 1000 MHz for GSO FSS "matched" Hughes's needs for ubiquitous service from its proposed Spaceway system); *id.* at ¶¶ 15, 47 (sharing between GSO FSS and LMDS at Ka band not possible because GSO FSS would deploy ubiquitous terminals).

<sup>22</sup> See Letter from Cellular Vision USA, Inc., AT&T, Hughes, Teledesic Corporation, Motorola, the University of Texas -- Pan American, Phillips Electronics, Titan Information Systems, Cellular Vision of New York, L.P., M/A COM, Inc., RioVision of Texas, Inc., International CellularVision Association, CellularVision Technology and Telecommunications, L.P. and GE American Communications, Inc. to the FCC, CC Docket No. 92-297 (filed June 3, 1996); Letter from Hughes, AT&T, GE American Communications, Inc., and Motorola to the FCC, CC Docket No. 92-297 (filed June 6, 1996).

<sup>23</sup> 18 GHz Order at ¶ 59.

future GSO/FSS systems), and that neither the GSO/FSS systems nor the NGSO/MSS feeder link stations would need to “disrupt or alter their transmissions.”<sup>24</sup> The sharing criteria adopted for the 29.25-29.50 GHz band are independent of the type, nature or number of GSO/FSS earth stations. The record specifically reflects (1) the need of the GSO/FSS to use this band for ubiquitous terminals, and (2) the technical analysis that demonstrates sharing between an NGSO/MSS feeder link operator and these small, ubiquitous GSO/FSS terminals.<sup>25</sup>

The Commission’s incorrect characterization of the ability of GSO/FSS systems to utilize the 29.25-29.50 GHz band for ubiquitously deployed earth stations is even more perplexing in view of Hughes’s extensive discussion of this issue in its Comments, which included a separate technical statement on the issue, in its Reply Comments and in *ex parte* submissions in the record in this proceeding.<sup>26</sup> The Commission completely fails to respond to these record documents and to explain the Commission’s departure from the principles set forth in its 28 GHz Order. In fact, the Commission’s failure in this regard appears to be an impermissible attempt to bootstrap another element of the 18 GHz Order. Namely, the Commission’s illogical and arbitrary decision to designate for GSO/FSS a total of only 720 MHz of downlink spectrum that is usable for ubiquitous deployment of earth terminals. That is, the Commission improperly attempts to justify a 720 MHz downlink designation on the flawed conclusion that only 750 MHz of uplink bandwidth is available for the same use.

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<sup>24</sup> 28 GHz Order at ¶¶ 72-73.

<sup>25</sup> See, e.g., FCC staff submission in CC Docket 92-297 (filed February 6, 1996); FCC staff submission in CC Docket 92-297 (filed January 22, 1996).

<sup>26</sup> Hughes Comments at 11-13, Technical Appendix A; Hughes Reply Comments at 23-24; Written *Ex Parte* Presentation by Hughes Network Systems in IB Docket 98-172 (filed May 19, 2000).

**B. The Commission's 18 GHz Band Plan is Not a Rational Accommodation of All Uses**

As the Commission acknowledges, segmentation of the 18 GHz Band into separate terrestrial fixed and satellite uses benefits both industries.<sup>27</sup> It follows then that the burdens that are associated with the benefits of segmentation should also be spread between both terrestrial fixed and satellite industries and equitably within those industries, as well. This concept of spreading the burdens of segmentation is especially appropriate in a case such as the 18 GHz Band where the satellite and fixed service interests have long held an equal claim to, and equal "equities" in, the 18 GHz Band. As Hughes has previously explained,<sup>28</sup> the 18 GHz Band has been a shared satellite/terrestrial band for more than twenty-five (25) years, since 1973, when the Commission opened up this band as a much-needed expansion band for broadband satellite systems.<sup>29</sup>

However, the 18 GHz Order, arbitrarily places a disproportionate burden of the band plan on the GSO/FSS industry, fails to meet the Commission-recognized<sup>30</sup> needs of that industry, and entirely spares several other industries any of the burden of the 18 GHz band plan. For example, while the 18 GHz Order limits the GSO/FSS industry to less than 75% of its needs, the PCO/CARS industry receives an upgraded, exclusive primary designation in 36% (18.14 - 18.3 GHz) of the spectrum that it currently uses on a co-primary basis and retains its existing co-primary rights in the remaining 64% (18.3 - 18.58 GHz) of that spectrum. The Commission

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<sup>27</sup> 18 GHz Order at ¶ 17.

