

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

In the Matter of )
INTELSAT LLC )
File Nos:
For Authority to Operate, and to further Construct, ) SAT-A/O-20000119-00002 to SAT-A/O-
Launch, and Operate C-band and Ku-band ) 20000119-00018;
Satellites that Form a Global Communications ) SAT-AMD-20000119-00029 to SAT-AMD-
System in Geostationary Orbit ) 20000119-00041;
) SAT-LOA-20000119-00019 to SAT-LOA-
) 20000119-00028

ORDER ON RECONSIDERATION

Adopted: December 12, 2000

Released: December 14, 2000

By the Commission:

I. INTRODUCTION

1. PanAmSat Corporation ("PanAmSat") and GE American Communications, Inc. ("GE Americom") (jointly as "Petitioners") have petitioned for reconsideration of our Memorandum Opinion Order and Authorization issued on August 8, 2000 in the above-captioned proceeding. In that Order we granted the applications of Intelsat LLC requesting licenses to: (1) operate 17 existing C-band and Ku-band satellites presently owned and operated by the International Telecommunications Satellite Organization ("INTELSAT"); (2) construct, launch and operate 10 satellites planned by INTELSAT for operation in these bands; and (3) relocate certain currently operating satellites to different orbital locations upon launch of planned satellites. We also waived certain technical rules in connection with the operation of these satellites. The licenses issued will be effective upon the successful privatization of INTELSAT.

2. For the reasons stated below, we deny the petitions for reconsideration filed by PanAmSat and GE Americom.

II. BACKGROUND

3. INTELSAT is a 144-member intergovernmental organization created by international

1 Applications of Intelsat LLC for Authority to Operate, and to Further Construct, Launch, and Operate C-band and Ku-band Satellites that Form a Global Communications System in Geostationary Orbit, Memorandum Opinion Order and Authorization, FCC 00-287, 2000 WL 1340577 (released August 8, 2000) ("Licensing Order").

2 Licensing Order at ¶56-123.

agreement.<sup>3</sup> INTELSAT owns and operates a global satellite system over which much of the world's international telephone, video, data, Internet and other communications are transmitted. It operates 17 satellites and serves tens of thousands of earth stations. As noted in our *Licensing Order*, INTELSAT was created as a result of initiatives undertaken in the early days of development of space technology by the United States under the Communications Satellite Act of 1962 ("Satellite Act").<sup>4</sup> The Satellite Act declared it U.S. policy to join with other countries to create a commercial, global communications satellite system that would provide services on a non-discriminatory basis.<sup>5</sup> The United States relies on INTELSAT to satisfy much of its commercial and government satellite communications needs.

4. INTELSAT currently is in the process of privatizing its commercial operations. As an intergovernmental organization, INTELSAT is not now subject to any national licensing authority. It created Intelsat LLC, a wholly owned Delaware corporation, for the purpose of filing applications with the FCC for licenses to operate its satellites. Upon privatization, INTELSAT would transfer its satellites to Intelsat LLC. It also would transfer 22 associated orbital locations to the U.S. registry under the procedures of the International Telecommunications Union ("ITU").

5. The privatization of INTELSAT has been a policy goal of the United States. This goal was enshrined in U.S. law as the stated purpose of the recently enacted Open-Market Reorganization for the Betterment of International Telecommunications Act (the "ORBIT Act").<sup>6</sup> Privatization of INTELSAT will make it a more effective competitor and promote fairer and more robust competition in the global satellite market. The ORBIT Act establishes general and specific criteria to ensure a pro-competitive privatization and requires the Commission to take certain actions to ensure fulfillment of the criteria.<sup>7</sup> The ORBIT Act, however, specifically permits the Commission to act upon Intelsat LLC's application prior to privatization provided that authorization is conditioned upon privatization consistent with the Act.<sup>8</sup> Our *Licensing Order*, therefore, imposed this condition and provided for review of INTELSAT's privatization prior to the effective date of the licenses.<sup>9</sup>

6. In September 2000, the INTELSAT Board of Governors formally recommended that the Assembly of Parties accept the FCC licenses and select the United States to receive and license

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<sup>3</sup> See Agreement Relating to the International Telecommunications Satellite Organization, "INTELSAT", 23 U.S.T.3813; TIAS No. 7532, (February 12, 1973) ("INTELSAT Agreement"). See also Operating Agreement Relating to the International Telecommunications Satellite Organization, "INTELSAT", 23 U.S.T. 4091, (August 20, 1971) ("INTELSAT Operating Agreement").

<sup>4</sup> *Licensing Order* at ¶ 6, citing the Communications Satellite Act of 1962, as amended, 47 U.S.C. §§ 701 *et. seq.*

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

<sup>6</sup> Pub. L. 106-180, 114 Stat. 48 (2000).

<sup>7</sup> Pub. L. 106-180 §§ 621 and 622.

<sup>8</sup> Pub. L. 106-180, § 601(b)(1)(d).

<sup>9</sup> *Licensing Order* at ¶ 38 and 160.

INTELSAT's orbital registrations upon privatization, based under the terms of the *Licensing Order*.<sup>10</sup> The Board also selected the United Kingdom as a backup jurisdiction for licensing INTELSAT's existing and planned satellites operating in the C-band and Ku-band "should the terms of the U.S. license approval be adversely affected prior to privatization."<sup>11</sup> The Board's decision on selection of licensing jurisdictions, and other aspects of INTELSAT's privatization, was approved by INTELSAT's member governments at the INTELSAT Assembly of Parties meeting held November 13-17, 2000.<sup>12</sup>

### III. PLEADINGS

7. PanAmSat and GE Americom both operate commercial satellite systems that compete with INTELSAT. They request reconsideration and modification of decisions made in the *Licensing Order* to: (1) cancel the ITU orbital locations transferred to the U.S. registry upon privatization should we no longer license their use by Intelsat LLC;<sup>13</sup> (2) authorize Intelsat LLC's future use of six orbital locations that currently are held, but unused, by INTELSAT;<sup>14</sup> (3) waive our two-degree spacing requirements for Intelsat LLC without requiring its non-compliant satellites to operate on a secondary basis;<sup>15</sup> (4) waive our requirement that licensed satellites employ linear polarization of C-band on future satellites;<sup>16</sup> and (5) waive our requirement that TT&C operations be located at the band edge.<sup>17</sup> In addition, PanAmSat contends that the *Licensing Order* violates the ORBIT Act by authorizing Intelsat LLC to provide direct-to-home service.<sup>18</sup> Finally, PanAmSat maintains that we erred in declining to regulate Intelsat LLC as a dominant carrier on thin routes.<sup>19</sup>

8. Intelsat LLC and Lockheed Martin Global Telecommunications (LMGT) filed oppositions to the petitions of PanAmSat and GE Americom. Intelsat LLC contends that neither petition presents any new facts or changed circumstances or advances any legitimate basis for reconsidering or modifying the Commission's grant of authority to Intelsat LLC.<sup>20</sup> LMGT maintains that the Commission's findings in the

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<sup>10</sup> INTELSAT Press Release, "INTELSAT Board Chooses United States as Jurisdiction for Privatized Service Company; Accepts FCC Licenses" (Sept. 15, 2000).

<sup>11</sup> *Id.* The Board also selected the United Kingdom as the licensing jurisdiction for future satellites that may be constructed for operation in the Ka-band, V-band and BSS band.

<sup>12</sup> INTELSAT Press Release." Historic Assembly says "All Systems Go" for 2001: INTELSAT Privatization Plan and Schedule Formally Approved by Governments", November 20, 2000.

<sup>13</sup> PanAmSat Petition at 2-4 and Reply at 2-4.

<sup>14</sup> *Id.* Petition at 7-8.

<sup>15</sup> *Id.* Petition at 4-7 and Reply at 7-8; GE Americom Petition at 3-6 and Reply at 7-9.

<sup>16</sup> GE Americom Petition at 6-7 and Reply at 9.

<sup>17</sup> *Id.* Petition at 7-8 and Reply at 10.

<sup>18</sup> PanAmSat Petition at 8-9.

<sup>19</sup> *Id.* Petition at 9-10 and Reply at 6-7.

<sup>20</sup> Intelsat LLC Opposition at i – ii.

*Licensing Order*, including grant of waivers to Intelsat LLC, was supported by the record and not rebutted by the petitioners.<sup>21</sup> It urges prompt denial of the petitions to expedite Intelsat LLC's licensing in the United States and the privatization of INTELSAT.<sup>22</sup> Both PanAmSat and GE Americom replied to the Intelsat LLC and LMG T oppositions.

