## BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

Petition of  New Skies Satellites B.V.	) ) File No )
For Declaratory Ruling for Inclusion of SES-4 at 22.0° W.L. on the Commission's Permitted Space Station List; and	) ) )
For Declaratory Ruling to Serve the U.S. Market Using the Extended C-band and Ku- band Capacity on SES-4	) ) )
For Authority to Provide U.S. Direct-to-Home Services	) ) )

#### PETITION FOR DECLARATORY RULING

Thai E. Rubin
Senior Vice President and General Counsel
New Skies Satellites B.V.
Rooseveltplantsoen 4
2517 KR Den Hague
The Netherlands

John Hane Tony Lin Pillsbury Winthrop Shaw Pittman LLP 2300 N Street NW Washington, DC 20037 Counsel for New Skies Satellites B.V. Joslyn Read Vice President, Regulatory Affairs New Skies Satellites B.V. 1129 20<sup>th</sup> Street, NW, Suite 1000 Washington, DC 20036

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#### PETITION FOR DECLARATORY RULING

Pursuant to Section 25.137 of the Commission's rules,¹ New Skies Satellites B.V. (doing business as "SES WORLD SKIES")² hereby submits this Petition for Declaratory Ruling ("Petition") to request U.S. market access for The Netherlands-licensed SES-4 satellite at the 22.0° W.L. (338° E.L.) orbital location. The SES-4 satellite will replace The Netherlands-licensed NSS-7 satellite currently operating at that orbital location. Specifically, SES WORLD SKIES requests: (1) the inclusion of SES-4 on the Permitted Space Station List ("Permitted List") for the provision of Fixed-Satellite Service ("FSS") to, from and within the United States using the conventional C-band and Ku-band payloads; (2) a ruling permitting the use of the

<sup>&</sup>lt;sup>1</sup> 47 C.F.R. § 25.137; see also In the Matter of 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, 12 FCC Rcd 24094 (1997) ("DISCO II"); In the Matter of Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Space Stations to Provide Domestic and International Satellite Service in the United States, 15 FCC Rcd 7207 (1999) ("DISCO II Reconsideration Order").

<sup>&</sup>lt;sup>2</sup> SES WORLD SKIES is the commercial brand name for the integrated operations of two indirect subsidiaries of SES S.A.: New Skies Satellites B.V. and SES Americom, Inc. (effective January 1, 2009). The brand name does not affect the underlying legal entities that hold Commission authorizations or U.S. market access rights.

extended C-band and Ku-band capacity on SES-4 for the provision of international FSS and limited tracking, telemetry and command ("TT&C") operations;<sup>3</sup> and (3) authority to provide direct-to-home ("DTH") FSS within the United States and between the United States and certain other countries.

Grant of the Petition would serve the public interest by allowing SES WORLD SKIES to provide continuity of service to existing customers of NSS-7, make more satellite capacity available for service, and introduce DTH services from the 22.0° W.L. orbital location. SES WORLD SKIES has a replacement expectancy with respect to the frequencies used by NSS-7 in the provision of services to the U.S. market.<sup>4</sup> Additionally, SES WORLD SKIES meets the Commission's criteria for granting U.S. market access to SES-4, and the technical waivers requested in the Petition are all consistent with previous decisions of the Commission, including the waivers granted for NSS-7.

SES-4 is expected to be launched by the end of September 2011. Accordingly, SES WORLD SKIES requests expedited consideration and grant of this Petition.

#### **Background**

The Netherlands-licensed NSS-7 satellite at the 22.0° W.L. orbital location has been on the Permitted List since 2002.<sup>5</sup> Since its launch, the satellite has been successfully providing FSS to enterprise and government customers in the Americas, Europe, Africa, and the Middle

SES WORLD SKIES acknowledges that earth station operators seeking to access SES-4 using the extended C-band or Ku-band frequencies must still obtain a specific earth station license that includes SES-4 as an authorized point of communication or modify an existing license to add SES-4 as a point of communication. See, e.g., In the Matter of Telesat Canada, 17 FCC Rcd 25287, at ¶ 1 (Int'l Bur. 2002).

<sup>&</sup>lt;sup>4</sup> In the Matter of Amendment of the Commission's Space Station Licensing Rules and Policies, 18 FCC Rcd 10760, at ¶¶ 322-24 (2003) ("Satellite Licensing Order").

<sup>&</sup>lt;sup>5</sup> See In the Matter of New Skies Satellites N.V., 17 FCC Rcd 10369 (Int'l Bur. 2002) ("NSS-7 Order"); see also Stamp Grant, Application of New Skies Satellites, N.V., File No. SAT-PDR-20020930-00179 (May 29, 2003) (modifying the Permitted List to reflect the operation of NSS-7 at 22.0° W.L. rather than 21.5° W.L.); Public Notice, SPB-181, Revision of Permitted List Entry for the NSS-7 Satellite to Remove Coordination Conditions, 17 FCC Rcd 22969 (Int'l Bur. 2002).

East, as well as over the Atlantic Ocean region. The SES-4 satellite, which is also licensed by The Netherlands, will replace NSS-7 at 22.0° W.L. and provide essentially the same coverage and the same services.