<sup>28</sup> Hughes Reply Comments at 3-6; Written *Ex Parte* Presentation in IB Docket 98-172 at 2-4 (filed February 22, 2000).

<sup>29</sup> See *In Re Establishment of Domestic Communication-Satellite Facilities by Non-Governmental Entities*, 25 FCC 2d 718, (¶¶ 1-5) (1970); *In Re Amendment of Part 2 of the Commission's Rules to Conform with Space WARC 1971*, 39 FCC 2d 959 (1973).

bases this decision on the argument that 18 GHz is the only band available for PCO/CARS uses. However, the Commission wholly fails to address Hughes's proposal (as well as that of other Ka band satellite licensees) that at least a portion of the future<sup>31</sup> PCO/CARS uses be accommodated in the 12.7 - 13.2 GHz band, which is currently available for CARS and may become available for PCO use,<sup>32</sup> and/or the 21.2 - 23.6 GHz band, which is available, and used,<sup>33</sup> today for PCO systems.

Similarly, the 18 GHz Order provides the NGSO/FSS and NGSO MSS industries 100% of their stated needs, while limiting the GSO/FSS to 72% of their legitimate needs, without adequate reason for the differential treatment. The Commission appears to base this differential treatment on the unsupported statement that GSO/FSS "commenters failed to demonstrate how existing consumer demand would justify the designation of 1000 MHz of spectrum for exclusive primary use by them."<sup>34</sup>

At the outset, the Commission makes this statement in violation of the APA without any citation to the record in this proceeding and completely fails to explain the basis for the statement. The Commission ignores its decision in the 28 GHz proceeding that the promise of GSO/FSS systems warranted the designation of 1000 MHz for ubiquitous earth terminals.<sup>35</sup> The Commission cannot now change that course without having a rational basis for its decision

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<sup>30</sup> 28 GHz Order at ¶ 17, 58, 78.

<sup>31</sup> Of course, existing PCO/CARS operations in this band are subject to the grandfathering and relocation policies of the 18 GHz Order.

<sup>32</sup> *See Petition for Rulemaking to Amend Eligibility Requirements in Part 78 Regarding 12 GHz Cable Television Relay Service*, CS Docket No. 99-250, FCC 99-166 (rel. July 14, 1999).

<sup>33</sup> *Petition for Rulemaking of OpTel, Inc.*, RM- 9257, at 2 n.1 (filed April 1, 1998).

<sup>34</sup> 18 GHz Order at ¶ 60.

and explaining that basis fully. Moreover, this statement is an impermissible post-hoc rationalization because the Commission did not specifically solicit comment in the 18 GHz NPRM on the relative “existing consumer demand” for each of the services in the 18 GHz Band. If it did so, it is unlikely that the floundering PCO industry, or the failed NGSO MSS industry, would have been treated as favorably as the 18 GHz Order treats them.

More importantly, the Commission’s assessment of the demand for GSO/FSS services is incorrect. Hughes has fully explained why the strong demand for advanced satellite broadband offerings justifies retaining the 1000 MHz commitment of the 28 GHz band plan.<sup>36</sup> Indeed, if the Commission’s basis for allocating the spectrum in the 18 GHz band in this proceeding is now the relative “existing consumer demand” for these services, it is the GSO/FSS that should be accorded 100% of its needs. Unlike the spectacular failure of the one MSS system still licensed to use the 19.3 - 19.7 GHz band<sup>37</sup> and the seemingly perpetually delayed deployment of the one licensed NGSO/FSS system,<sup>38</sup> Hughes is moving forward rapidly with the construction and deployment of its Ka band GSO/FSS system<sup>39</sup> and other Ka band GSO/FSS licensees appear to be making progress with the financing and construction of their systems.<sup>40</sup> Indeed, in other proceedings, the Commission has acknowledged the important role that satellite-delivered broadband services will soon play in providing competition to terrestrial broadband

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<sup>35</sup> See, *supra*, note 21.

<sup>36</sup> See, *e.g.*, Hughes Comments at 5-8.

<sup>37</sup> See *Iridium Blames Motorola For Stopping Sales*, COMMUNICATIONS DAILY, September 5, 2000 (Motorola to deorbit Iridium constellation).

<sup>38</sup> See Letter to Magalie Roman Salas from Lawrence H. Williams, Vice President, Teledesic (filed June 30, 2000).