#### IV. DISCUSSION

##### A. Treatment of Network Filings

9. Under the terms of the *Licensing Order*, the authorizations issued to Intelsat LLC will become effective upon privatization of INTELSAT consistent with the ORBIT Act.<sup>23</sup> This event will occur on the date INTELSAT transfers its satellites and associated assets to Intelsat LLC on a permanent basis, and transfers its ITU network filings for the orbital locations associated with the operation of its satellites, to the United States national registry of satellites.<sup>24</sup> The *Licensing Order* further provides that, in the event that we no longer in the future license Intelsat LLC for use of any of the orbital locations, the transferred orbital locations shall be cancelled in accordance with procedures of the International Telecommunication Union ("ITU").<sup>25</sup> This provision does not apply to any other locations assigned to Intelsat LLC at a later date.<sup>26</sup>

10. PanAmSat maintains that reservation of transferred orbital locations exclusively to Intelsat LLC making them unavailable to U.S. licensees is contrary to the public interest.<sup>27</sup> PanAmSat argues that the effect will be to undercut future Commission efforts to enforce its rules by removing Intelsat LLC's incentive to comply with our rules and policies.<sup>28</sup> It suggests that the Commission has compromised its ability to enforce its rules because of the risk of losing U.S. rights to the orbital locations if it revokes the licenses of Intelsat LLC.<sup>29</sup> PanAmSat also argues that reserving the orbital locations to Intelsat LLC violates the Communications Act, which requires an applicant to become a Commission licensee to waive any claim to a particular frequency, and the ORBIT Act which requires the Commission to take the action necessary to remain the ITU notifying administration for the privatized INTELSAT.<sup>30</sup> Intelsat LLC responds that the Commission's *Licensing Order* does not reduce the incentive of Intelsat LLC to comply with applicable Commission rules and policies or the Commission's ability to enforce those rules. Intelsat

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<sup>21</sup> LMG T Opposition at 5.

<sup>22</sup> *Id.* at 12.

<sup>23</sup> *Licensing Order* at ¶ 38

<sup>24</sup> *Id.* at ¶ 158.

<sup>25</sup> *Id.* at ¶ 132-136 and ¶ 159.

<sup>26</sup> *Id.* at ¶ 136.

<sup>27</sup> PanAmSat Petition at 2-4.

<sup>28</sup> *Id.* at 3-4.

<sup>29</sup> PanAmSat Reply at 2.

<sup>30</sup> *Id.* at Petition at 3-4, *citing* 47 U.S.C. § 304 and Reply at 2 and 5.

LLC points out that if it does not comply with applicable rules, it could lose its FCC licenses and risk reassignment of its orbital locations under ITU priorities.<sup>31</sup>

11. In our *Licensing Order*, we found that under the INTELSAT Agreement and ITU procedures, INTELSAT presently uses orbital locations on behalf of its member countries.<sup>32</sup> We found that these locations therefore are unavailable for assignment by any country, including the United States, to its licensed operators.<sup>33</sup> PanAmSat provides no new information or analysis to change this conclusion. We further found that, in the context of ongoing privatization negotiations, many INTELSAT members are concerned that a national licensing authority could assign INTELSAT orbital locations to its own licensed operators. They fear that such a result would jeopardize INTELSAT's ability to maintain global coverage and connectivity, particularly to lifeline users.<sup>34</sup>

12. Our decision to cancel any transferred orbital locations under ITU procedures, should we no longer authorize their use by Intelsat LLC, was intended to reflect the long-standing status of INTELSAT orbital slots. Cancellation with the ITU gives all INTELSAT members, including the United States, an opportunity under ITU procedures to use any cancelled locations that were formally held by INTELSAT on behalf of all of its members. At the same time, the prospect of cancellation for failure to comply with relevant Commission rules and policies would effectively preserve Intelsat LLC's incentive to comply with applicable Commission rules and policies.<sup>35</sup> Intelsat LLC's incentive to comply with applicable Commission rules and policies derives from the significant damage that would likely occur if it lost its license. This fear of license forfeiture is the same incentive compelling other U.S. licensees to abide by the requirements of a license. PanAmSat fails to explain why Intelsat LLC would not have such incentive. Rather, PanAmSat attempts to link Intelsat LLC's incentive to the prospect of its orbital locations becoming available to U.S. operators should it lose its license to operate. It fails to demonstrate, however, that Intelsat LLC's incentive is in any way diminished if a loss of its licenses results in its orbital locations becoming available to foreign competitors as opposed to U.S. operators. Further, its suggestion that the Commission has compromised its ability to enforce its rules against Intelsat LLC is speculative. PanAmSat can point to nothing in the *Licensing Order* that will inhibit the Commission from exercising its statutory authority to enforce applicable rules and policies with respect to Intelsat LLC. Moreover, as with other administrations, the United States is not precluded from filing under ITU procedures for former INTELSAT orbital locations that may be cancelled in the future.

13. Finally, our decision to cancel transferred orbital locations with the ITU does not violate either the Communications Act of 1934 or Section 644(b) of the ORBIT Act, as PanAmSat claims. With regard to the Communications Act, Intelsat LLC, in its application, waived any claim to use of any particular frequency against the regulatory power of the United States as required by Section 304 of the Communications Act and thus there is no violation.<sup>36</sup> With regard to the ORBIT Act, PanAmSat claims

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<sup>31</sup> Intelsat LLC Opposition at 8.

<sup>32</sup> *Id.*

<sup>33</sup> *Licensing Order* at ¶ 119.

<sup>34</sup> *Id.* at ¶ 120.

<sup>35</sup> *Id.* at ¶ 133.

<sup>36</sup> INTELSAT Application, Volumes XII and XIII, Form 312, Main Form at 4.

that our decision somehow violates Section 644(b) because in taking that decision we are yielding to pressure from INTELSAT and undermining the public interest. Section 644(b) states that “the Commission shall take the actions necessary to ensure that the United States remains the ITU notifying administration for the privatized INTELSAT’s existing and future orbital slot registrations.”<sup>37</sup> PanAmSat argues that the intent of Section 644(b) was that the Commission was required to “resist all attempts to remove these slots from U.S. jurisdiction” not that the Commission “abdicate its responsibilities” under domestic law.<sup>38</sup>

14. It is not clear from PanAmSat’s comments what actions it regards to be appropriate to resist all attempts to remove these slots from U.S. jurisdiction. While the United States has historically served as INTELSAT’s notifying administration, INTELSAT orbital locations are not currently subject to U.S. regulatory authority and are therefore not within U.S. jurisdiction. As to resisting all attempts to remove these slots, the United States cannot simply appropriate INTELSAT’s orbital locations under ITU procedures, should INTELSAT select a licensing jurisdiction other than the United States. Just as the ORBIT Act does not allow the Commission to act in contravention of domestic law, nothing in Section 644(b) suggests that the Commission may carry out its responsibilities in a manner inconsistent with international agreements. The only way the orbital locations would become subject to U.S. jurisdiction, and thus meet the goal of Section 644(b), is if INTELSAT selects the United States as its licensing jurisdiction upon privatization. We found that nothing in the ORBIT Act precludes us from canceling ITU filings for orbital locations if this approach is agreed to internationally as part of privatization of INTELSAT.<sup>39</sup> We conclude that the Act allows us to balance the unique history INTELSAT and concerns of its members with the goal of Section 644(b).<sup>40</sup> PanAmSat has offered nothing concrete that persuades us that the balance our decision struck in any way violates Section 644(b) or could be deemed an abdication of our responsibilities.

## B. Unused Orbital Locations

15. In the *Licensing Order*, we waived Section 25.140(f) of the Commission Rules, which limits to one the number of orbit locations a licensee may be assigned beyond any current authorizations.<sup>41</sup> As a result, we issued satellite licenses to Intelsat LLC at six currently “unused” orbital locations that are

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<sup>37</sup> Pub. L. 106-180, §644(b).

<sup>38</sup> PanAmSat Reply at 5.

<sup>39</sup> *Licensing Order* at ¶ 135.

