

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

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 ) CC Docket No. 92-297  
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 )  
)

**MEMORANDUM OPINION AND ORDER**

**Adopted:** May 22, 2001

**Released:** May 25, 2001

By the Commission:

**Introduction**

1. In this order we dispose of petitions for clarification or reconsideration of the *Third Report and Order* in this proceeding.<sup>1</sup> More specifically, we deny one petitioner’s request that we amend our rule prescribing service-coverage requirements, we grant a request for amendment of our rule pertaining to implementation milestones, and we direct the International Bureau to grant a request for authority for international operation, subject to compliance with any pertinent requirements of foreign administrations.

**Background**

2. In the *First Report and Order* in this proceeding, the Commission established a comprehensive allocation plan for domestic use of the Ka Band<sup>2</sup> by non-government licensees.<sup>3</sup> The Commission designated 1000 MHz of primary uplink spectrum and 1600 MHz of primary downlink spectrum for systems providing fixed-satellite service via geostationary satellites (*i.e.*, “GSO FSS” systems).<sup>4</sup> The Commission also designated 500 MHz of primary uplink and 500 MHz of primary

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<sup>1</sup> 12 FCC Rcd 22,310 (1997).

<sup>2</sup> We use the term “Ka Band” in reference to the frequencies at 17.7-20.2 GHz, which are allocated for satellite-to-earth (*i.e.*, downlink) transmission, and the frequencies at 27.5-30.0 GHz, which are allocated for earth-to-satellite (*i.e.*, uplink) transmission.

<sup>3</sup> *First Report and Order and Fourth Notice of Proposed Rulemaking*, 11 FCC Rcd 19,005 (1996).

<sup>4</sup> The Commission subsequently revised the downlink allocations, designating 720 MHz of spectrum at 18.58-18.8 GHz and 19.7-20.2 GHz for GSO FSS on a sole primary basis and 280 MHz at 18.3-18.58 GHz for (continued....)

downlink spectrum for systems providing fixed-satellite service via non-geostationary satellites (*i.e.*, “NGSO FSS” systems) and designated other portions of the Ka Band for mobile-satellite service feeder links and terrestrial services. In 1997 the Commission issued a license to Teledesic for construction, launch, and operation of an NGSO FSS Ka-Band system and licensed thirteen other companies to construct, launch, and operate GSO FSS Ka-Band systems, subject to service rules to be adopted later.<sup>5</sup>

3. In the *Third Report and Order*, the Commission established service rules for GSO FSS and NGSO FSS systems. Three interested parties filed petitions for clarification or reconsideration of the *Third Report and Order* or rules adopted therein, and a number of others filed comments in support or opposition to contentions raised by the petitioners.

### Discussion

#### Coverage Requirements

4. Motorola Global Communications, Inc. (“Motorola”) filed a “Petition for Partial Reconsideration and/or Clarification” of the *Third Report and Order*, in response to which Teledesic Corporation and Lockheed Martin Corporation filed comments in opposition.<sup>6</sup> Motorola asks the Commission to revise a rule adopted in the *Third Report and Order* that prescribes geographic coverage requirements for NGSO systems by inserting a minimum-elevation-angle specification.

5. The rule provision in question, 47 C.F.R. § 25.145(c), states that an applicant for an NGSO FSS Ka-Band authorization must demonstrate that the proposed system could provide continuous service throughout the United States, Puerto Rico, and the U.S. Virgin Islands. Further, the applicant must show that the system could provide service for at least 18 hours in any 24-hour period anywhere outside the United States between 70 degrees North latitude and 55 degrees South latitude. The Commission said when adopting these provisions that it was adopting “the same coverage requirements ... [as] apply to ‘Big

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sharing by GSO FSS and terrestrial fixed services on a co-primary basis. *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*, 15 FCC Rcd 13,430 (2000) (“18 GHz Report and Order”), petition for review pending, *Teledesic LLC v. FCC*, D.C. Cir. No. 00-1466 (filed Nov. 6, 2000).