Both the SES-4 and NSS-7 satellites are capable of operating in both the conventional and extended C-band and Ku-band frequencies. The SES-4 satellite, however, will operate on one additional uplink band not used by NSS-7 (13750-14000 MHz). A chart comparing the frequency bands on the existing NSS-7 satellite and the new SES-4 satellite is shown below.

Chart 1 – Comparison of Frequency Bands Used by NSS-7 and SES-4

Frequency Band	NSS-7	SES-4
Conventional C-band	3700-4200 MHz downlink	3700-4200 MHz downlink
	5925-6425 MHz uplink	5925-6425 MHz uplink
Extended C-band	3625-3700 MHz downlink	3625-3700 MHz downlink
	5850-5925 MHz uplink	5850-5925 MHz uplink
Conventional Ku-band	11700-12200 MHz downlink	11700-12200 MHz downlink
	14000-14500 MHz uplink	14000-14500 MHz uplink
Extended Ku-band	10950-11200 MHz downlink 11450-11700 MHz downlink	10950-11200 MHz downlink 11450-11700 MHz downlink
		13750-14000 MHz uplink

Both the NSS-7 and SES-4 spacecraft are also capable of operating in the 12500-12750 MHz downlink band. However, SES WORLD SKIES will only use these frequencies in International Telecommunication Union ("ITU") Region 1 and, therefore, is not seeking authority to use the 12500-12750 MHz band for service into the United States.

#### Discussion

#### I. GRANT OF THIS PETITION WILL SERVE THE PUBLIC INTEREST

Grant of the Petition will permit SES WORLD SKIES to provide continuity of service to customers accessing NSS-7 upon its replacement by SES-4. Indeed, the Commission long has recognized that the public interest is served by granting a replacement expectancy for satellite operators:

Given the huge costs of building and operating [geostationary orbit ("GSO")] space stations, we have found that there should be some assurance that operators will be able to continue to serve their customers. Therefore, the Commission has stated that, when an orbit location remains available for a U.S. satellite with the technical characteristics of the proposed replacement satellite, it will generally authorize the replacement satellite at the same location.<sup>6</sup>

This same analysis is also applicable to foreign operators serving the U.S. market:

Under the Commission's rules, "non-U.S.-licensed satellites [have] the same replacement expectancy as . . . U.S.-licensed satellites. That is, [the Commission] will permit the proposed replacement satellite to access the U.S. market provided that the location remains available to a satellite authorized by the Administration that authorized the existing satellite, and the technical characteristics of the proposed replacement allow it to be assigned to that location.<sup>7</sup>

These conditions are satisfied here. Both NSS-7 and SES-4 are licensed by The Netherlands to SES WORLD SKIES to operate at the same location, 22.0° W.L. SES-4 is technically similar to NSS-7 and its operations at 22° W.L. on the frequency bands used by NSS-7 have been coordinated with adjacent satellite operators and will be in accordance with all existing and

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<sup>&</sup>lt;sup>6</sup> Satellite Licensing Order, at ¶ 250 (citing Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, 3 FCC Rcd 6972, at ¶ 8 n. 31 (1988); Hughes Communications Galaxy, Inc., 6 FCC Rcd 72, at ¶ 6 n. 7 (1991); and GE American Communications, Inc., 10 FCC Rcd 13775, at ¶ 6 (Int'l Bur. 1995)).

<sup>&</sup>lt;sup>7</sup> Satellite Licensing Order, at ¶¶ 324.

future coordination agreements. Accordingly, SES WORLD SKIES is entitled to a replacement expectancy with respect to those frequency bands used by NSS-7.

Grant of the Petition also will expand the satellite capacity available for service at the 22.0° W.L. orbital location by permitting SES WORLD SKIES to use an additional uplink frequency band. With respect to this frequency band, as well as the other frequency bands for which SES WORLD SKIES has a replacement expectancy, SES WORLD SKIES meets the criteria for access to the U.S. market. Specifically, as explained below, the provision of service by SES-4 will facilitate competition and will not create the potential for harmful interference; SES WORLD SKIES meets the legal qualifications for access; SES-4 meets the Commission's technical requirements, subject to the waiver requests specified below (all of which are consistent with waivers the Bureau has granted before); and there are no offsetting concerns to warrant denial of the Petition.

Grant of the Petition also will allow SES WORLD SKIES to introduce DTH services from the 22.0° W.L. orbital location, permitting the company to meet customer requirements for enhanced DTH capacity and increase competition for DTH services. As explained below, SES WORLD SKIES meets the Commission's ECO-sat test for the provision of DTH services within the United States and between the United States and certain other countries. For all of the above reasons, grant of the Petition serves the public interest.

# II. THIS PETITION SATISFIES THE CRITERIA FOR GRANTING SES-4 ACCESS TO THE U.S. MARKET

In *DISCO II*, the Commission established the criteria for evaluating requests to approve the use of non-U.S. licensed space stations to provide satellite service to, from, and within the

United States.<sup>8</sup> The Commission considers the effect on competition in the United States, spectrum availability, eligibility and operational requirements, and concerns related to national security, law enforcement, foreign policy, and trade.<sup>9</sup> SES WORLD SKIES satisfies these criteria for access to the U.S. market by SES-4, subject to the technical waivers described below and in the Technical Appendix.