<sup>40</sup> We did reject other licensing options that may be considered by the Assembly of Parties on the basis that those other options would raise competition problems and questions as to compliance with ITU procedures. We specifically rejected licensing Intelsat LLC on the basis of two other scenarios, which we found would lead to the type of problems raised by PanAmSat in its petition. Those two other alternatives are under discussion in INTELSAT’s privatization in the privatization negotiations: (1) transferring orbital locations pursuant to ITU procedures (if available), to another jurisdiction designated by the residual IGO being created to supervise INTELSAT’s provision of service to lifeline users after privatization, or (2) having the IGO rather than the licensing jurisdiction hold the orbital locations on behalf of the privatized company. These alternatives are unnecessary to address the concerns of INTELSAT members, and raise competition issues and questions as to compliance with ITU procedures. *Licensing Order* at ¶ 134.

<sup>41</sup> *Licensing Order* at ¶ 116-123.

now held by INTELSAT under ITU procedures.<sup>42</sup> The orbital locations are scheduled to be put in use over the next several years either through launch of new satellites or relocation of older satellites being replaced at other orbital locations.<sup>43</sup> We also imposed milestones on the construction and operation of new satellites to ensure expeditious use of these orbital locations.<sup>44</sup>

16. PanAmSat argues that Intelsat LLC should have no special entitlement to the six unused orbital locations, currently available only to INTELSAT, once they are transferred to the U.S. registry under ITU procedures upon privatization.<sup>45</sup> Instead, it maintains that INTELSAT's competitors should be given the opportunity to compete for these six unused orbital locations.<sup>46</sup> PanAmSat also disagrees with our finding that INTELSAT's privatization is analogous to a transfer of control, which should not occasion reassignment of its frequency assignments and orbital locations.<sup>47</sup>

17. Intelsat LLC states that licensing of the six unused INTELSAT orbital locations will allow it to continue the current INTELSAT system plan that has already been endorsed by the U.S. government through its oversight of Comsat's participation in INTELSAT as the U.S. Signatory.<sup>48</sup> Intelsat LLC maintains that: (1) licensing Intelsat LLC's use of the unused orbital locations neither gives it special status or undercuts FCC efforts to enforce its rules against Intelsat LLC; (2) there is no legal basis or U.S. interest upon which to initiate a processing round for the unused orbital locations; and (3) the relief requested by PanAmSat would be inconsistent with the ORBIT Act's foreign policy goal of licensing the privatized INTELSAT in the United States.<sup>49</sup> LMG T points out that permitting Intelsat LLC to operate the global satellite system as currently planned and operated by INTELSAT would be consistent with ITU filings made by the United States on behalf of INTELSAT and not give Intelsat LLC any special competitive advantage.<sup>50</sup> LMG T agrees with the finding in our *Licensing Order* that any decision "to require INTELSAT to relinquish its claim to these orbital locations would be inconsistent with the INTELSAT Agreement and the longstanding arrangements the United States has had with INTELSAT in its intergovernmental organization role."<sup>51</sup> Finally, LMG T argues that the Commission retains full jurisdiction over Intelsat LLC authorizations at these locations, which are subject to milestone requirements to assure that the locations are brought into use on a timely basis.<sup>52</sup>

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<sup>42</sup> *Id.* at ¶ 119-123.

<sup>43</sup> *Id.* at ¶ 149-152 and Appendix A.

<sup>44</sup> *Id.* at ¶ 137-138 and 156.

<sup>45</sup> PanAmSat Petition at 7.

<sup>46</sup> *Id.*

<sup>47</sup> *Id.* at 8, note 19.

<sup>48</sup> Intelsat LLC Opposition at 4. Comsat Corporation is now doing business as Lockheed Martin Global Communications.

<sup>49</sup> *Id.* at 5-7.

<sup>50</sup> LMTG Opposition at 6.

<sup>51</sup> *Id.* at 6-7.

<sup>52</sup> *Id.* at 7.

18. In acting upon Intelsat LLC's application, we were presented with a unique situation – licensing an existing commercial satellite system with presently operating satellites and plans for the future expansion.<sup>53</sup> That system was created through international agreement to carry out U.S. policy objectives and has been subject to U.S. government oversight through participation of Comsat.<sup>54</sup> Consistent with U.S. policy objectives, INTELSAT now has decided to privatize. The details of INTELSAT's privatization have been subject to ongoing international negotiations in which the United States is a participant.<sup>55</sup> As a condition of its 1999 decision, the INTELSAT Assembly of Parties determined that privatization must entail assurance that INTELSAT ITU network filings transferred to the licensing jurisdiction would be authorized for use by the privatized INTELSAT in a manner that would allow it to compete on a level playing field with other commercial satellite operators.<sup>56</sup> The United States joined the INTELSAT Assembly decision.

19. PanAmSat provides no analysis or information to change our conclusion that INTELSAT orbital locations cannot now be made available by the United States or any other country to license to its own operators. Rather, PanAmSat argues that, once Intelsat LLC is subject to Commission jurisdiction as a licensee, its U.S. competitors must be given an opportunity to compete for unused orbital locations “in the interest of fairness.”<sup>57</sup> We disagree. First, we are not persuaded by PanAmSat's arguments challenging the analogy in the *Licensing Order* of INTELSAT's privatization to transfer of control of a U.S. licensee. PanAmSat argues that the analogy fails because INTELSAT's unused orbital locations have not previously been subject to the Commission's orbital assignment process. We agree with PanAmSat that the *Licensing Order* does not affect a transfer of existing FCC licenses. INTELSAT's privatization, however, will be accomplished through transfer from the current intergovernmental organization of the satellite and associated assets to the private company and transfer of existing orbital locations to a national licensing jurisdiction.<sup>58</sup> Section 310(d) of the Communications Act precludes the Commission in a transfer of control situation from assigning a lawfully held license to other than the proposed assignee or transferee.<sup>59</sup> INTELSAT, specifically its member administrations, now holds its orbital locations under authority of the INTELSAT Agreement and pursuant to ITU procedures. Comsat, subject to U.S. government oversight, participated in INTELSAT's decision to file with the ITU for the six unused orbital locations in question. The United States did not challenge through ITU procedures INTELSAT's filings for these locations. Under these circumstances, and in view of the unique situation brought before us by the Intelsat LLC application, we believe that treating the application in a manner analogous to a transfer of control situation is a reasonable exercise of our licensing authority.

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<sup>53</sup> *Licensing Order* at ¶ 11-14 and 61-65.

<sup>54</sup> *Id.* at ¶ 6 and ¶ 62-63.

<sup>55</sup> *Id.* at ¶ 8-9 and ¶ 22-24.

<sup>56</sup> *Id.* at ¶ 3, citing INTELSAT Assembly of Parties Record of Decisions of the Twenty-fourth meeting, AP-24-3E Final, August 10, 1999 (Penang, Malasia, October 26-29)(“1999 Assembly Decision”) and at ¶ 12.

<sup>57</sup> PanAmSat Petition at 8.

<sup>58</sup> *Licensing Order* at ¶ 12 and 23.

<sup>59</sup> 47 U.S.C. § 310(d).



20. Second, although PanAmSat argues that Intelsat LLC should not benefit from its intergovernmental heritage, it fails to address the actual findings upon which we based our waiver of Section 25.140(f). Beyond concluding that Section 25.140(f) will not be a concern at the time assets will transfer because INTELSAT already holds the "unused" orbital locations in question under valid international procedures, we were also obliged to ensure that the policies embodied in Section 25.140(f) were not undermined on a going forward basis. These policies relate to concerns about applicants warehousing orbital locations and about the ability for later entry, where appropriate, by qualified applicants. We found that the milestones we imposed on new construction will assure that these policies are not undermined by our actions regarding INTELSAT. The milestones will assure that unused orbital locations will be brought into use in a timely manner, either through placement of a new satellite or relocations of older satellites in these locations. If new construction milestones are not met and unused orbital locations not filled in accordance with the *Licensing Order*, those locations would be subject to cancellations and return to the ITU. This approach, we believe, will prevent warehousing. In failing to address why this finding might not support the policies we sought to ensure, PanAmSat provides no new analysis upon which we might be persuaded to change our decision.

21. We also believe that licensing the six unused orbital locations to Intelsat LLC will carry out the purposes of the ORBIT Act. The Act requires that "[a]ccess to new, or renewal of access to orbital locations shall be subject to the legal and regulating processes of a national government that applies due diligence requirements intended to prevent the warehousing of orbital locations."<sup>60</sup> Imposition of milestone requirements on new construction clearly will satisfy this requirement.