<sup>5</sup> *Application of Teledesic Corporation*, 12 FCC Rcd 3154 (Int’l Bur. 1997); *Application of GE American Communications, Inc.*, 13 FCC Rcd 6475 (Int’l Bur. 1997); *Application of Loral Space & Communications Ltd.*, 13 FCC Rcd 1379 (Int’l Bur. 1997); *Application of Hughes Communication Galaxy, Inc.*, 13 FCC Rcd 1351 (Int’l Bur. 1997); *Application of PanAmSat Licensee Corp.*, 13 FCC Rcd 1405 (Int’l Bur. 1997); *Application of Comm, Inc.*, 12 FCC Rcd 23,001 (Int’l Bur. 1997); *Application of EchoStar Satellite Corp.*, 13 FCC Rcd 5664 (Int’l Bur. 1997); *Application of KaStar Satellite Communications Corp.*, 13 FCC Rcd 1366 (Int’l Bur. 1997); *Application of Lockheed Martin Corp.*, 12 FCC Rcd 23,014 (Int’l Bur. 1997); *Application of Morning Star Satellite Co.*, 12 FCC Rcd 6039 (Int’l Bur. 1997); *Application of NetSat 28 Company*, 13 FCC Rcd 1392 (Int’l Bur. 1997); *Application of Orion Atlantic, L.P.*, 13 FCC Rcd 1416 (Int’l Bur. 1997); *Application of VisionStar, Inc.*, 13 FCC Rcd 1428 (Int’l Bur. 1997).

<sup>6</sup> Motorola is the parent corporation of one of the recipients of license authority for a GSO FSS Ka-Band system and of another subsidiary with a license application on file for a proposed NGSO FSS Ka-Band system to be designated by the tradename “Celestri.” Teledesic and Lockheed Martin hold Ka-Band licenses for unconstructed NGSO FSS and GSO FSS systems, respectively.

LEO' systems."<sup>7</sup> As Motorola notes, however, the coverage rules for Ka-Band NGSO FSS systems and Big LEO systems are not identical. The rule for Big LEOs defines service coverage as extending wherever at least one system satellite is visible above the horizon at an elevation angle of five degrees or more.<sup>8</sup> The Ka-Band coverage rule does not include such a provision. Motorola contends that the omission of that definitional criterion leaves uncertainty as to what is required of Ka-Band NGSO FSS systems. Motorola therefore urges the Commission to insert provisions defining required service coverage for NGSO FSS Ka-Band systems in terms of a five-degree minimum elevation angle.

6. In opposition, Teledesic argues that it would be inappropriate to define acceptable coverage for Ka-Band NGSO FSS systems in terms of a minimum elevation angle as low as five degrees because Ka-Band satellite links are much more susceptible than Big LEO satellite links to rain attenuation and blockage at low elevation angles.<sup>9</sup> Teledesic contends that if the Commission were to specify a minimum elevation angle in the coverage rule for Ka-Band NSGO FSS systems, the angle should be "substantially" higher than five degrees. Teledesic does not advocate adoption of a higher minimum elevation-angle specification for Ka-Band NGSO FSS systems, however. Rather, Teledesic recommends that we determine, on a case-by-case basis, whether proposed Ka-Band NGSO FSS systems would be capable of providing "adequate" service throughout the geographic areas where coverage is mandated, in light of all relevant factors, qualitative as well as quantitative. Lockheed Martin maintains that it would be inappropriate to specify a five-degree minimum elevation angle for Ka-Band NGSO FSS systems because all the applications that have been filed for Ka-Band NGSO FSS authorizations have specified minimum elevation angles higher than five degrees.<sup>10</sup> For instance, Lockheed Martin asserts that the pending application of a Motorola subsidiary for the proposed "Celestri" Ka-Band NGSO FSS system indicates that the system is designed for operation with a minimum elevation angle of sixteen degrees. Lockheed Martin contends that to assume for purposes of the mandatory coverage rule that Celestri would provide service wherever its satellites are visible at elevation angles down to five degrees, though the applicant itself

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<sup>7</sup> *Third Report and Order* at ¶34.