#### A. Competition Considerations

SES WORLD SKIES will operate SES-4 at the 22.0° W.L. orbital location pursuant to an authorization granted by The Netherlands. The satellite system has been submitted for coordination to the ITU by The Netherlands under the NSS-G2-11 and NSS-16 filings. The Netherlands is a member of the World Trade Organization ("WTO"), and SES WORLD SKIES seeks access to the U.S. market to provide certain non-DTH FSS, which is a service covered by the WTO Agreement on Basic Telecommunications Services ("WTO Agreement"). Accordingly, SES WORLD SKIES enjoys a presumption in favor of entry for SES-4 and need not make an effective competitive opportunities showing for the provision of non-DTH FSS. SES WORLD SKIES is also seeking authority to provide DTH services within the United States and between the United States and certain other countries. That request is discussed in Section III infra.

The Commission consistently has authorized The Netherlands-licensed satellites of SES WORLD SKIES to provide non-DTH FSS in the United States. In 1999, the Commission

<sup>&</sup>lt;sup>8</sup> See DISCO II, at ¶¶ 30-182. The same considerations apply to requests for inclusion on the Permitted List, with respect to the conventional C-band and Ku-band frequencies, and for access to the U.S. market using other frequency bands. See id., at ¶ 192; DISCO II Reconsideration Order, at ¶ 5; see also, e.g., In the Matter of Telesat Canada, 17 FCC Rcd 25287, at ¶ 22 (Int'l Bur. 2002).

<sup>&</sup>lt;sup>9</sup> *See DISCO II*, at ¶¶ 30-182.

<sup>&</sup>lt;sup>10</sup> 47 C.F.R. § 25.137(c)(3).

<sup>&</sup>lt;sup>11</sup> See DISCO II, at ¶ 30.

<sup>&</sup>lt;sup>12</sup> See 47 C.F.R. § 25.137(a)(2).

adopted the *New Skies Market Access Order*, which – pursuant to the Commission's *DISCO II* analysis – granted 136 earth stations authority to communicate with one or more of SES WORLD SKIES' five satellites.<sup>13</sup> In 2001, the Commission granted SES WORLD SKIES' Petition for a Declaratory Ruling to add four satellites to the Permitted List.<sup>14</sup> In 2002, the FCC added to the Permitted List NSS-7, which replaced NSS-803 and NSS-K at the nominal 22° W.L. orbital location.<sup>15</sup> More recently, in 2009 and 2010, the Bureau added NSS-9<sup>16</sup> and the C-band payload of NSS-5 to the Permitted List.<sup>17</sup>

#### B. Spectrum Availability

The Commission considers spectrum availability as a factor in determining whether to allow a foreign-licensed satellite to serve the U.S. market and evaluates whether grant of access will create the potential for harmful interference with U.S.-licensed systems. As discussed earlier, NSS-7 currently operates on the conventional and extended C-band and Ku-band frequencies at the 22.0° W.L. orbital location. SES-4 is technically similar and will operate on all these same frequencies as NSS-7. In addition, the operations of SES-4 at 22.0° W.L. on those frequency bands used by NSS-7 have been coordinated with adjacent satellite operators and will be in accordance with all existing and future coordination agreements.

<sup>&</sup>lt;sup>13</sup> See In the Matter of New Skies Satellites, N.V., 14 FCC Rcd 13003 (1999) ("New Skies Market Access Order"). SES WORLD SKIES has since de-orbited two of those satellites (NSS-K and NSS-513).

<sup>&</sup>lt;sup>14</sup> See In the Matter of New Skies Satellite, N.V., 16 FCC Rcd 6740 (Int'l Bur. 2001) ("New Skies 2001 PDR Order").

<sup>&</sup>lt;sup>15</sup> See NSS-7 Order, at  $\P$  6.

<sup>&</sup>lt;sup>16</sup> See Stamp Grant, Application of New Skies Satellites B.V., File Nos. SAT-PPL-20080811-00152, SAT-APL-20081212-00230 (February 10, 2009).

See Stamp Grant, Application of New Skies Satellites B.V., File Nos. SAT-PPL-20091208-00142, SAT-APL-20100219-00034 (June 4, 2010). The Ku-band payload on NSS-5 is operated by and licensed to Intelsat North America LLC.

<sup>&</sup>lt;sup>18</sup> *See DISCO II*, at ¶¶ 149-50.

<sup>&</sup>lt;sup>19</sup> See supra Chart 1.

The SES-4 satellite will also operate on an additional frequency band, the 13750-14000 MHz band. There is no satellite serving the U.S. market currently located or proposed to be located at the nominal 22° W.L. orbital location that uses or proposes to use this frequency band. Accordingly, the frequencies are available for use in the provision of service to the United States. The operations of SES-4 in this additional uplink band are in the process of being coordinated and will be in accordance with future coordination agreements.<sup>20</sup>

SES WORLD SKIES acknowledges that, under the Commission's rules, the use of the extended C-band (3625-3700 MHz downlink; 5850-5925 MHz uplink) and certain extended Kuband frequencies (10950-11200 MHz and 11400-11700 MHz downlink; 13750-14000 MHz uplink) is limited to international service. SES WORLD SKIES also acknowledges that use of the extended C-band frequencies is subject to case-by-case electromagnetic compatibility analysis with co-primary U.S. government systems. SES WORLD SKIES's proposed use of these bands on SES-4 to serve the United States will be consistent with these and other applicable restrictions in the extended bands, except to the extent set forth in the waiver requests below.