<sup>39</sup> See, *supra*, note 7.

providers and in extending broadband services to unserved and underserved communities, and in enhancing competition in already-served areas.<sup>41</sup> Thus, the Commission's 18 GHz band plan disproportionately burdens the GSO/FSS industry and therefore, does not effect a fair, rational or balanced segmentation of the 18 GHz band.

## II. THE "LEGACY LIST" POLICY IS AN UNEXPLAINED DEPARTURE FROM CURRENT RULES AND WAS ADOPTED WITHOUT MANDATORY NOTICE AND COMMENT PROCEDURES

The 18 GHz Order requires satellite licensees that utilize the 18.3 - 18.8 GHz band to pay to alleviate interference that any existing terrestrial fixed licensee in this band receives from the satellite licensee because the *terrestrial fixed licensee's receiver* is pointed within 2 degrees of the geostationary arc.<sup>42</sup> This rule applies even if the satellite licensee's operations fully comply with the power flux density ("*pf<sub>d</sub>*") limits set forth in Commission rule Section 25.208, which were adopted (i) as explicit sharing criteria, and (ii) to avoid this very problem with terrestrial receivers. Although the 18 GHz Order is not entirely clear, the Commission's premise in adopting this "Legacy List" rule appears to be that existing terrestrial fixed operators could not have known prior to the 18 GHz Order that satellite downlinks might operate in the 18 GHz band at or above the *pf<sub>d</sub>* limits set forth in Section 25.208.<sup>43</sup> The Commission's premise is thoroughly mistaken.

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<sup>40</sup> See *Satellite Broadband Strategy Dominates SBCA*, COMMUNICATIONS DAILY, July 24, 2000 (iSKY to begin operations in 2001); *Satellite*, COMMUNICATIONS DAILY, June 9, 2000 (Astrolink lets design and integration contract for satellite constellation).

<sup>41</sup> See *Extending Wireless Telecommunications Services To Tribal Lands*, FCC 99-205 ¶ 12 (rel. August 18, 1999).

<sup>42</sup> 18 GHz Order at ¶¶ 43-47.

<sup>43</sup> 18 GHz Order at ¶ 44.

As the Commission itself acknowledges,<sup>44</sup> the very purpose of Section 25.208 is to establish the sharing criteria between spacecraft transmissions and terrestrial fixed service receivers. Spacecraft transmissions in these bands must not exceed the required pfd limit. As a result, terrestrial fixed service operators are assured that spacecraft transmissions will not exceed a certain power on the Earth's surface, but must accept any interference occurring below that power level, including interference caused by pointing their terrestrial receivers directly toward the geostationary arc. Indeed, precedent is clear that the specific pfd limit in place *since at least 1983* in the 18 GHz Band was designed to “pre-coordinate” spacecraft transmissions and terrestrial fixed service receivers regardless of the elevation angle and azimuth of the terrestrial receiver.<sup>45</sup> The Commission recently reconfirmed this reading of Section 25.208(c).<sup>46</sup> The absence of a pfd limit in the FSS downlink band at 19.7 - 20.2 GHz, where there is no fixed service allocation, provides further support for this reading.

Thus, since at least 1983, the terrestrial fixed service in the 18 GHz Band has been subject to, and on notice of, the pre-coordination regime incorporated within Section 25.208(c). While there is no explicit restriction against 18 GHz terrestrial users pointing at the geostationary arc, the co-primary sharing regime imposed by Section 25.208(c) clearly requires

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<sup>44</sup> 18 GHz Order at ¶ 43 (stating that the pfd limit was designed to protect the fixed service from satellite downlinks); *Id.* at ¶ 38 (only GSO/FSS earth stations subject to interference in shared bands).

<sup>45</sup> *See Licensing of Space Stations in the Domestic Fixed-Satellite Service*, 88 FCC 2d. 318, ¶ 43 n. 35 (pfd limits in 25.208 sufficient to protect terrestrial stations from in-orbit space station transmissions.)

<sup>46</sup> *Teledesic LLC for Minor Modification of License to Construct, Launch and Operate a Non-Geostationary Fixed Satellite System*, 14 FCC Rcd. 2261, ¶21 (1999) (“In any event, in all cases, [Teledesic’s] modified PFD limits continue to meet the requirements of Section 25.208(c), . . . of the Commission’s Rules. *This limit ensures that there will not be any unacceptable interference to terrestrial receivers in this band.*”) (emphasis added).

terrestrial operators to bear the burden of *any* interference from satellite downlinks that comply with Section 25.208(c).