<sup>8</sup> The Big LEO coverage rule is as follows.

[E]ach applicant shall demonstrate the following:

....

(ii) That the proposed system [will] be capable of providing ... services to all locations as far north as 70° latitude and as far south as 55° latitude for at least 75% of every 24-hour period, *i.e., that at least one satellite will be visible above the horizon at an elevation angle of at least 5° for at least 18 hours each day within the prescribed geographic area* [and]

(iii) That the proposed system is capable of providing ... services on a continuous basis throughout the fifty states, Puerto Rico, and the U.S. Virgin Islands ... *i.e., that at least one satellite will be visible above the horizon at an elevation angle of at least 5° at all times within the prescribed geographic area* ....

47 C.F.R. § 25.143(b)(2) (emphasis added).

<sup>9</sup> Opposition of Teledesic Corporation filed Feb. 5, 1998, p.6.

<sup>10</sup> Consolidated Comments of Lockheed Martin Corporation filed Feb. 5, 1998, p.5.

has indicated that the system is designed for operation at angles above sixteen degrees, would defeat the purpose of the rule.

7. In response to Teledesic's advocacy of case-by-case qualitative evaluation, Motorola reiterates its contention that specification of a measurable performance threshold is necessary for compliance to be ascertainable and for the requirement to be consistently applied. Motorola contends that the proposed Celestri system could provide continuous broadband service throughout the United States, including Point Barrow, Alaska, the northernmost point in the U.S. at 71.38° North Latitude, where the Celestri satellites would be visible at a minimum elevation angle of five degrees above the horizon, and could also meet the requirement for worldwide coverage at North latitudes up to 70°, where Celestri satellites would be at a minimum elevation angle of seven degrees. Neither rain attenuation nor blockage is a significant factor at those extreme latitudes, according to Motorola, because little rain falls there and tall obstructions are scarce in that region. Motorola also contends that greater path loss at such low elevation angles can be overcome by equipping earth-stations with larger antenna dishes.

8. We recognize that the service-coverage rule for Ka-Band NGSO FSS systems is less definite than the corresponding rule for Big LEO systems. Motorola has not persuaded us, however, that it would be appropriate to define "service" for purposes of Subsection 25.145(c) as coverage at a minimum elevation angle of five degrees or more. Propagation in the Ka Band is much more susceptible to rain attenuation than propagation in the Big LEO service-link bands. The duration and intensity of rain fade affecting a satellite link, moreover, are inverse functions of the time-averaged elevation angle formed by the sightline from the earth station to the satellite; the lower the angle, the greater the rain-fade effect.<sup>11</sup> While rain fade might have little effect on Ka-Band transmission between satellites and earth stations at high northern latitudes, defining "service" in terms of a five-degree minimum elevation angle would have a bearing on quality of service *everywhere* within the defined coverage area, including locations where rainfall is generally plentiful -- Hawaii, Puerto Rico, and portions of the contiguous United States, for instance. There is no evidence in the record of this proceeding that broadband NGSO FSS Ka-Band service can be reliably provided at elevation angles as low as five degrees in areas where rainfall is plentiful. We therefore decline to adopt the rule amendment that Motorola proposes. We tentatively agree, however, that greater specificity in the service-coverage rule for NGSO FSS Ka-Band systems may be desirable, and we intend to revisit this subject in the forthcoming rulemaking concerning the second-round Ka-Band NGSO FSS applications.

### Construction Milestones

9. A number of the license applicants involved in the first Ka-Band FSS processing round, including Hughes Communications Galaxy, Inc. ("Hughes"), proposed to use inter-satellite links ("ISLs") to interconnect the satellites in their networks. Because of unresolved interference and allocation issues, the Commission's International Bureau withheld authority for ISLs when it granted initial system authorizations to those applicants.<sup>12</sup> On the assumption that the licensees proposing to operate with ISLs

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<sup>11</sup> The inverse relationship is non-linear, as incremental differences in elevation angle at the low end of the range have more impact on rain fade than differences at the high end. For instance, the difference between elevation angles of 5° and 10° is more important in this regard than the difference between elevation angles of 85° and 90°.