#### C. Eligibility Requirements

The Commission concluded in *DISCO II* that, in order to be granted access to the U.S. market, space station operators not licensed by the Commission will be required to meet the same qualifications that U.S.-licensed space station operators must meet to obtain a satellite

<sup>&</sup>lt;sup>20</sup> As demonstrated in the Technical Appendix, operations in this frequency band would be compatible with satellites spaced two-degree away. *See* Technical Appendix, at Section 17 and Appendix A. In fact, there is no satellite within six degrees of 22.0° W.L. that operates in this frequency band. *See* <a href="https://www.lyngsat.com/atlantic.html">www.lyngsat.com/atlantic.html</a> (last visited March 25, 2011).

<sup>&</sup>lt;sup>21</sup> See 47 C.F.R. § 2.106 Footnotes US245, NG104, and NG185, § 2.108, and § 25.202(a)(1) Note 2.

<sup>&</sup>lt;sup>22</sup> See 47 C.F.R. § 2.106 Footnote US245, and § 2.108.

<sup>&</sup>lt;sup>23</sup> See infra Section II.C.2.

license.<sup>24</sup> The information provided in this Petition, including the associated attachments, Schedule S, and FCC Form 312, demonstrates that SES WORLD SKIES satisfies these requirements.

## 1. Legal and Technical Qualifications

The Commission grants petitions for declaratory ruling for access to the U.S. market by a foreign satellite when the request is accompanied by information demonstrating compliance with Sections 25.114 and 25.137 of the Commission's rules. The relevant information is set forth in this Petition, associated Appendices, and the accompanying FCC Form 312. SES WORLD SKIES' legal qualifications are also a matter of record in the proceedings granting U.S. market access to other satellites of SES WORLD SKIES. The technical aspects of the proposed operations of SES-4 can be found in the associated FCC Form 312, Schedule S, and Technical Appendix. Taken together, these materials show that SES WORLD SKIES meets the Commission's legal and technical requirements, subject to the waiver requests below, for access to the U.S. market by SES-4.

#### 2. Waiver Requests of the Commission's Technical Rules

The Commission may waive a rule if there is good cause to do so, if warranted by special circumstances, and if a deviation from the rule would better serve the public interest than would strict adherence to the rule.<sup>27</sup> SES WORLD SKIES requests waivers to accommodate certain

<sup>25</sup> See DISCO II Reconsideration Order, at ¶¶ 10, 16, 28-30; 47 C.F.R. §§ 25.114 (setting forth requirements for space station authorizations), 25.137 (setting forth requirements for access to the U.S. market by foreign-licensed satellites).

<sup>&</sup>lt;sup>24</sup> See DISCO II, at ¶¶ 154-59.

<sup>&</sup>lt;sup>26</sup> See New Skies 2001 PDR Order; NSS-7 Order; Stamp Grant, Application of New Skies Satellites B.V., File Nos. SAT-PPL-20080811-00152, SAT-APL-20081212-00230 (February 10, 2009); Stamp Grant, Application of New Skies Satellites B.V., File Nos. SAT-PPL-20091208-00142, SAT-APL-20100219-00034 (June 4, 2010).

<sup>&</sup>lt;sup>27</sup> See, e.g., WAIT Radio v. FCC, 418 F.2d 1153, 1159 (D.C. Cir. 1969), cert. denied, 409 U.S. 1027 (1972); Northeast Cellular Telephone Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990); 47 C.F.R. § 1.3.

technical characteristics of the SES-4 satellite. The FCC previously has granted similar waivers for NSS-7, the satellite that SES-4 will replace, as well as for other similarly situated satellites.<sup>28</sup> Grant of the requested waivers also is warranted here for the reasons specified below. Moreover, the SES-4 satellite substantially complies with the Commission's technical requirements, including its two-degree spacing policy. To the extent the satellite does not, allowing such non-conforming operations would better serve the public interest than would strict adherence to the rules, given the identified public interest benefits and the lack of harmful interference expected from the proposed operations.

Sections 2.106 Footnote NG104 and 25.202(a) Note 2. These sections limit FSS operations in the 10950-11200 and 11450-11700 MHz bands to international service.<sup>29</sup> As stated above, SES WORLD SKIES intends to use these frequency bands on SES-4 for international service.<sup>30</sup> However, SES-4 has two telemetry frequencies at the edge of the 11450-11700 MHz (and none in the conventional Ku-band).<sup>31</sup> As the Commission has recognized, TT&C operations require uplink and downlink capability from the same earth station.<sup>32</sup> For reliability and cost reasons, SES WORLD SKIES intends to use a limited number of earth stations (no more than

<sup>&</sup>lt;sup>28</sup> See NSS-7 Order, at  $\P$  22 (granting conditional waivers of Sections 25.140(b)(2), 25.210(a), 25.210(i), and 25.211(a)).

<sup>&</sup>lt;sup>29</sup> 47 C.F.R. §§ 2.106 NG104, 25.202(a) Note 2; *In the Matter of EchoStar KuX Corporation Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-band Frequencies in the Fixed-Satellite Service at the 83° W.L. Orbital Location, 20 FCC Rcd 919, at ¶ 9 (Int'l Bur. 2004)* ("*EchoStar 83W Order*") ("[A] satellite may provide downlink service into the United States and its Possessions (US&P) in the 10.95-11.2 GHz and 11.45-11.7 GHz only if the uplink originates outside the US&P.").