### C. Technical Waivers

22. In the *Licensing Order*, we granted Intelsat LLC technical waivers for both its 17 existing and ten planned satellites. We generally determined that Intelsat LLC met the required waiver standard of "good cause" because of special or unique circumstances and because the ultimate goals underlying the rules could be achieved without strict enforcement. In addition, we reasoned that the costs Intelsat LLC would incur absent waivers would be unreasonable. Finally, we addressed the technical rules for each waiver requested and discussed specific reasons supporting our grant of waivers.

23. GE Americom and PanAmSat contend that we did not sufficiently explain and support our decision in granting the waivers concerning two-degree spacing, linear polarization, and band edge frequencies for telemetry, tracking and telecommand ("TT&C").<sup>61</sup> They maintain that any type of waiver should be limited to operating or substantially constructed satellites.<sup>62</sup> They also assert that we wrongly focused on the costs Intelsat LLC would incur absent a grant of the various waivers and that we failed to balance the benefits of applying the rules.<sup>63</sup> Finally, they additionally contend that the waivers granted are inconsistent with Commission precedent.<sup>64</sup>

<sup>60</sup> Pub L. 106-180 §621(3)(c).

<sup>61</sup> GE Americom Petition at 2 - 3 and PanAmSat Petition at 5.

<sup>62</sup> GE Americom Petition at 2 and PanAmSat Petition at 4-7. Although, with respect to linear polarization and band-edge TT&C operation of these satellites, GE Americom would not object to allowing strict compliance with the Commission technical rules to be "grandfathered." GE Americom Petition at ii.

<sup>63</sup> GE Americom Petition at 6-7 and PanAmSat Petition at 5.

<sup>64</sup> GE Americom Petition at ii and 1 and PanAmSat Petition at 5.

24. Intelsat LLC and LMGT argue that our waiver decisions are justified.<sup>65</sup> They state that the authorizations merely maintain the status quo by “simply permit[ing] Intelsat LLC to operate the global satellite system as currently planned and operated by INTELSAT.”<sup>66</sup> LMGT states that we correctly considered the special circumstances, including the fact that the basic INTELSAT satellite design characteristics were conceived before most of our technical rules were adopted.<sup>67</sup> Intelsat LLC states that we appropriately included planned and under-construction satellites within the waivers because they are part of an integral system.<sup>68</sup> LMGT also contends that GE Americom and PanAmSat fail to factually support their contention that the waivers undermine the policies of the rules in question.<sup>69</sup> Finally, Intelsat LLC and LMGT assert that the technical waivers granted are consistent with Commission precedent.<sup>70</sup>

25. In granting the Intelsat LLC waiver requests, we applied the same legal test to which all U.S. licensees are held that seek waivers of our rules.<sup>71</sup> Generally, this standard allows for waivers where good cause is shown. Good cause is demonstrated where (1) special circumstances support a finding that strict adherence would not be in the public interest and (2) where a grant would not undermine the underlying policy objectives of the rule(s) in question.<sup>72</sup> The court specifically noted that although “an agency may discharge its responsibilities by promulgating rules of general application which, in the overall perspective, establish the ‘public interest’ for a broad range of situations, [this] does not relieve it of an obligation to seek out the ‘public interest’ in particular, individualized cases.”<sup>73</sup> In this case, the standard of good cause has been met.

26. We recognize that granting technical waivers to Intelsat LLC results in different application of our technical rules among U.S. satellite licensees. Indeed, we have also recently been studying our technical rules and their effectiveness. We therefore plan to review our satellite technical rules in the very near future to consider whether the practical realities of today’s satellite operation justify any changes, particularly in light of the technical issues that have been raised in this proceeding. Our objective would be to make certain that our technical rules are consistent with the state of today’s technology and that they are better designed to protect against harmful interference, promote efficient use of the geostationary satellite orbital arc and implementation of smaller earth stations, facilitate satellite

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<sup>65</sup> Intelsat LLC Opposition at 1 and LMGT Opposition at 3.

<sup>66</sup> LMGT Opposition at 5 and Intelsat LLC Opposition at i and 4.

<sup>67</sup> *Id.* at 3, citing *Licensing Order* at ¶ 60.

<sup>68</sup> Intelsat LLC Opposition at 2.

<sup>69</sup> LMGT Opposition at 4 and 7, particularly citing filings in the *Licensing Order* proceeding: Intelsat LLC Reply at 4-29; Comsat Reply at 11-21; and Comsat Response at 10-17. These comments are incorporated by reference.

<sup>70</sup> Intelsat LLC Opposition at 2 and LMGT Opposition at 6 and 9.

<sup>71</sup> *Licensing Order* at ¶ 59.

<sup>72</sup> *Id.* citing *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969) (“*WAIT Radio*”).

<sup>73</sup> *Id.*

network coordination in a consistent manner, and speed up the licensing of satellites and earth stations. This review would provide an opportunity to effect changes in our rules to accommodate differently designed satellite systems and to assure current licensees and Intelsat LLC more flexibility in developing future systems to compete with each other and foreign competitors.

27. Neither PanAmSat nor GE Americom has presented arguments that upset our prior findings in the *Licensing Order* that special circumstances were present. Our action entailed the authorization of an already operating satellite system owned by an intergovernmental organization, which had never been subject to a national licensing regime.<sup>74</sup> We noted the historical and policy reasons why the design and technical parameters of the INTELSAT system were different from U.S. authorized systems.<sup>75</sup> The *Licensing Order* stated further that INTELSAT was established largely with the support and participation of the U.S. government in order to carry out the U.S. policy goals of the Satellite Act. Its satellite system creation, development, implementation, and operation were subject to U.S. government oversight, including Commission authorization of Comsat participation in the procurement of satellites and provision of services. This “particular individualized” situation surrounding creation of the INTELSAT global system – including the fact that the basic design characteristics of INTELSAT satellites predated the adoption of most of our technical rules – supported a finding of special circumstances.<sup>76</sup>

28. The *Licensing Order* also found that the principles underlying our policy objectives for these technical rules – that of minimizing interference, maximizing efficient use of the radio frequency spectrum, and encouraging competition – would not be undermined by granting the requested waivers, as conditioned.<sup>77</sup> We determined that denial of the requested waivers could “lead to increased interference, unnecessary costs and major service disruption.”<sup>78</sup>

29. PanAmSat and GE Americom, however, argue that, while waivers of operating or substantially constructed satellites might be warranted, waivers for not yet substantially constructed satellites would not be warranted.<sup>79</sup> They instead would require strict compliance with the Commission’s technical rules for such satellites.<sup>80</sup> PanAmSat identifies non-substantially constructed satellites as ALPHA 1, ALPHA 2, and BETA 1.<sup>81</sup> GE Americom identifies these same satellites as not substantially

<sup>74</sup> *Id.* at ¶ 60-65.

<sup>75</sup> *Id.* at ¶ 60.

<sup>76</sup> *Id.* at ¶ 60-65.

<sup>77</sup> *Id.* at ¶ 66-69. *See also, e.g., Establishment of Domestic Communication-Satellite Facilities by Non-Government Entities*, Report and Order, 22 FCC 2d 86 (1970), Second Report and Order, 35 FCC 2d 844 (1972), *recon. in part*, Memorandum Opinion and Order, 38 FCC 2d 665 (1972) (“*Open Skies decisions*”); *Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions of Part 25 of the Rules and Regulations*, Report and Order, FCC 83-184, 48 FR 40233, 54 RR 2d (P&F) 577 (1983) (“*Two-degree Spacing decision*”).

<sup>78</sup> *Licensing Order* at ¶ 60-67.

<sup>79</sup> GE Americom Petition at 8 and Reply at 3, and PanAmSat Petition at 4-6.

<sup>80</sup> GE Americom Petition at 8 and Reply at 3, and PanAmSat Petition at 6-7.

<sup>81</sup> PanAmSat Petition at 4.

constructed, but only in the context of the TT&C waiver.<sup>82</sup>

30. In granting waivers to Intelsat LLC, we found the first seven planned satellites to be in advanced stages of the manufacturing cycle, with substantial costs entailed in their redesign and remanufacture, as well as likely service disruption and possible loss of customers.<sup>83</sup> Neither PanAmSat nor GE Americom challenge this finding. We also found, however, that both the ALPHA 1 and ALPHA 2 satellites will be in the manufacturing cycle by the date of INTELSAT's privatization when the Intelsat LLC authorizations become effective.<sup>84</sup> GE Americom contends that this is no reason for Intelsat LLC to delay compliance until after privatization (with respect to these two satellites) since the Board of Governors has already selected the United States as the licensing jurisdiction.<sup>85</sup> Instead, it asserts that this certainty argues for immediate compliance. We disagree. In our *Licensing Order*, we found that in addition to spacecraft re-design costs, the cost of modifying or replacing the earth stations that would operate with the satellites would be roughly the same as for each of the first seven planned satellites.<sup>86</sup> Since the ALPHA 1 and ALPHA 2 satellites would replace existing satellites, these earth station costs would be borne by existing customers. Application of our rules to these satellites also would result in two satellites operating on a substantially different basis than those that comprise the rest of INTELSAT's global system. For these reasons, we do not believe reconsideration of our waivers is warranted. We are not persuaded by GE Americom's arguments that these concerns are minimal and fail to support grant of waivers for these satellites.