<sup>12</sup> See orders cited in n.4, *supra*.

would be unable to proceed beyond the initial phases of construction before receiving ISL assignments, the Commission said in the *Third Report and Order* that it would refrain from imposing implementation “milestone” deadlines for those licensees until the issues concerning ISL authorization were resolved.<sup>13</sup> Hughes contends that the milestone rule for Ka-Band FSS systems adopted in the *Third Report and Order* does not fully reflect this policy determination.<sup>14</sup> Hughes points out that there is no mention in the rule of the exception for those awaiting ISL assignments, insofar as the exception pertains to GSO licensees. While the rule indicates that the time-periods for NGSO FSS licensees to meet their implementation milestones are to commence running only upon “unconditional grant” of license authority, the provision pertaining to GSO FSS licensees simply states that they will be required to commence satellite construction “within one year of grant” and launch at least one satellite “within five years of grant.” For clarification, Hughes asks the Commission to amend the rule by inserting “unconditional” as a modifier for “grant” in the provision pertaining to GSO systems. Lockheed Martin, GE American Communications, Inc., and Loral Space and Communications Ltd. filed comments in support of this request, which is unopposed.

10. We agree that the milestone rule should be reworded to conform more clearly to the intent expressed in the *Third Report and Order*. The editorial amendment that Hughes advocates would not fully serve the purpose of clarification, however. “Unconditional grant” is overbroad, as all satellite authorizations are subject to specified conditions of various kinds. “Grant of all space-station frequency assignments” is more apt. We are revising the text of the rule accordingly and inserting a proviso preserving discretion to depart from this lenient general formula where necessary to avert circumvention of the milestone rule. As this is essentially a clarifying amendment rather than a substantive change there is no need to withhold the amendment pending implementation of further notice-and-comment procedures. Neither is it necessary to include an additional regulatory flexibility analysis in this order pursuant to 5 U.S.C. § 604. The Commission’s final regulatory flexibility analysis with respect to the milestone rule and the other rules adopted in the *Third Report and Order*, *supra*, is set forth in Appendix B thereto.

#### Additional Spectrum Assignments for Links with Earth Stations Outside the United States

11. In accordance with the domestic allocation plan adopted in the *First Report and Order*, the Commission’s International Bureau assigned Hughes 1000 MHz of uplink spectrum at 28.35-28.6 GHz and 29.25-30.0 GHz and 1000 MHz of downlink spectrum at 18.3-18.8 GHz and 19.7-20.2 GHz “to provide services to, from, or within the United States.”<sup>15</sup> In addition to requesting authority for satellite links with earth stations within the United States, however, Hughes had requested authority to operate in wider frequency bands to link with earth stations in foreign countries. The Bureau did not assign spectrum to Hughes specifically for links with foreign-based earth stations but indicated in the initial license order

<sup>13</sup> *Third Report and Order* at ¶55 (“because licensees will not be able to proceed ... until the inter-satellite link issues are resolved, we did not impose any ... milestones until we grant authority to launch and operate ... using specific intersatellite link spectrum”). Despite the use of the past tense in that statement, it is obvious from the syntax that the Commission meant not only that it had not imposed milestones for those awaiting ISL assignments but also that it *would not* do so prior to granting the assignments. The International Bureau granted ISL authorizations to first-round licensees in January 2001. *See, e.g., CyberStar Licensee LLC*, DA 01-223 (rel. Jan. 31, 2001).

<sup>14</sup> The rule provision in question is 47 C.F.R. § 25.145(f).