<sup>&</sup>lt;sup>30</sup> See supra note 3 and accompanying text.

<sup>&</sup>lt;sup>31</sup> See Technical Appendix, at Section 5.3. SES-4 also has two telemetry frequencies in the 12500-12700 MHz band, which are useable only in Region 1.

<sup>&</sup>lt;sup>32</sup> EchoStar 83W Order, at ¶ 17; see also In the Matter of EchoStar Satellite LLC, Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-band Frequencies in the Fixed-Satellite Service at the 109° W.L. Orbital Location, 20 FCC Rcd 930, at ¶ 17 (Int'l Bur. 2004) ("EchoStar109W Order"); In the Matter of EchoStar KuX Corporation, Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-band Frequencies in the Fixed-Satellite Service at the 121° W.L. Orbital Location, 20 FCC Rcd 942, at ¶ 18 (2004) ("EchoStar 121W Order").

two) in the United States to perform TT&C with SES-4. To the extent that TT&C is considered a domestic (*i.e.*, non-international) service, SES WORLD SKIES respectfully requests a waiver of the international-service restriction to enable TT&C to be performed with SES-4 from a limited number of U.S. earth stations.

Grant of this waiver would not undermine the purpose of the applicable rules, which is to ensure that earth station deployments in these frequency bands do not negatively impact the deployment of fixed service ("FS") in the band or cause interference to such operations.<sup>33</sup> The telemetry downlink from SES-4 will comply with the power flex density limits in the Commission's rules and, thus, will not interfere with FS station operations.<sup>34</sup> Moreover, SES WORLD SKIES seeks only a small number of U.S. earth stations (no more than two) to perform TT&C with SES-4, which should not place any significant restrictions on the deployment of FS in the same band.<sup>35</sup> For these reasons, a waiver of the applicable rules would not undermine the purpose of the rules and would be consistent with Commission precedent.

Sections 25.210(a)(1) and (3). These sections require that space stations operating in the C-band use orthogonal linear polarization and that they be capable of switching polarization sense upon ground command.<sup>36</sup> SES-4, like NSS-7, uses circular polarization for its C-band payload rather than linear polarization and is not capable of switching polarization on ground command. This practice can be traced to the historic international origins and specific design of the INTELSAT system. As the Commission is aware, the NSS-7 satellite was launched as a

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<sup>&</sup>lt;sup>33</sup> See EchoStar 83W Order, at ¶¶ 14-17; EchoStar 109W Order, at ¶¶ 14-17; EchoStar 121W Order, at ¶¶ 14-18.

<sup>&</sup>lt;sup>34</sup> See Technical Appendix, at Section 10. SES WORLD SKIES will take interference mitigation measures, such as careful placement and/or shielding of the earth station, to ensure that its receive terminals maintain acceptable service on the extended Ku-band frequencies.

<sup>&</sup>lt;sup>35</sup> See EchoStar 83W Order, at ¶ 16 ("The Commission has waived this requirement [i.e. NG104] where the number of potential earth stations in a particular service is inherently small."); EchoStar 109W Order, at ¶ 16 (same); EchoStar 121W Order, at ¶ 17 (same).

<sup>&</sup>lt;sup>36</sup> 47 C.F.R. §§ 25.210(a)(1) and (a)(3).

replacement for the NSS-803 and NSS-K satellites that SES WORLD SKIES inherited from INTELSAT as part of the New Skies spin-off in 1998.<sup>37</sup> Like other satellites in the INTELSAT system, NSS-803 operates with circular polarization in the C-band.<sup>38</sup> Today, a very large installed base of customers accesses the NSS-7 satellite using circular polarization in the C-band. SES-4 also will use circular polarization in the C-band to maintain continuity of service and to minimize disruptions to existing customers accessing NSS-7. The Commission has found this to be a legitimate basis for waiver of the Commission's rules.<sup>39</sup>

Grant of the waiver request would not undermine the primary purposes of the rule, which are to minimize interference potential between adjacent FSS satellites and ensure full frequency reuse. SES WORLD SKIES has coordinated the C-band operations of SES-4 at 22.0° W.L. with adjacent satellites, and accordingly there will be no harmful interference to those satellites on those frequencies. In addition, full frequency reuse is achieved on SES-4 through the use of both left-hand and right circular polarizations and use of multiple spatially independent beams. Accordingly, the Bureau should waive these rules for SES-4, consistent with its prior decisions, including with respect to NSS-7.40

Section 25.210(i). This section requires FSS space station antennas to provide cross-polarization isolation such that the ratio of the on-axis co-polarization gain to the cross-polarization gain of the antenna in the assigned frequency band is at least 30 dB within its primary coverage area.<sup>41</sup> As explained more fully in the Technical Appendix, SES-4 will operate

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<sup>&</sup>lt;sup>37</sup> See NSS-7 Order, at  $\P$  6.

<sup>&</sup>lt;sup>38</sup> See New Skies Market Access Order, at ¶ 76 n. 198.

<sup>&</sup>lt;sup>39</sup> See supra note 26; see also In the Matter of Applications of Intelsat LLC, 15 FCC Rcd 15460, at ¶ 106 (2000).

<sup>&</sup>lt;sup>40</sup> See NSS-7 Order, at ¶ 18; see also supra note 39.