31. As for the tenth planned satellite – BETA 1 – we also believe that the overarching good cause reasons justifying waivers -- weighed against the actual harm likely -- support allowing Intelsat LLC to maintain the complete integrity of its systems. In particular, we note that BETA 1 will be located well outside the U.S. domestic satellite arc (serving only Guam in the United States) and affect no existing or planned U.S. satellite. We found in the *Licensing Order* that no U.S. satellite is adjacent to the 85° E. L. location where it could be directly affected, nor are there any proposals for a future U.S.-licensed satellite to be located adjacent to 85° E. L. Neither PanAmSat nor GE Americom explain how application of our rules to this one satellite is required to achieve the policy objectives for which they were created. They otherwise provide no specific information or reasons to change this determination.

32. PanAmSat further argues, however, that because we granted waivers for the ALPHA 1, ALPHA 2, and BETA 1 satellites, each future waiver request would also be justified due to the “negligible effect” of adding a new satellite in relation to the entire fleet of non-compliant Intelsat LLC satellites.<sup>87</sup> We disagree. Clearly, any future waiver request must be considered on its own merits. In this case, the special circumstances of Intelsat LLC's privatization justify waiver of our rules to facilitate and accommodate the existing design and operations of the INTELSAT system. These three satellites are planned as an integral part of the INTELSAT satellite system. We believe the best course at this time is to grant the waivers for

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<sup>82</sup> GE Americom Petition at 8.

<sup>83</sup> *Licensing Order* at ¶ 73.

<sup>84</sup> *Id.* at ¶ 74.

<sup>85</sup> GE Americom Reply at 4.

<sup>86</sup> *Licensing Order* at ¶ 75.

<sup>87</sup> PanAmSat Petition at 5.

these three satellites to enable a smooth transition, consistent with the ORBIT Act and the U.S. policy supporting privatization.

### 1. Two-Degree Spacing

33. Both PanAmSat and GE Americom object to waivers of the two-degree spacing requirement. They contend that non-compliant satellites should be required to operate on a secondary, non-interference basis, as in our *New Skies decision*.<sup>88</sup> GE Americom asserts that the *New Skies decision* is directly relevant “because New Skies uses satellites that were transferred from the INTELSAT system, just as Intelsat LLC proposes to do.”<sup>89</sup> GE Americom states that we failed to explain why the circumstances applicable to Intelsat LLC are different from that of New Skies.<sup>90</sup> Finally, it contends that we failed to weigh the risks associated with the grant of waivers over the benefits of requiring operation on a secondary, non-interference basis.<sup>91</sup>

34. We continue to believe that there is sound basis for waiver of our two-degree spacing requirements for the satellites authorized by our *Licensing Order*. We concluded that: (1) two-degree spacing normally can be applied most effectively among U.S. satellites such as those located in the traditional U.S. “domestic arc” to U.S. licensed satellites;<sup>92</sup> (2) INTELSAT existing and planned satellites are located outside the traditional U.S. domestic arc;<sup>93</sup> (3) the prospect of creating additional orbital locations by applying two-degree spacing to Intelsat LLC is limited;<sup>94</sup> (4) waiver of the two-degree spacing rule under the present circumstances would not materially undermine our ability to maintain a reasonable level of efficiency – that is, maximizing the number of satellites in the geostationary satellite orbital arc without unduly increasing interference;<sup>95</sup> (5) a waiver would not increase interference concerns of currently operational and planned INTELSAT satellites, at the relevant orbital locations, including subsequent reassignments of certain INTELSAT satellites;<sup>96</sup> and (6) requiring Intelsat LLC to comply with the two-degree spacing requirement would entail customer costs and service disruptions associated with repointing or replacement of antennas operating with each satellite.<sup>97</sup> Neither PanAmSat nor GE Americom has provided information that would lead us to change our conclusions.

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<sup>88</sup> *New Skies decision*, 14 FCC Rcd at 35. See also *Licensing Order* at 38. We incorporate the *New Skies decision* discussion in the *Licensing Order* by reference. PanAmSat Petition at 6.

<sup>89</sup> GE Americom Petition at 3-4.

<sup>90</sup> *Id.* at 5.

<sup>91</sup> *Id.* at 5-6.

<sup>92</sup> *Licensing Order* at ¶ 81.

<sup>93</sup> *Id.* at ¶ 81-82.

<sup>94</sup> *Id.* at ¶ 82.

<sup>95</sup> *Id.* at ¶ 83.

<sup>96</sup> *Id.* at ¶ 85.

<sup>97</sup> *Id.* at ¶ 88.

35. Additionally, GE Americom is incorrect that the *Licensing Order* did not weigh in the benefits and risks associated with requiring Intelsat LLC to operate on a secondary, non-harmful interference basis, or explain how Intelsat LLC presents circumstances different from the *New Skies Decision*. In our *Licensing Order*, we specifically found that requiring operation on a secondary, non-interference basis has never been applied to INTELSAT satellites providing service to the United States. We further found that the risks of applying this policy to Intelsat LLC outweighed the benefits, taking into account the potential for subjecting U.S. customers to service disruptions. We further found that INTELSAT orbital locations either are fully coordinated, or are in the coordination process with resolution expected to be completed by the effective date of the licenses issued to Intelsat LLC. As a result, concern over harmful interference from non-compliant Intelsat LLC satellites is misplaced. In the *New Skies Decision*, we were not presented with a similar record. New Skies did not seek a waiver, as has Intelsat LLC, nor were we otherwise provided a factual basis for taking the same action as we have in our *Licensing Order*. New Skies has since, however, requested a waiver of our two-degree spacing requirements in a recent petition filed to gain full access to the U.S. market.<sup>98</sup>

36. We also noted in our *Licensing Order* that considering similar waiver requests from a non-U.S. licensee, such as New Skies, would require us to weigh the lack of direct jurisdiction over the satellites involved.<sup>99</sup> This lack of direct jurisdiction would complicate our ability to effectively deal with any future unforeseen interference or other future technical issues that might arise in connection with a non-U.S. licensed system. Our ability to manage such situations would be relevant in determining if one prong of the waiver standard is satisfied – whether granting a waiver would not undermine the underlying policy objective of the rule in question, such as minimizing interference. In the *Licensing Order*, we found that directly licensing Intelsat LLC satellites would benefit our ability to manage coordination and interference matters with respect to other U.S.-licensed satellites.<sup>100</sup>

37. Finally, GE Americom also contends that many INTELSAT satellites already operate two-degrees apart and so Intelsat LLC's claim of undue hardship if required to strictly comply should be rejected.<sup>101</sup> We disagree. GE Americom fails to consider that, outside the design rules imposed by a regulatory or other authority, satellites within an integrated system are designed to better function adjacent to each other than next to a competitor's satellite. Furthermore, the business goals of the satellite system frequently support such a situation.<sup>102</sup> In the *Licensing Order*, we noted that, typically, the size of the smallest antennas accessing either satellite limits the achievable proximity of neighboring satellites serving the same geographical area at the same frequency. INTELSAT has, as demand and business goals compelled, evolved its satellites system toward a two-degree spacing configuration whenever its system parameters, such as antenna size distribution, allow. On the other hand, where the INTELSAT satellites neighbor other systems, coordination agreements have been reached or are being negotiated consistent with the system parameters of both systems. These agreements should not be placed in jeopardy at this time

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<sup>98</sup> See Petition for Declaratory Ruling and Extension of Earth Station Licenses, File No. SAT-PDR-2000 1031-00146, filed by New Skies Satellites, N.V., October 31, 2000.

<sup>99</sup> *Licensing Order* at ¶ 68.

<sup>100</sup> *Id.* at ¶ 32.

<sup>101</sup> GE Americom Petition at 5.