<sup>15</sup> (Emphasis added.) *Hughes Communications Galaxy, Inc.*, 13 FCC Rcd 1351 (Int’l Bur.), at n.14; *Hughes Communications Galaxy, Inc.*, 2001 W.L. 79,380 (Int’l Bur., rel. Jan. 31, 2001).

that the Commission would undertake coordination on Hughes' behalf with respect to such non-domestic operation in consultation with foreign administrations.<sup>16</sup> The Bureau also pointed out that the Commission intended to address issues concerning international coordination of Ka-Band FSS systems in a future rulemaking order.<sup>17</sup>

12. In the *Third Report and Order* in this proceeding, the Commission decided that for purposes of coordination between U.S.-licensed Ka-Band satellite systems regarding use of spectrum for downlinks to earth stations outside the United States it would require adherence to the domestic allocation plan, except insofar as deviation might be necessary in order to uphold previous intergovernmental coordination agreements.<sup>18</sup> Accordingly, a U.S.-licensed system would have to cease nonconforming operation that causes harmful interference to the international operation of other U.S.-licensed systems in conformance with the domestic allocation plan. Concerning coordination between FCC-licensed systems and foreign-licensed systems, on the other hand, the Commission merely said that it would follow applicable procedures and regulations of the International Telecommunication Union ("ITU").<sup>19</sup>

13. In its petition for reconsideration, Hughes points out that although the *Third Report and Order* established policies for coordinating international operation of FCC-licensed Ka-Band satellite systems, the Commission has yet to grant explicit authority for Hughes to use spectrum for service links with earth stations in foreign countries. Hughes asks for issuance of a clarifying statement that it may use the frequency bands 17.7-18.8 GHz, 19.7-20.2 GHz, 27.5-28.6 GHz, and 29.25-30.0 GHz for that purpose. Hughes acknowledges that its provision of service in foreign countries will be subject to foreign laws and that protection from interference with such operation by foreign-licensed stations must be sought pursuant to the ITU's publication, coordination, and notification procedures. In supporting comments, GE American Communications, Inc. agrees that the Commission should clarify the rights of GSO FSS licensees to operate internationally. On the other hand, Motorola argues that because approval for U.S. licensees to use the Ka Band for provision of service outside the U.S. must be sought through international coordination procedures it would be inappropriate to address Hughes' request for such authority in this proceeding.

14. Spectrum rights for FCC-licensed systems to provide service in foreign countries will depend on the outcome of international coordination and foreign earth-station licensing procedures. The Commission routinely issues FSS licenses, however, that include authority to use specified frequencies to transmit from a satellite to earth stations that may be located in foreign countries, subject to international coordination.<sup>20</sup> Furthermore, the Commission has indicated that it is willing to coordinate international spectrum use on behalf of its Ka-Band FSS licensees in accordance with the coordination policies outlined in the *Third Report and Order*. No previous disposition having been made of Hughes' pending request for authority to use Ka-Band frequencies for links with earth stations outside the United States, we direct our

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<sup>16</sup> 13 FCC Rcd at 1363 ¶33.

<sup>17</sup> *Id.* at n.14.

<sup>18</sup> *Id.* at ¶¶ 67-69. The coordination policy does not apply to operation of earth stations accessing FCC-licensed systems from foreign countries, which is entirely within the regulatory jurisdiction of foreign administrations. *Id.* at n.83.

<sup>19</sup> *Fourth Report and Order, supra*, at ¶72.

<sup>20</sup> *See, e.g., Columbia Communications Corp.*, DA 01-514 (rel. Feb. 27, 2001).

International Bureau to issue an order modifying Hughes' GSO FSS space-station license to add authority for such operation, subject to appropriate conditions.

15. The 17.7-18.3 GHz band-segment, which Hughes specifies in its request for authority for international operation, is no longer available domestically for FSS downlinks.<sup>21</sup> Hence the policy for coordination between FCC-licensed systems adopted in the *Third Report and Order* provides no guidance for coordination of international operation in that segment. Before undertaking coordination of such operation with respect to foreign-licensed systems, we will require Hughes, or any other Commission licensee proposing use of frequencies between 17.7 and 18.3 GHz for FSS downlink transmission to earth stations in foreign countries, to show that it has coordinated such proposed operation with other Commission FSS licensees with authority for global operation in this frequency band.