<sup>&</sup>lt;sup>41</sup> 47 C.F.R. § 25.210(i)(1).

with less than 30 dB of cross-polarization on certain beams in its primary coverage areas. 42 Accordingly, SES WORLD SKIES respectfully requests a waiver of Section 25.210(i). The Commission has waived this rule in the past on the grounds that cross-polarization performance has a negligible impact on neighboring satellite systems, and thus, only the satellite operator itself would suffer from potential interference from poor cross-polarization performance. 43 The Commission granted such a waiver for NSS-7 on this ground and should do so again for SES-4.44

Section 25.211(a). This section requires that downlink analog video transmissions in the C-band be transmitted only on certain center frequencies with corresponding uplink frequencies 2225 MHz higher.<sup>45</sup> The center frequencies for SES-4's C-band transponders do not conform to this requirement. Accordingly, SES WORLD SKIES respectfully requests a waiver of this rule.

Grant of the waiver would not undermine the purpose of the rule, which is "to minimize the interference between adjacent satellites when both are carrying analog video signals with highly peaked spectra." <sup>46</sup> The conduct of analog video operations of SES-4 in the C-band frequencies has been coordinated with adjacent satellites. Under such circumstances, the Bureau has waived this requirement in the past, including with respect to NSS-7 and its predecessor NSS-803, and it should do so here as well. <sup>47</sup>

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<sup>&</sup>lt;sup>42</sup> See Technical Appendix, at Section 5.6.

<sup>&</sup>lt;sup>43</sup> See In the Matter of EchoStar Satellite Operating Corporation, 21 FCC Rcd 14780, at ¶¶ 6-8 (Int'l Bur. 2006); In the Matter of Applications of Intelsat LLC, 15 FCC Rcd 15460, at ¶ 11 n. 281 (2000).

<sup>&</sup>lt;sup>44</sup> *See NSS-7 Order*, at ¶ 19.

<sup>&</sup>lt;sup>45</sup> 47 C.F.R. § 25.211(a).

In the Matter of Establishment of Policies and Service Rules for the Broadcasting-Satellite Service at the 17.3-17.7 GHz Frequency Band and at the 17.7-17.8 GHz Frequency Band Internationally, and at the 24.75-25.25 GHz Frequency Band for Fixed Satellite Services Providing Feeder Links to the Broadcasting-Satellite Service and for the Satellite Services Operating Bi-directionally in the 17.3-17.8 GHz Frequency Band, 22 FCC Rcd 8842, at ¶ 111 (2007); In the Matter of EchoStar Satellite Operating Corporation, 21 FCC Rcd 14780, at ¶ 7 (Int'l Bur. 2006).

<sup>&</sup>lt;sup>47</sup> See NSS-7 Order, at ¶ 18; see also In the Matter of Intelsat North America, LLC, 20 FCC Rcd 11833, at ¶ 9 (2005); In the Matter of the Applications of Intelsat LLC, 15 FCC Rcd 15460, at ¶¶ 111-12 (2000).

#### **D.** Other Considerations

There are no national security, law enforcement, foreign policy, or trade concerns applicable to this Petition. Indeed, as discussed above, the Bureau on numerous occasions has granted access to the U.S. market for The Netherlands-licensed satellites of SES WORLD SKIES.<sup>48</sup> Nothing in this Petition warrants a different conclusion.

## III. REQUEST FOR AUTHORITY TO PROVIDE DIRECT-TO-HOME SERVICE

SES WORLD SKIES also requests authority to use the SES-4 satellite to provide U.S.

DTH services, which are not covered in the U.S. commitments to the WTO Agreement. For such services, the Commission applies the "ECO-Sat" test, which requires a determination whether U.S.-licensed satellites have "effective competitive opportunities" in the relevant foreign markets to provide analogous services. <sup>49</sup> Under the Commission's rules, the relevant foreign markets for this test are (i) the country in which the non-U.S.-licensed satellite is licensed; and (ii) the countries in which communications with U.S. earth stations will originate or terminate. <sup>50</sup> To assess compliance with the ECO-Sat test the Commission looks at whether there are *de jure* or *de facto* barriers to entry for U.S. satellite operators. <sup>51</sup>

Specifically, SES WORLD SKIES requests that the Commission authorize the provision of DTH capacity using SES-4: (1) within the U.S., (2) between the U.S. and The Netherlands, (3) between the U.S. and other European Union ("EU") member states, (4) between the U.S. and Mexico, and (5) between the U.S. and Brazil, the Netherlands Antilles, Guatemala, Honduras, Nicaragua, and the overseas territories of the United Kingdom located in the Caribbean

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<sup>&</sup>lt;sup>48</sup> See supra note 26.

<sup>&</sup>lt;sup>49</sup> *See DISCO II*, at ¶¶ 73-92.

<sup>&</sup>lt;sup>50</sup> See 47 C.F.R. § 25.137(a).

<sup>&</sup>lt;sup>51</sup> See DISCO II, at  $\P$  73.

(Bermuda, the British Virgin Islands ("BVI"), and the Cayman Islands). As demonstrated below, all of these countries satisfy the ECO-Sat test.