The Commission's argument that terrestrial operators could not have known of this interference risk when they selected their receiver equipment and site<sup>47</sup> is inexplicable. In addition to Section 25.208, the relevant portions of the Commission's terrestrial licensing rules make clear that the band is shared with satellite systems.<sup>48</sup> Furthermore, over seven years ago terrestrial users were placed on clear notice of the impending satellite use of the 18 GHz band when Hughes filed its initial application for the SPACEWAY satellite system, and again in 1995 when the Commission placed twelve other Ka band satellite system applications on public notice. Moreover, four years ago, the Commission's 28 GHz band plan reaffirmed the shared satellite/terrestrial nature of the 18 GHz band,<sup>49</sup> and more than three years ago, fourteen satellite systems, including Hughes' SPACEWAY system, were licensed, without objection from the terrestrial interests, to use portions of the 18 GHz band for downlinks.

The Commission's failure to even acknowledge, much less explain away, the obvious intent and effect of Section 25.208(c) is especially bewildering because Hughes specifically brought this issue to the Commission's attention in the record this proceeding.<sup>50</sup> The Commission's "Legacy List" rule is a dramatic and unexplained departure from its previous policy. The Commission's failure to explain its reasoning and provide a rational basis for this departure is a violation of the APA. In addition, the new rule is itself an arbitrary and

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<sup>47</sup> See 18 GHz Order at ¶ 44.

<sup>48</sup> 47 C.F.R. § 101.101 (1999).

<sup>49</sup> 28 GHz Order at ¶¶ 78, 81.

<sup>50</sup> Hughes Reply Comments at 4-5, 12; Written *Ex Parte* Presentation in IB Docket 98-172 at 3 (filed February 22, 2000).

unwarranted penalty on the satellite users of the 18.3 - 18.8 GHz band, who have reasonably relied on the Commission's rules and past precedent. Furthermore, the rule would bestow a windfall on terrestrial licensees who deployed systems that are not robust enough to operate under long-established terrestrial/satellite sharing rules.

Finally, the Commission's "Legacy List" rule does not comply with Section 553(b) of the APA,<sup>51</sup> which requires the Commission to provide adequate notice of, and a meaningful opportunity to comment on, the alternative being considered. The 18 GHz NPRM did not discuss the terms or the substance of such a proposal or provide any notion that the Commission would break from its long-standing interpretation of the existing pfd limits in Section 25.208. In fact, the Commission itself tacitly acknowledges this procedure failing by indicating that it only became aware of this matter in its review of the comments in this proceeding.<sup>52</sup> However, the law is clear that the Commission may not seek to "bootstrap" compliance with the adequate notice requirements APA by referring to the comments in a proceeding.<sup>53</sup>

Moreover, even if it were permissible for comments to provide adequate notice, the comments cited by the Commission do not provide sufficient or reasonable notice of the Commission's "Legacy List" rule. Both the CTIA Comments and the ICTA Comments make only general statements about potential interference between satellite and terrestrial operations in

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<sup>51</sup> 5 U.S.C.A. § 553(b)(3) (West 1996).

<sup>52</sup> 18 GHz Order at ¶ 43.

<sup>53</sup> *See MCI v. FCC*, 57 F.3d 1136, 1140-42 (DC Cir 1995) (footnotes in a notice and comments from other parties do not constitute adequate public notice of a proposed rule); *American Federation of Labor v. Donovan*, 757 F.2d 330, 340 (D.C. Cir 1985) (Commission cannot bootstrap notice from a comment filed by one party); *Small Ref. Lead Phase-Down Task Force v. US EPA*, 705 F.2d 506, 549-550 (DC Cir 1983) (agency must provide notice itself; it cannot bootstrap notice from comments).

certain circumstances. Neither comment suggests the “Legacy List” rule nor any other relocation payment rule to remedy the cited interference issue. Indeed, Hughes specifically replied to the point raised in the ICTA Comments, indicating that any potential interference into terrestrial receivers from pfd-compliant spacecraft transmissions was solely due to the failure of terrestrial fixed operators to design their systems to take into account the existing satellite-terrestrial sharing rules.<sup>54</sup> *The Commission does not address the merits of Hughes’s response, much less even acknowledge that Hughes replied on this issue.* Ultimately, the complete lack of record comment on the “Legacy List” rule or a similar rule demonstrates that the Commission did not provide adequate notice of, and meaningful opportunity to comment on, this proposed rule. This failure of the Commission to comply with the adequate notice provisions of the APA provides a separate and independent basis for rescinding the Legacy List rule.