#### Deviations from Band Plan Necessitated by Prior Coordination Agreements

16. Hughes requests clarification of the inter-system coordination policy with regard to deviations necessary for compliance with agreements negotiated with other administrations prior to the Commission's adoption of the allocation plan for Ka-Band services.<sup>22</sup> Hughes maintains that it cannot "finalize" its system design and proceed with satellite construction without knowing how, and to what extent, such prior agreements necessitate departure from the plan. As the *Third Report and Order* does not disclose such information, Hughes asks us to "specify in detail the extent to which GSO licensees will have to modify their international operations ... to comply with deviations from the 28 GHz band plan [due to] preexisting U.S. government coordination agreements." Lockheed Martin, GE Americom, and Loral Space & Communications Ltd. support this request.<sup>23</sup>

17. The information Hughes requests is already a matter of public record. The licensee of the "IRIDIUM" NGSO MSS system included this statement in a petition for reconsideration of the *First Report and Order*:

[T]he Commission, acting on behalf of the U.S. Administration, signed a coordination agreement with the Japanese Administration in which the IRIDIUM System is authorized to use the 29.25-29.30 GHz band to implement the coordination plan agreed to with the N-Star and COMET's systems.<sup>24</sup>

There are no other international agreements affecting availability of spectrum that is domestically

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<sup>21</sup> The *First Report and Order* designated that segment for co-primary use for terrestrial fixed service and GSO FSS downlinks, but under a revised segmentation plan adopted last year it is now available only for terrestrial fixed service. *18 GHz Report and Order*, n.4, *supra*.

<sup>22</sup> Petition for Reconsideration or Clarification filed Dec. 18, 1997, pp. 3-5.

<sup>23</sup> Comments of Loral Space & Communications Ltd. in Support of Petition for Reconsideration (filed Feb. 5, 1998), pp. 2-3; Comments of GE American Communications, Inc. on Petitions for Reconsideration or Clarification (filed Feb. 4, 2000), p.3; Consolidated Comments of Lockheed Martin Corporation (filed Feb. 5, 2000) p.3.

<sup>24</sup> Petition for Partial Reconsideration filed in CC Docket No. 92-297 by Motorola Satellite Communications, Inc. on Sept. 27, 1996.

designated for GSO FSS operation. In any event, the international coordination process is designed to elicit information regarding potential conflicts between spectrum uses authorized by different national administrations, and we are moving forward to coordinate U.S.-licensed Ka-Band satellite systems pursuant to that process.

#### Petition of Teledesic Corporation

18. Teledesic, which has license authority for launch and operation of a Ka-Band NGSO FSS system, filed a petition for clarification or reconsideration of statements in the *Third Report and Order* concerning co-frequency sharing by NGSO FSS systems. We intend to address the issues that Teledesic raised in notice-and-comment proceedings pertaining to a second licensing round for Ka-Band satellite systems and will hold its petition in abeyance in the interim.

#### Anti-trafficking Rule

19. On our own motion, we are amending the anti-trafficking provision in Subsection 25.145(d) of our rules to correct a cross-reference that appears to limit the applicability of the rule to licenses for non-geostationary systems, contrary to the Commission's plainly-stated intention to prohibit "any Ka-band licensee from selling a bare license for a profit."<sup>25</sup> Adoption of this clarifying amendment does not necessitate additional "regulatory flexibility" analysis.

#### Final Paperwork Reduction Act Analysis

20. The policy adopted herein pertaining to international coordination of proposed use of the 17.7-18.3 GHz frequency band for downlinks to foreign-based earth stations establishes a new information collection requirement and is therefore subject to approval by the Office of Management and Budget ("OMB") under the emergency processing provisions of the Paperwork Reduction Act of 1995 (the "1995 Act"). OMB approval is requested to be granted no later than 30 days from the date of publication of this order in the Federal Register. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public to comment on the information collection requirement prescribed in this order, as required by the 1995 Act. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information will have practical utility; (b) the extent of the burden imposed on those subject to the requirement; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of collecting the information.