The Netherlands. The Netherlands passes the ECO-Sat test.<sup>52</sup> There are no *de jure* or *de facto* barriers in The Netherlands to U.S. satellite operators wishing to provide capacity for DTH service. The Netherlands' policy conforms to the EU directive specifying that "Member States shall ensure that any regulatory prohibition or restriction on the offer of space segment capacity to any authorised satellite earth station network operator are abolished." Accordingly, authorizing SES-4 to offer DTH service within the U.S. and between the U.S. and The Netherlands is consistent with *DISCO II*.

Other EU Member States. Similarly, there are no *de jure* or *de facto* barriers in other EU member states to U.S. satellite operators wishing to provide capacity for DTH service. In addition to the Netherlands, the Commission has previously determined that the ECO-Sat test is satisfied with respect to EU member the United Kingdom and its offshore territory Gibraltar<sup>54</sup> and has applied an analysis similar to the ECO-Sat test with respect to EU member Luxembourg.<sup>55</sup> Further individual analyses are not necessary, however, because pursuant to the

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In support of its request to provide Direct Broadcast Satellite ("DBS") service to the U.S. using Netherlands-licensed satellites, Spectrum Five demonstrated that the "only Dutch regulation applicable to the provision of satellite services (including DBS) requires that a license be obtained from the Radiocommunications Agency Netherlands for the use of frequencies for a satellite earth station," and there are "no restrictions regarding the nationality of the applicant for a license." Petition for Declaratory Ruling of Spectrum Five LLC, File Nos. SAT-LOI-20050312-00062/00063, Narrative at 16 (March 12, 2005). Given this undisputed showing, the International Bureau found no evidence "that suggests the existence of market entry barriers to the Netherlands." *In the Matter of Spectrum Five LLC*, 21 FCC Rcd 14023, at ¶ 12 (Int'1 Bur. 2006); *applications for review denied*, 23 FCC Rcd 3252 (2008).

<sup>&</sup>lt;sup>53</sup> Commission Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services, art. 7.1, 2002 O.J. (L 249) 21, 24.

<sup>&</sup>lt;sup>54</sup> See Stamp Grant, Assignment Application of SES Americom, Inc., File No. SAT-ASG-20080609-00120 (Aug. 6, 2008), Attachment at 3.

<sup>&</sup>lt;sup>55</sup> Specifically, the Commission considered competitive issues in connection with provision of DTH services by SES Americom using its U.S.-licensed satellites given the ultimate ownership of SES Americom by a Luxembourg entity. *See In the Matter of SES Americom, Inc.*, 18 FCC Rcd 16589 at ¶¶ 16-17 (Int'l Bur. 2003).

EU directive described above, all EU member states are prohibited from imposing any regulations or restrictions on satellite capacity, including capacity for DTH services.

Accordingly, the ECO-Sat test is satisfied for every EU member state. 56

Mexico. Mexico passes the ECO-Sat test. The U.S. and Mexico have entered into a bilateral agreement pursuant to which Mexico has agreed to permit U.S.-licensed satellites to provide FSS including DTH service to, from, and within Mexico provided that licensing and coordination conditions are met.<sup>57</sup> Accordingly, allowing SES-4 to provide DTH capacity in Mexico is consistent with *DISCO II*.<sup>58</sup>

Brazil, the Netherlands Antilles, Guatemala, Honduras, Nicaragua and the U.K.

Territories in the Caribbean. The Satellite Division has previously found that for DTH services

In that context, the Commission considered whether "a foreign operator could provide services in the United States that a U.S.-owned operator could not provide because it could not obtain authorization to operate in the home market of the foreign operator." *Id.* at ¶ 16. The Commission concluded that "such concerns . . . have not been presented in this case," and that "no competitive concerns [were] presented by SES Global's indirect

ownership in the Applicants as providers of DTH service in the United States." *Id.* at ¶ 17.

The twenty-seven current member states of the EU are: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom. See http://europa.eu/about-eu/member-countries/index en.htm (last visited March 17, 2011).

<sup>&</sup>lt;sup>57</sup> See Protocol Concerning the Transmission and Reception of Signals from Satellites for the Provision of Direct-to-Home Satellite Television Services in the United States of America and the United Mexican States, U.S.-Mex., November 8, 1996 available at http://www.fcc.gov/Bureaus/International/Public\_Notices/1996/da961880.pdf (last visited March 17, 2011).

See DISCO II, at ¶ 143 (there is no need for an inquiry into effective competitive opportunities where a bilateral agreement is in place with respect to the relevant service); see also In the Matters of EchoStar Satellite LLC et al., 21 FCC Rcd 4077, at ¶ 8 n. 20 (Sat. Div. 2006) (in light of U.S.-Mexico bilateral agreement, "no further market access analysis is required" under DISCO II in order to authorize U.S.-licensed earth stations to communicate with satellite operating under Mexican authority for DTH services).

the ECO-Sat test is satisfied with respect to Brazil,<sup>59</sup> the Netherlands Antilles, Guatemala, Honduras, Nicaragua, Bermuda, BVI, and Cayman Islands route markets.<sup>60</sup>

In sum, U.S.-licensed operators have effective competitive opportunities to provide DTH transmission capacity in The Netherlands and other EU member states, Mexico, Brazil, the Netherlands Antilles, Guatemala, Honduras, Nicaragua, and the Caribbean overseas territories of the United Kingdom. Thus, the ECO-Sat test is satisfied for both the home and these route markets for DTH service to, from, and within the United States.