### **III. THE DELETION OF SECONDARY SATELLITE DESIGNATIONS IS UNSUPPORTED AND CONTRARY TO MANDATORY NOTICE AND COMMENT PROCEDURES**

With scant discussion of the Commission’s underlying rationale and no reference to any record evidence, the 18 GHz Order arbitrarily deletes the secondary designations for NGSO/FSS in the 18.3 - 18.8 GHz GSO/FSS co-primary and primary bands and the secondary designations for GSO/FSS in the 18.8 - 19.3 GHz NGSO/FSS primary band.<sup>55</sup> The Commission completely fails to discuss the deletion of the secondary designation in the 18.3 - 18.8 GHz band, including the impact of that decision on the secondary license granted to Teledesic for that

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<sup>54</sup> Hughes Reply Comments at 4-5, 12.

<sup>55</sup> 18 GHz Order at ¶ 28 (band plan chart); *see also* 18 GHz Order at Appendix A, Rule § 2.106, Footnotes NG164 and NG165.

spectrum, which is not yet a final order.<sup>56</sup> Obviously, the APA requires at least some discussion of the Commission's rationale for this action.

While the 18 GHz Order discusses the deletion of the GSO/FSS secondary designation in the 18.8 - 19.3 GHz band,<sup>57</sup> the Commission makes no attempt to explain the Commission's departure from the rationale for the secondary designations set forth in the 28 GHz Order. The Commission also ignores the results of WRC-2000, to which the Commission refers in another context in the 18 GHz Order,<sup>58</sup> that relate to GSO/NGSO sharing. More importantly, the Commission's actions in the 18 GHz Order leave the designations for Ka band FSS systems in confusion and disarray. The 18 GHz Order deletes the secondary designation in two of the three FSS downlink band segments (18.3 - 18.8 GHz and 18.8 - 19.3 GHz), but leaves the third FSS downlink band segment, 19.7 - 20.2 GHz, and the corresponding uplink band segments (28.35 - 28.6 GHz, 28.6 - 29.1 GHz, 29.25 - 29.5 GHz and 29.5-30.0 GHz) untouched and unmentioned. The Commission does not even try to explain why it would change the inter-satellite rules in the downlink band, but not even address the same rules in the uplink band. Simply put, this decision is not a rational, productive or transparent result.

Hughes does not necessarily disagree with the Commission that deleting the secondary satellite designations that were established in the 28 GHz Order in the satellite-primary bands ultimately may be sensible, but adopting this policy in a haphazard and piecemeal way without an adequate record makes no sense. The most appropriate way to deal with the issue of secondary satellite designations in satellite-primary bands at Ka band is to issue a

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<sup>56</sup> See *Teledesic for Minor Modification of License*, 14 FCC Rcd. 2261 (1999). This license is still subject to one or more petitions for reconsideration.

<sup>57</sup> 18 GHz Order at ¶ 57.

<sup>58</sup> 18 GHz Order at ¶ 41.

Further Notice of Proposed Rule Making on the topic and to deal comprehensively in that proceeding with the issue for both the Ka band uplink and downlink bands, where, among other things, the results of WRC-2000 could be considered. In the meantime, however, the Commission's deletions of the secondary satellite designations are unexplained and irrational, do not comply with the APA and should, therefore, be rescinded.

**IV. THE COMMISSION SHOULD PERMIT EITHER BLANKET LICENSING OR STREAMLINED REGISTRATION IN THE FULL 1000 MHZ ALLOCATED TO GSO/FSS AT KA BAND**

The 18 GHz Order takes no action either (i) with respect to blanket licensing of GSO/FSS earth stations in the satellite-only band of 29.25 - 29.5 GHz or (ii) with respect to streamlined licensing or registration of earth stations that would only receive, and not transmit, in the 18.3 - 18.58 GHz band. The 18 GHz Order provides no rationale for the Commission's refusal to establish blanket licensing in the 29.25 - 29.5 GHz band and decides that action on the 18.3 - 18.58 GHz band should be delayed to an unspecified future proceeding.<sup>59</sup> The Commission should not delay action any longer on the 29.25 - 29.5 GHz band, and it should include Hughes's streamlined licensing proposal for the 18.3 - 18.58 GHz band in a prompt Further Notice of Proposed Rule Making in this proceeding, if the Commission does not accept Hughes's proposal to provide a full 1000 MHz for blanket licensed earth stations.