<sup>102</sup> It is also easier to do actual traffic planning on a real-time basis if both satellites are controlled by a single entity. This real-time planning is more difficult to accomplish if the adjacent satellite is a competitor.

simply because INTELSAT seeks licenses under a national jurisdiction in its privatization process.

## 2. Polarization

38. GE Americom and PanAmSat contend that the Commission failed to properly weigh both the benefits and costs of requiring compliance with our polarization rules.<sup>103</sup> They state that the Commission ignored the public interest competition benefits of polarization uniformity.<sup>104</sup> GE Americom argues that INTELSAT's customers are "effectively locked into their existing service arrangements" because they cannot cost effectively switch providers without modifying the associated earth station facilities.<sup>105</sup> It asks that we require Intelsat LLC to convert its not yet substantially constructed satellites to linear polarization because it would "enhance competition" by allowing Intelsat LLC's customers to more easily "switch carriers in response to market forces."<sup>106</sup> GE Americom argues further that, in granting this waiver, we relied too much on Intelsat LLC's representation of total costs for converting to linear polarization, which it alleges, are overstated.<sup>107</sup> PanAmSat asserts that the Commission wrongly focuses on only the costs Intelsat LLC would incur without properly considering the costs of increased interference that other operators must accept and higher prices to INTELSAT's customers from a lack of standardization.<sup>108</sup> It states that this lack of standardization makes it too costly to switch from INTELSAT to a competing system.<sup>109</sup> It asserts that non-standardization is also anti-competitive because it does not give other satellite operators a fair opportunity to compete.<sup>110</sup> PanAmSat maintains that the Commission should at least limit any waiver of the technical rules to operating INTELSAT satellites and those that are substantially under construction. It contends that the non-substantially constructed, non-compliant satellites, should only be allowed to operate on a secondary basis. We disagree.

39. The relevant portion of the polarization rules require that all space stations in the Fixed Satellite Service ("FSS") employed for domestic service in the 4/6 GHz frequency band ("C-band") shall use orthogonal linear polarization and shall be capable of switching polarization sense upon ground command.<sup>111</sup> The underlying policy reason for this rule is to reduce the potential interference between analog video signals among adjacent satellite systems.<sup>112</sup> All but one of INTELSAT satellites is designed to use circular polarization at C-band and none is able to switch polarization sense upon ground command. Intelsat LLC therefore requested a waiver of this rule.

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<sup>103</sup> GE Americom Petition at 7 and Reply at 6, and PanAmSat Petition at 5-6 and Reply at 8. See 47 C.F.R. § 25.210(a)(1) and (3).

<sup>104</sup> GE Americom Petition at 6 and Reply at 9. PanAmSat Petition at 5-6 and Reply at 9.

<sup>105</sup> *Id.* Petition at 6.

<sup>106</sup> *Id.*

<sup>107</sup> *Id.* Petition at 6-7 and Reply at 9.

<sup>108</sup> PanAmSat Petition at 5-6 and Reply at 9.

<sup>109</sup> *Id.*

<sup>110</sup> *Id.*

<sup>111</sup> 47 C.F.R. § 25.210(a)(1) and (3).

<sup>112</sup> *Licensing Order* at ¶ 102.

40. In the *Licensing Order*, we waived, in part, our polarization requirements for all INTELSAT operating and planned satellites, including those not substantially under construction, because the likely aggregate interference between circularly polarized and adjacent linearly polarized satellites would be minimally different than that between satellites with homogenous polarization characteristics.<sup>113</sup> We further concluded, that common techniques for sharing exist to assure that linearly and circularly polarized satellites do not cause unacceptable interference to and from adjacent linearly polarized satellites.<sup>114</sup> Thus, we found that the underlying policy objectives of the rule would not be undermined, consistent with the requisite waiver standard. Nothing presented to us by GE Americom and PanAmSat convinces us to change this conclusion. In particular, we disagree with PanAmSat that interference potential of ALPHA 1, ALPHA 2, and BETA 1 will be significant. To the contrary, interference potential is minimal and so the costs of interference to other operators alleged by PanAmSat is similarly minimal.<sup>115</sup>

41. INTELSAT has operated its global satellite system for over 30 years using circular polarization at C-band, almost exclusively, while the rest of the world has employed a linear polarization system, with few exceptions, such as Intersputnik. For the most part, unacceptable interference has not been a significant problem due to existing coordination procedures. Any change by INTELSAT from circular to linear polarization will entail costs to customers associated with earth station replacement or modification, whether the change is a business decision or mandated by regulatory authority. Further, current INTELSAT customers who may decide to switch to another satellite operator would incur such costs as a result of their business decisions. While GE Americom and PanAmSat assert that uniform polarization would be conducive to improving competition, requiring Intelsat LLC to standardize its polarization on new satellites at this time, consistent with the U.S. standard, would force INTELSAT's customers in both the United States and other countries to incur up-front costs to replace or modify their earth stations in order to comply. We do not believe requiring a change to linear polarization would be in the public interest, notwithstanding the benefits alleged by GE Americom. First, PanAmSat and GE Americom do not explain how requiring three planned Intelsat LLC's satellites to comply with our linear polarization rules is necessary to prevent excessive aggregate interference in the areas of the orbital arc involved. Preventing interference is the primary purpose of a uniform polarized standard.<sup>116</sup> Second, existing customers would have to bear the new costs occasioned by requiring compliance with our polarization rules, where they might not immediately want to. All three spacecraft at issue will be replacement satellites that make use of existing technical characteristics of the network and will have customers already using the satellites to be replaced. We believe that decisions to incur such costs at this time should be made by the customers (should they seek to take service from a competing system) and not imposed on an up-front basis by regulatory action. GE Americom and PanAmSat want standardized polarization so that customers would be able to easily switch between satellite operators. Customers already are able to switch between INTELSAT and other satellite operators and would do so if they

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<sup>113</sup> *Id.* at 41-42. In essence, we determined that there would likely be no more interference from an adjacent circularly polarized satellite network into a linearly polarized network, than from an adjacent linearly polarized network. *See also, e.g.*, filings in the *Licensing Order* proceeding: LMGT Comments at 11-16, Comsat Comments at 15, and Intelsat LLC Application at 40-46.

<sup>114</sup> *See Licensing Order* at ¶¶ 67-69 and ¶¶ 105 and 106.

<sup>115</sup> *See infra* at ¶ 42.

<sup>116</sup> *See Licensing Order* at ¶ 102.



believed it would be in their commercial interest. Intelsat LLC's competitors may make commercial offers to earth station operators that would make it attractive for them to immediately implement earth station modifications in order to operate with satellites having linear polarization. We do not believe the public interest is served by, in effect, requiring INTELSAT customers now to modify their earth stations before they want to or before the marketplace provides the incentive, notwithstanding any alleged benefits.

42. Additionally, contrary to GE Americom and PanAmSat, we continue to believe that costs associated with requiring standardized polarization support the waivers granted.<sup>117</sup> We noted in our *Licensing Order* the necessary costs of requiring the ten planned satellites to comply with our linear polarization requirements would be between \$270 million and \$3 billion for earth station modifications and replacement.<sup>118</sup> The *Licensing Order* also projected lost revenue of between \$4.8 and \$6.4 billion due to service disruptions and delays, as well as "non-quantifiable costs, such as service interruption, departure of customers, and loss of credibility" among customers to convert the ten planned satellites to linear polarization.<sup>119</sup> In general, the costs to redesign and/or re-manufacture the ALPHA 1 and ALPHA 2 spacecraft would be roughly the same as for each of the seven planned spacecraft noted above.<sup>120</sup> Therefore, extrapolating, the figures from the *Licensing Order* to only include the costs of redesigning or modifying earth stations would give us a range of between \$54 and \$600 million.<sup>121</sup> Because the ALPHA 1 and ALPHA 2 satellites represent replacement satellites for existing customers, Intelsat LLC would also incur the cost of having to operate linearly polarized and circularly polarized systems simultaneously to prevent service disruptions and continue service to customers who do not changeover. Moreover, there would be the costs of service delays or disruptions, and redundant operations. Thus, compliance with such a requirement would still add costs even though the underlying policy objectives of the rule would not be undermined by grant of a waiver.