#### IV. Waiver of Performance Bond Requirement

The FCC's rules require that foreign licensees seeking access to the U.S. market post a performance bond for the satellite seeking access.<sup>61</sup> However, construction of the SES-4 satellite is nearly complete.<sup>62</sup> Additionally, as evidenced by publicly available information,<sup>63</sup> launch of the satellite from Baikonur, Kazakhstan onboard a PROTON M BREEZE launch vehicle is expected by the end of September 2011, which is less than five months from the filing of this

<sup>&</sup>lt;sup>59</sup> See Stamp Grant, File No. SAT-MOD-20040628-00124 (Aug. 26, 2004) (modifying the Permitted Space Station List entry for the Brazilian-licensed Amazonas-1 satellite to permit the provision of DTH service to, from, or within the U.S.); Stamp Grant, File Nos. SAT-PPL-20100506-00093 & SAT-APL-20101209-00257 (Dec. 10, 2010) (same with respect to Amazonas-2).

<sup>&</sup>lt;sup>60</sup> See Stamp Grant, Assignment Application of SES Americom, Inc., File No. SAT-ASG-20080609-00120 (Aug. 6, 2008), Attachment at 3.

<sup>&</sup>lt;sup>61</sup> See 47 C.F.R. §§ 25.137(d)(4), 25.165.

<sup>&</sup>lt;sup>62</sup> SES WORLD SKIES announced construction of the satellite in February 2008. *See* http://www.ses.com/ses/siteSections/newsroom/archive/2008/index.php?pressRelease=/pressReleases/archive-by-year/2008/08-02-27/index.php (last visited March 17, 2011).

In the Matter of DIRECTV Enterprises, LLC, 21 FCC Rcd 8028, at ¶ 8 n. 29 (Int'l Bur. 2006) (taking notice of applicable satellite launch date from information available on www.lyngsat.com); see also In the Matter of EchoStar Satellite L.L.C., 21 FCC Rcd 14045, at ¶ 2 n. 8 (Int'l Bur. 2006) (taking notice of technical information available on www.lyngsat.com); In the Matter of Application of EchoStar Communications Corporation et al., 17 FCC Rcd 20559, at ¶ 262 n. 618 (2002) (taking notice of general satellite industry revenue information available on www.lyngsat.com).

Petition.<sup>64</sup> Accordingly, SES WORLD SKIES submits that no bond is necessary and requests waiver of the FCC's bond requirement in the event this Petition is granted prior to the launch of the satellite.<sup>65</sup> Attached as Attachment A is a declaration from Thai Rubin, senior vice president and general counsel of New Skies Satellites B.V., attesting to the expected launch of the satellite by the end of September 2011.

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<sup>&</sup>lt;sup>64</sup> See, e.g., http://www.lyngsat.com/launches/2011.html (last visited March 17, 2011); http://www.ses.com/ses/siteSections/services/satellitefleet/upcoming-launches/index.php (last visited March 17, 2011).

<sup>&</sup>lt;sup>65</sup> See In the Matter of DIRECTV Enterprises, LLC, 21 FCC Rcd 8028, at ¶ 8 (Int'l Bur. 2006) (no bond required if satellite is launched prior to 30 days after license grant); see also Loral Skynet do Brasil, 18 FCC Rcd 26751, at ¶ 14 (Int'l Bur. 2003) (no bond required if satellite launched prior to 30 days after license grant).

## V. CONCLUSION

For the reasons stated above, SES WORLD SKIES respectfully requests that the Commission expeditiously grant access to the U.S. market by SES-4, including for DTH services within the U.S. and between the U.S. and the other countries identified in this Petition.

Respectfully submitted,

NEW SKIES SATELLITES B.V.

By: /s/
Thai E. Rubin
Senior Vice President and General
Counsel

John Hane Tony Lin Pillsbury Winthrop Shaw Pittman LLP 2300 N Street NW Washington, DC 20037 Counsel for New Skies Satellites B.V.

Dated: March 31, 2011

## **ENGINEERING CERTIFICATION**

The undersigned hereby certifies to the Federal Communications Commission as follows:

- 1. I am the technically qualified person responsible for the engineering information contained in the foregoing petition;
- 2. I am familiar with Part 25 of the Commission's rules; and
- 3. I have either prepared or reviewed the engineering information contained in the foregoing petition, and it is complete and accurate to the best of my knowledge and belief.

Signed:	
/s/	
Patrick van Niftrik	_
Senior Manager, Spectrum Development	
March 31, 2011	
Date	

# **Attachment A**

#### **DECLARATION**

I, Thai E. Rubin, hereby declare under penalty of perjury that, to the best of my knowledge, information and belief, the following statements are true and correct:

- 1. I am the Senior Vice President and General Counsel for New Skies Satellites B.V. (d/b/a/ "SES WORLD SKIES").
- 2. SES WORLD SKIES has an authorization from The Netherlands to operate the SES-4 satellite at the nominal 22°W.L. orbital location.
- 3. Construction of the SES-4 satellite is nearly complete and it is currently expected to be launched by the end of September 2011 from Baikonur, Kazakhstan onboard a PROTON M BREEZE launch vehicle.

Executed on March 31, 2011

/s/

Thai E. Rubin Senior Vice President and General Counsel New Skies Satellites B.V.