As discussed in Section IA above, the record in the 28 GHz proceeding is clear that the Commission and the parties in that proceeding intended that the shared use of the 29.25 - 29.5 GHz band between GSO/FSS and NGSO/MSS feeder links would not prevent deployment of ubiquitous GSO/FSS earth stations (the very types of terminals for which blanket licensing is critical and appropriate). Furthermore, the record on this issue in both the 28 GHz proceeding and in this proceeding is full and comprehensive. Hughes fully addressed this issue in its

Comments and Reply Comments and in a compendium *ex parte* filing that collected all of the relevant materials from both proceedings.<sup>60</sup> Hughes's showings on this issue are unrebutted in this proceeding. Thus, the record strongly supports permitting blanket licensing in the 29.25 - 29.5 GHz band and the Commission has no rational reason to delay decision on this point. The Commission should reconsider its decision and permit blanket licensing in the 29.25 - 29.5 GHz band, in accordance with the sharing principles agreed to with NGSO MSS proponents in 1996 and adopted by the full Commission in the 28 GHz Order.<sup>61</sup>

The Commission notes Hughes's proposal for streamlined licensing of earth stations in the bands shared on a co-primary basis by the GSO/FSS and the terrestrial fixed service, but concludes that the record is not sufficient to permit action on Hughes's proposal at this time.<sup>62</sup> The Commission indicates that it will address this proposal in some unspecified future proceeding. Hughes urges the Commission to address this proposal in a prompt Further Notice of Proposed Rule Making in this proceeding. A streamlined licensing or registration process, which differs from blanket licensing, is the only way that the Ka band GSO/FSS systems can make prompt and efficient use of the spectrum shared on a co-primary basis with the terrestrial fixed services. Significantly, a streamlined licensing approach facilitates the prompt and economical deployment of customer antennas, while still providing detailed information about the actual locations of those antennas, and will facilitate coordination with terrestrial

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<sup>59</sup> 18 GHz Order at ¶ 94.

<sup>60</sup> Hughes Comments at 11-13, Technical Appendix A; Hughes Reply Comments at 23-24; Written *Ex Parte* Presentation of Hughes Network Systems filed in IB Docket 98-172 (May 19, 2000) (more than 1000 pages of record support provided to the Commission).

<sup>61</sup> 28 GHz Order at ¶¶ 72-73.

<sup>62</sup> 18 GHz Order at ¶ 94.

services. Therefore, it is critical that the Commission take prompt action to investigate such a process.

**V. THE COMMISSION SHOULD RECONSIDER OR CORRECT SEVERAL TECHNICAL ASPECTS OF THE KA BAND BLANKET LICENSING RULES**

**A. The Amendment of the Spacecraft Downlink PFD Limit is Unexplained, Internally-Inconsistent and Contrary to the Record**

The 18 GHz Order replaces current rule Section 25.208(c) with an amended Section 25.208(c) and adds new Sections 25.208(d), (e) and (f). Whereas the previous version of 25.208(c) governed spacecraft downlink power-flux density (“pfd”) in the 17.7 - 19.7 GHz band, the amended Sections 25.208(c)-(f) inexplicably apply different pfd standards to the 18.3 - 18.8 GHz band than the 18.8 - 19.3 GHz and 19.3 - 19.7 GHz bands. The former version of 25.208(c) mirrors the current ITU Radio Regulations,<sup>63</sup> and, as discussed in detail above, the Commission adopted that version of 25.208(c) to govern the terms of spacecraft/terrestrial sharing in the 18 GHz band. Specifically with reference to GSO/FSS operations in 18.3 - 18.8 GHz, the Commission’s new Section 25.208(d) applies a more stringent pfd limit at certain angles of arrival than the prior rule. The Commission makes no attempt to provide a rationale for this departure from the longstanding existing pfd limit. Nor does the Commission explain why there should be a different pfd limit for the GSO FSS at 18.3-18.8 GHz than for the NGSO/FSS at 18.8-19.3 GHz or for NGSO/MSS Feeder Links at 19.3-19.7 GHz. Moreover, the change to the limit at 18.3-18.8 GHz is contrary both to the Commission’s new Ka band blanket licensing provision, Section 25.138, and to the record in this proceeding.