43. With respect to the ALPHA 2 and BETA 1 satellites, there would be little benefit from compliance because its assigned orbital location is well separated from any currently operating or prospective adjacent U.S. satellite.<sup>122</sup> There is no U.S. satellite within 14° of the 359° E.L. where ALPHA 2 is to be located and within 16.5° of the 85° E.L. where BETA 1 is to be located. Location of future U.S. satellites in this area of the orbital arc is highly unlikely because the areas are highly populated with ITU filings associated with non-U.S. satellite systems making successful coordination extremely difficult, if not impossible. The ALPHA 1 satellite, on the other hand, will be located at 310° E.L., a well established INTELSAT location with a history of successful coordination with the closest U.S. licensed location at 53° E.L.

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<sup>117</sup> GE Americom Petition at 6-7 and Reply at 4-5 and 9. PanAmSat Petition at 5 and Reply at 8.

<sup>118</sup> *Licensing Order* at ¶ 73-74.

<sup>119</sup> *Id.*

<sup>120</sup> *Id.*

<sup>121</sup> *Id.* Since there are 10 planned satellites that would incur roughly the same earth station modification cost if redesign and costs for the ALPHA 1 and ALPHA 2 would be 1/10 of between \$270 million and \$3 billion, times two. The lost revenue might, if figured the same way, would be 1/10 of between \$4.8 billion and \$6.4 billion.

<sup>122</sup> *Licensing Order* at ¶ 75.

44. GE Americom contends that the costs used here are exaggerated because customers would not be “forced to employ duplicative” orbital locations and, in any event, should be able to prepare for a polarization change in the time that it takes for Intelsat LLC to construct a new spacecraft.<sup>123</sup> We disagree. First, in assessing the costs that would be incurred absent a waiver of our polarization requirements, Intelsat LLC provided the Commission with a detailed accounting of these costs and other cost-related reasoning for the ten planned satellites.<sup>124</sup> On the other hand, we found in the *Licensing Order* that GE Americom provided only rough estimates and PanAmSat provided no estimates.<sup>125</sup> Even GE Americom’s figures demonstrate that significant financial costs would be incurred by any changeover to linear polarization. Second, our extrapolation of Intelsat LLC’s cost figures to include only the ALPHA 1 and ALPHA 2 satellites, provide a more accurate picture of the costs provided by Intelsat LLC that are still significant and appear to be more in line with GE Americom’s cost estimates. Third, contrary to GE Americom’s assertion, regardless of the timing, there will still be some redundancy necessary since all earth stations accessing a particular satellite would likely not change over to linear polarization simultaneously. Since Intelsat LLC would want to continue service to all of its current customers it would need to provide redundant operations. Finally, we note that assuming the costs to convert to linear polarization might be less than Intelsat LLC’s representations, waivers would still be justified in light of the overall special circumstances that we found in the *Licensing Order*, as well as, the lack of harm to the underlying policy reasons for the polarization rules. In any event, we believe that the costs addressed here are relevant and serve to support the grant of a waiver of our polarization requirements.

### 3. TT&C

45. GE Americom asserts that future Intelsat LLC satellites – including ALPHA 1, ALPHA 2, and BETA 1 – should be required to employ band-edge TT&C because placing TT&C carriers in the middle of the band complicates coordination and places burdens on other operators.<sup>126</sup> Intelsat LLC presently operates most of its TT&C functions at the center of the conventional C-band (3700-4200 MHz and 5925-6425 MHz),<sup>127</sup> whereas, the relevant rule provides that TT&C functions be conducted, “at either or both edges of the allocated band(s).”<sup>128</sup>

46. As we noted in the *Licensing Order*, the frequency utilization plans of the C-band evolved differently for the INTELSAT system and U.S. systems.<sup>129</sup> Indeed, the channelization plan used in the United States is a variant of the 12-channel plan of the INTELSAT IV series of satellites. By the time this series was deployed, INTELSAT TT&C frequencies were firmly in place. On the other hand, the U.S. plan took advantage of the additional interference isolation associated with the TV/FM signals that could

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<sup>123</sup> See also GE Americom Reply at 9.

<sup>121</sup> *Licensing Order* at ¶ 74.

<sup>125</sup> *Licensing Order* at ¶ 76.

<sup>126</sup> GE Americom Petition at 7 and Reply at 10. See also GE Americom *Licensing Order* Petition at 23 and PanAmSat *Licensing Order* Petition at 19.

<sup>127</sup> Intelsat LLC Application Vol. I at 64.

<sup>128</sup> See 47 C.F.R. § 25.202(g).

<sup>129</sup> *Licensing Order* at ¶ 96.

be achieved by interleaving the channels in two polarizations, thus leading to the band edges as the best location for TT&C frequencies in the U.S. band plan.

47. We do not agree with GE Americom that waiving our band edge TT&C requirement for the ALPHA 1, ALPHA and BETA 1 satellites will complicate coordination with other U.S. operators. Of the three satellites, only one, the ALPHA 1 at 50° W.L., is destined to be the neighbor of a U.S. licensed satellite. Columbia/GE Americom has been operating harmoniously at 47° W.L. with the satellites that INTELSAT has deployed at 50° W.L. to date. There is no reason to believe that the TT&C on the ALPHA 1 satellite will present a different interference situation than the current satellite, the INTELSAT 709. Requiring Intelsat LLC to move its TT&C frequencies on the ALPHA 1 to the band edge would impose substantial design and re-manufacturing costs, as well as re-coordination costs, and would offer little or no benefit. Additionally, as noted above, there would be no benefit to requiring Intelsat LLC to move its TT&C frequencies on the ALPHA 2 or the BETA 1 because there are no current or prospective U.S.-licensed satellites in their vicinity.

#### **D. Provision of DTH under the ORBIT Act**

48. PanAmSat contends that our *Licensing Order* violates Section 602 of the ORBIT Act by authorizing Intelsat LLC to provide direct-to-home (DTH) services prior to satisfaction of the privatization criteria set forth in the Act, including conducting an IPO.<sup>130</sup> It requests us to further condition any authorization to Intelsat LLC to prohibit it from using any FCC-licensed satellites, or any new orbital locations, to provide any “additional” services as defined under the Act until the privatization criteria have been satisfied.<sup>131</sup> PanAmSat also alleges in an ex parte filing that INTELSAT is currently in violation of both Sections 602 and 621 of the Act, pointing to a recent INTELSAT press release announcing introduction of a DTH service from France to French Polynesia via a U.S. earth station operated by Globecast.<sup>132</sup>

49. Intelsat LLC maintains that no new conditions are necessary. It and LMGT both argue that the *Licensing Order* is fully consistent with the ORBIT Act because the authority granted to Intelsat LLC is conditioned on compliance with the privatization criteria in the Act.<sup>133</sup> Intelsat LLC also claims that INTELSAT is not in violation of Sections 602 and 621(4) of the ORBIT Act.<sup>134</sup> It states that it is not offering “additional services” prohibited by the Act. Moreover, it asserts that the DTH services at issue serve French Polynesia – “a purely foreign-to-foreign communication” – and do not provide service in the U.S. market. Finally, Intelsat LLC states that it will not offer “additional services” until authorized to do so.<sup>135</sup>

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<sup>130</sup> PanAmSat Petition at 8-9.

<sup>131</sup> *Id.* at 9.

<sup>132</sup> *Ex parte* Letter from PanAmSat Corporation to the Secretary, Federal Communications Commission, October 19, 2000.

<sup>133</sup> Intelsat LLC Opposition at 18; LMGT Opposition at 10, n.29.

<sup>134</sup> *Ex parte* Letter from Intelsat LLC to the Secretary, Federal Communications Commission, November 1, 2000. *See also* Pub. L. 106-180, §§ 602 and 621(4).

<sup>135</sup> Intelsat LLC opposition at 18, n.43.