21. Written comments by the public on the new information collection requirement are due 21 days after publication of this Rulemaking in the Federal Register. Comments on the information collections prescribed herein should be submitted to Judy Boley, Federal Communications Commission, 445 Twelfth Street, S.W., Room 1-C804, Washington, D.C. 20554, or over the Internet to [jboley@fcc.gov](mailto:jboley@fcc.gov) and to Edward C. Springer, OMB Desk Officer, Room 10236 NEOB, 725 17th Street, N.W., Washington, DC 20503 or via the Internet to [edward.springer@omb.eop.gov](mailto:edward.springer@omb.eop.gov). For additional information on the information collection requirements, contact Judy Boley at (202) 418-0214 or via the Internet at the above address.

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<sup>25</sup> *Third Report and Order, supra*, ¶74 (emphasis added).



**Ordering Clauses**

22. ACCORDINGLY, IT IS ORDERED that the “Petition for Partial Reconsideration and/or Clarification” filed on December 18, 1997 by Motorola Global Communications, Inc. IS DENIED and that the “Petition for Reconsideration or Clarification” filed on the same date by Hughes Communications Galaxy, Inc. IS GRANTED to the extent indicated herein and is otherwise denied.

23. IT IS FURTHER ORDERED that Section 25.145 of the Commission’s rules is amended as specified in the appendix to this order, effective 30 days after publication in the Federal Register. This action is taken pursuant to 47 U.S.C. §§ 154(i) and 303(r).

24. IT IS FURTHER ORDERED that the information collection requirement prescribed in Paragraph 15 herein SHALL become effective upon approval by the Office of Management and Budget.

25. IT IS FURTHER ORDERED that the “Petition for Clarification and/or Reconsideration” filed on December 18, 1997 by Teledesic Corporation SHALL BE TEMPORARILY HELD IN ABEYANCE, as provided herein.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas  
Secretary

## APPENDIX

For the reasons discussed above, the Federal Communications Commission amends 47 C.F.R. Part 25 as follows:

## Part 25 – Satellite Communications

1. The authority citation for part 25 continues to read as follows:

Authority: 47 U.S.C. 701-744. Interprets or applies Sections 4, 301, 302, 303; 307, 309 and 332 of the Communications Act, as amended, 47 U.S.C. Sections 154, 301, 302, 303, 307, 309 and 332, unless otherwise noted.

2. In Section 25.145, Paragraph (d)(1), the first sentence of Paragraph (d)(2), and Paragraph (f) are revised to read as follows:

**§25.145 Licensing conditions for the Fixed-Satellite Service in the 20/30GHz Bands**

\* \* \* \* \*

(d) *Considerations involving transfer or assignment applications.* (1) “Trafficking” in bare licenses is prohibited, except with respect to licenses obtained through a competitive bidding procedure.

(2) The Commission will review a proposed transaction to determine if the circumstances indicate trafficking in licenses whenever applications (except those involving *pro forma* assignment or transfer of control) for consent to assignment of a license, or for transfer of control of a licensee, involve facilities licensed for the Fixed-Satellite Service in the 20/30 GHz bands. \* \* \*

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(f) *Implementation milestone schedule.* Unless otherwise specified in the license, each GSO FSS licensee in the 20/30 GHz band will be required to begin construction of its first satellite within one year of grant of all space station frequency assignments, to begin construction of the remainder within two years of such authorization, to launch at least one satellite into each of its assigned orbit locations within five years of such authorization, and to launch the remainder of its satellites by the date required by the International Telecommunication Union to assure international recognition and protection of those satellites. Unless otherwise specified in the license, each NGSO FSS licensee in the 20/30 GHz band will be required to begin construction of its first two satellites within one year of the grant of all space station frequency assignments and complete construction of those first two satellites within four years of such authorization. Construction of the remaining authorized operating satellites in the constellation must begin within three years of such authorization, and the entire authorized system must be operational within six years.

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