The 18 GHz Order does not explicitly provide a rationale for the Commission’s amendments to Section 25.208(c). At most the Commission explains that it “adopt[s] the final

recommendations of the [Blanket Licensing Industry Working Group] as detailed in the [Commission's] revised Rules.”<sup>64</sup> However, the Blanket Licensing Industry Working Group (“BL-IWG”) specifically recommended that the Commission *not* adopt the NPRM proposal to amend Section 25.208(c) because such an amendment would be “inconsistent with the ‘coordination threshold’ approach to blanket licensing that the Industry Working Group has adopted.”<sup>65</sup> Inexplicably, the Commission makes no attempt to address this recommendation by the BL-IWG or Hughes’s Comments<sup>66</sup> to the same effect. This failure is a clear violation of the APA’s requirement that the Commission address well-supported arguments that are contrary to the Commission’s ultimate result.

New Section 25.208(d) is also fundamentally inconsistent with the underlying coordination threshold approach that is embodied in the Commission’s Section 25.138(a) and (b). Indeed, the ability to coordinate inter-satellite operations at uplink and downlink power levels in excess of the thresholds set forth in Section 25.138(a) is fundamental to the approach taken by both the Commission<sup>67</sup> and the BL-IWG.<sup>68</sup> Section 25.138(b) clearly provides that the Commission could grant, upon a proper inter-satellite coordination showing, an application for a blanket earth station license that contemplates receiving downlink power from the satellite in excess of the -118 dBW/m<sup>2</sup>/MHz threshold set forth in Section 25.138(a)(6). Yet, the Commission’s new Section 25.208(d) would prohibit these coordinated higher-power operations

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<sup>63</sup> See ITU Radio Regulations, Article S21, Section V, Table S21-4; see also 18 GHz Order at ¶ 90.

<sup>64</sup> 18 GHz Order at ¶ 92.

<sup>65</sup> Second Report of the GSO FSS Ka-Band Blanket Licensing Industry Working Group at 2 (“BL-IWG Second Report”).

<sup>66</sup> Hughes Comments at 16-17.

<sup>67</sup> See 18 GHz Order at Appendix A, Rule Section 25.138(b).

from many orbital positions over a range of angles of arrival. For example, while 25.138(b) would permit Hughes, upon coordination with adjacent satellite operators, to obtain a blanket earth station license to receive a higher power downlink service in the SPACEWAY beams that cover Alaska, Section 25.208(d) would prevent this coordinated service. This result is neither internally consistent nor rational.

Indeed, the result is all the more perplexing in view of the Commission's decision to designate a portion of the 18 GHz Band exclusively to GSO/FSS downlinks. As discussed above, the original purpose of 25.208(c) was to "pre-coordinate" spacecraft downlink transmissions in the 18 GHz band with the co-primary terrestrial fixed service users. Thus, the rational result of the Commission's satellite/terrestrial segmentation decision would be to remove the Section 25.208 pfd limit entirely from those bands designated for FSS exclusive use, as is currently the case for the FSS-exclusive 19.7 - 20.2 GHz band, and to retain the current pfd limit for those bands where satellite and terrestrial users retain their co-primary status. At the least, the APA requires that the Commission reinstate the prior 25.208(c) pfd limit, which is consistent with the ITU Radio Regulations, for the GSO/FSS band at 18.3 - 18.8 GHz.<sup>69</sup>

**B. The Commission Should Correct Rule Section 25.138(a)(6) to Apply to All GSO/FSS Downlink Bands In Which the Commission Permits Blanket Licensing**

The Commission makes clear in the text of the 18 GHz Order and in portions of its proposed rule Section 25.138, that the blanket licensing procedure for GSO/FSS earth stations applies to the 18.58-18.8 GHz band, in addition to the 19.7 - 20.2 GHz, 28.35 - 28.6 GHz, and

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<sup>68</sup> BL-IWG Second Report at 2.

<sup>69</sup> In the event that the Commission retains its new Section 25.208(d), the Commission should make clear that the new, more stringent pfd limit applies only to satellite

29.5 - 30.0 GHz bands.<sup>70</sup> However, the text of rule Section 25.138(a)(6), which lists the downlink power-flux density coordination threshold for routine processing of blanket license applications, omits the 18.58-18.8 GHz downlink band and lists only the 19.7 - 20.2 GHz downlink band. As discussed above, Hughes believes that the Commission should designate the entire 18.3 - 18.8 GHz band for satellite downlinks to ubiquitous, blanket-licensed earth terminals, but whatever the Commission's decision on the segmentation of, and blanket licensing in, the various portions 18 GHz Band, Section 25.138(a)(6) should apply to each GSO/FSS downlink band in which the Commission permits blanket earth station licensing. There is simply no rational reason for doing otherwise. To allow, as would the current text of Section 25.138(a)(6), routine processing of a blanket license application that contemplates a higher downlink power-flux density in the 18.58 - 18.8 GHz band, for example, than -118 dBW/m<sup>2</sup>/MHz would disrupt the industry consensus reflected in the Second Report of the BL-IWG. Thus, the Commission should amend Section 25.138(a)(6) to reference each Ka band downlink band in which the Commission ultimately permits GSO/FSS blanket earth station licensing.