50. Section 602 of the ORBIT Act provides:

“(a) LIMITATION – Until INTELSAT, Inmarsat, and their successor or separate entities are privatized in accordance with the requirements of this title, INTELSAT, Inmarsat, and their successor or separate entities, respectively, shall not be permitted to provide additional services. The Commission shall take all necessary measures to implement this requirement, including denial by the Commission of licensing for such services.<sup>136</sup>”

DTH is considered to be an “additional service” under the Act.<sup>137</sup> Further, Section 621(4) provides:

(4) PREVENTION OF EXPANSION DURING TRANSITION. – During the transition period prior to privatization under this title, INTELSAT and Inmarsat shall be precluded from expanding into additional services.<sup>138</sup>

The Act also provides, however, that the Commission may act upon Intelsat LLC’s application prior to the latest date set forth in the Act for the conduct of an IPO “including such actions as may be necessary for the United States to become the licensing jurisdiction for INTELSAT”. Section 601(b)(1)(D) provides:

“(D) RULE OF CONSTRUCTION. – Nothing in this subsection is intended to preclude the Commission from acting upon applications of INTELSAT, Inmarsat, or their successor entities prior to the latest date set out in section 621(5)(A), including such actions as may be necessary for the United States to become the licensing jurisdiction for INTELSAT, but the Commission shall condition a grant of authority pursuant to this subsection upon compliance with sections 621 and 622.<sup>139</sup>”

51. PanAmSat’s allegations raise three issues. The first issue is whether our *Licensing Order* violated Section 602. The *Licensing Order* did not violate Section 602. It authorized the construction and/or operation of existing and planned satellites that are capable of being used by customers for purposes of delivering DTH services. However, as required by Section 601(b)(1)(D), the authorizations were conditional upon compliance with the privatization criteria in Sections 621 and 622 of the ORBIT Act.<sup>140</sup> In addition, the *Licensing Order* provides for Commission review, after notice and comment, of INTELSAT’s privatization prior to the effective date of the licenses issued to Intelsat LLC. Under these circumstances, the further condition requested by PanAmSat is unnecessary. The second issue is whether INTELSAT has violated both Sections 602 and 621(4) of the Act as a result of Globecast’s use of INTELSAT satellite capacity to provide DTH services to French Polynesia. We will consider this issue upon review of Intelsat LLC’s privatization decision as required by the ORBIT Act. Finally, the third issue is whether Globecast is currently authorized to provide these services absent seeking specific authority

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<sup>136</sup> Pub L. 106-180, § 602(a).

<sup>137</sup> *Id.* at § 681(12)(B).

<sup>138</sup> *Id.* at § 621(4).

<sup>139</sup> *Id.* at § 601(b)(1)(D).

<sup>140</sup> *Licensing Order* at ¶ 38 and 160.

under our 1997 DISCO II decision.<sup>141</sup> Globecast's compliance with its license is not within the scope of this proceeding. Based on PanAmSat's allegations, we will independently examine this question. Any determination that we make in considering the second issue may impact our examination of this issue and action we take, if any.

### E. Dominant Carrier Treatment

52. In our Order we declined to declare that Intelsat LLC be regulated as dominant carrier for service to thin route countries as requested by PanAmSat.<sup>142</sup> PanAmSat requests that, on reconsideration, we condition Intelsat LLC's authorization on regulation of Intelsat LLC as a dominant carrier based on the findings we made in our 1998 *Comsat Non-Dominant Order*.<sup>143</sup> PanAmSat contends that the Commission otherwise is being inconsistent with its approach in the order of authorizing Intelsat LLC subject to compliance with the Act's privatization criteria. PanAmSat describes its proposal as "a prophylactic condition on any Intelsat LLC authorization based on the Commission's prior – and unaltered – factual finding that the INTELSAT system has market power on these routes."<sup>144</sup> It argues that Intelsat LLC cannot assert public responsibilities in assuming global connectivity and nondiscriminatory access, and avoid common carrier regulation.<sup>145</sup>

53. Intelsat LLC states that it initially will not be offering service on a common carrier basis.<sup>146</sup> If it does offer common carrier service in the future, Intelsat LLC states that the Commission would need to consider a variety of currently unknown factors, such as routes, services, capacity availability, trends toward liberalization and open entry in markets, and third party influence in markets, in deciding whether Intelsat LLC is a dominant carrier.<sup>147</sup> LMGT similarly argues that it would be premature for the Commission to decide this issue without analysis of the market and services at the time Intelsat LLC decides to offer common carrier services.<sup>148</sup>

54. At the outset, we find that PanAmSat's reliance on our *Comsat Non-Dominant Order* is misplaced. We did not, in that decision, find the INTELSAT system dominant on thin routes.<sup>149</sup> Rather, we found Comsat to be dominant in its use of the INTELSAT system to provide switched voice and private

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<sup>141</sup> See Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Space Stations to provide Domestic and International Satellite Services in the United States, Report and Order, 12 FCC Rcd. 24094, 24112 (1997) ("DISCO II decision"), petitions for reconsideration pending, petition for review pending sub nom. Comsat Corp. v. Federal Communications Commission, Case No. 1011 (D.C. Cir).

<sup>142</sup> *Licensing Order* at ¶ 40-41

<sup>143</sup> PanAmSat Opposition at 9-10, citing *Comsat Non-Dominant Order*, 15 FCC Rcd 14083, 14148 (1998).

<sup>144</sup> *Id.* at 10.

<sup>145</sup> PanAmSat Reply at 6.

<sup>146</sup> Intelsat LLC Opposition at 17.

<sup>147</sup> *Id.*

<sup>148</sup> LMGT Opposition at 5-6, n.15.

<sup>149</sup> PanAmSat Petition at 9.

line service between the United States and 63 countries and occasional-use television service between the United States and 142 other countries.<sup>150</sup> The distinction is important here because it is Comsat that controls much of INTELSAT satellite capacity to thin-route countries.<sup>151</sup> It is therefore Comsat upon which we now impose regulatory requirements to protect consumers. In 1999, we adopted incentive-based regulation of Comsat for the services on route to countries in which it is classified as dominant.<sup>152</sup> That program involved Comsat commitments for annual rate reductions for switched voice services, rate caps on private line services, and a one-time rate reduction for occasional-use television services for competitive and non-competitive routes.<sup>153</sup> PanAmSat provides no explanation as to why an additional layer of regulation on Intelsat LLC is necessary to protect the U.S. ratepayer as long as Comsat controls INTELSAT satellite capacity useful in providing much of services to thin route countries. While this situation may change in the future, our treatment of Comsat does not provide a factual basis for imposing dominant carrier regulation at this time.

55. Additionally, as we discussed in our Intelsat LLC *Licensing Order*, the imposition of dominant carrier regulation first requires that a service be deemed a common carrier service. We said that, if Intelsat LLC does provide satellite capacity directly to U.S. users and service providers for the purpose of serving thin route countries, we would use the two-part analysis enunciated by the D.C. Circuit in *National Association of Regulatory Utility Commissioners v. FCC*, to determine whether a space station operator offering service to another entity, that then offers service to end users, should be regulated as a common carrier.<sup>154</sup> Further, we noted current Commission policy allowing U.S. licensees in the fixed satellite services (FSS) to elect between providing service on common carrier or non-common carrier basis, subject to NARUC I.<sup>155</sup> Finally, we noted that, whether Intelsat LLC should be deemed a common carrier, in part, will require consideration of the post-privatization distribution arrangements that continue to be subject to negotiation within INTELSAT.<sup>156</sup> We require Intelsat LLC to provide information as to post privatization distribution arrangements in the filing required by the Order following its November Assembly of Parties approving the proposed privatization. We will then be in a better position to weigh all factors associated with this issue. This approach is consistent with that taken with respect to other aspects of the *Licensing Order* in licensing Intelsat LLC.<sup>157</sup>

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<sup>150</sup> *Comsat Non-Dominant Order* at 14147-14149. See also, *infra*, Appendix A and B.

<sup>151</sup> See *Availability of INTELST Space Segment Capacity to Users and Service Providers Seeking to Access INTELSAT Directly*, Report and Order, FCC 00-340 (released September 13, 2000).

<sup>152</sup> *In the Matter of Comsat Corporation Policies and Rules for Alternative Incentive Based Regulation of Comsat Corporation*, 14 FCC Rcd 3065 (1999) (“*Comsat Incentive Based Order*”).

<sup>153</sup> *Id.*

<sup>154</sup> *Licensing Order* at ¶ 41, citing *National Association of Regulatory Utility Commissioners v. FCC*, 525 F.2d. 630, 642(D.C. Cir. 1976) (“*NARUC I*”).

<sup>155</sup> *Id.* at n. 134, citing *DISCO I decision*, 11 FCC Rcd at 2436 (1999).

<sup>156</sup> *Licensing Order* at ¶ 41.

<sup>157</sup> *Id.* at ¶ 38 and 160.

**V. ORDERING CLAUSE**

56. Accordingly, in view of the above discussion, IT IS ORDERED the Petitions for Reconsideration of the Memorandum Opinion Order and Authorization released August 8, 2000 in the above-captioned proceeding filed by PanAmSat Corporation and GE American Communications, Inc., ARE DENIED.

Federal Communications Commission

Magalie Roman Salas  
Secretary