**C. The Commission Should Correct the Text of Section 25.138(b) To Conform To Industry Consensus and the Record in This Proceeding**

As noted above, the 18 GHz Order indicates that the Commission intended to adopt the recommendations of the BL-IWG on technical matters relating to blanket licensing of earth terminals. However, the text of Section 25.138(b) in the 18 GHz Order omits the word "blanket" before "earth station license" in the first sentence of that section, which is contrary to

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transmissions to the U.S. and does not displace the current ITU limits for coordination of international operations between spacecraft providing service outside the U.S.

<sup>70</sup> 18 GHz Order at ¶ 87; 18 GHz Order at Appendix A (listing 18.58 - 18.8 GHz in the heading of Section 25.138 and in subsection 25.138 (a)).

the proposal of the BL-IWG.<sup>71</sup> The Commission's omission, if it is intentional, is done without any explanatory rationale whatsoever, and without any support in the record of this proceeding.

The effect of the omission is that (although the heading of Section 25.138 clearly indicates that the Section applies to applications for blanket earth station licenses) Section 25.138(b), and therefore Section 25.138(c), possibly could be interpreted also to apply to applications for non-blanketed licensed earth terminals, such as individually-licensed and coordinated earth stations used for TT&C functions. The consequence of such an interpretation is that critical earth station facilities, such as TT&C stations, even after they are coordinated, could be subject to the requirement that they "power down" to accommodate new operations at any of the six orbital locations within six degrees. Such result obviously would be unacceptable.

The clear intention of the BL-IWG was that their proposed rules would "govern[] only the routine licensing of blanket-licensed earth terminals."<sup>72</sup> In Hughes's view, the reason that the BL-IWG intended its report to apply only to blanket-licensed earth terminals was that the technical discussions of the BL-IWG did not address the likely parameters of individually-licensed earth stations (*e.g.* TT&C), which would necessarily be individually coordinated with adjacent satellite operators in accordance with long-established precedent.<sup>73</sup> Thus, in accordance with the BL-IWG recommendations, and the APA, Commission should correct the text of

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<sup>71</sup> Compare 18 GHz Order at Appendix A ("Each applicant for earth station license(s) that proposes . . .") with BL-IWG Second Report at 4 ("Each applicant for *blanket* earth station license(s) that proposes . . .") (emphasis added).

<sup>72</sup> BL-IWG Second Report at 2.

<sup>73</sup> For example, individually licensed Ku band earth stations are treated this way under Section 25.212, in contrast to the rules that apply to blanket licensed Ku band VSAT terminals under Section 25.134. While the BL-IWG developed a proposed rule that is a Ka band analog to Section 25.134, it did not address an analog to Section 25.212.

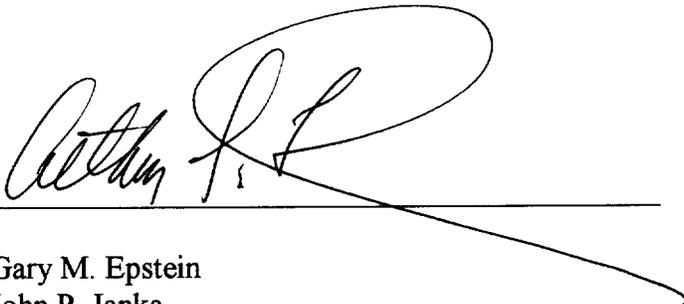
Section 25.138(b) to insert the word "blanket" before "earth station license" in the first sentence of that section.

**VI. CONCLUSION**

For all of the foregoing reasons, Hughes Electronics Corporation respectfully requests that the Commission reconsider the decisions in the 18 GHz Order discussed herein and take the actions on reconsideration proposed by this petition.

Respectfully submitted,

HUGHES ELECTRONICS CORPORATION

A handwritten signature in black ink, appearing to read "Arthur S. Landerholm", is written over a horizontal line. The signature is stylized and cursive.

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October 6, 2000

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