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

Application of TERRESTAR LICENSE INC., DEBTOR-IN-POSSESSION	File No. SES-MOD Call Sign: E060430
LOSSESSION	

APPLICATION FOR MODIFICATION OF ANCILLARY TERRESTRIAL COMPONENT AUTHORITY

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I. INTRODUCTION AND SUMMARY

TerreStar License Inc., Debtor-in-Possession ("TSL DIP" and collectively with its affiliates and predecessors in interest, "TerreStar") seeks the consent of the Federal Communications Commission ("Commission" or "FCC") for modification of its ancillary terrestrial component ("ATC") authorization, as necessary, to waive certain rules applicable to ATC service to the extent and for the reasons requested herein. Today, TSL DIP and various of its affiliates filed an application with the Commission to transfer certain of TerreStar's FCC authorizations to Gamma Acquisition L.L.C. ("Gamma"), a wholly owned subsidiary of DISH Network Corporation ("DISH" and together with Gamma and the relevant TerreStar entities, the "Applicants") (the "Transfer Application"). Among other things, the Transfer Application also requests waivers of certain requirements, including the integrated service and spare satellite

¹ In a January 13, 2010 order, the Commission granted TerreStar blanket authority to operate ATC base stations and up to two million dual-mode MSS-ATC mobile earth terminals ("METs") on a common carrier basis using its assigned MSS S-band spectrum. *See generally* TerreStar Networks Inc., *Order and Authorization*, 25 FCC Rcd. 228 (2010) ("MSS/ATC Order").

rules, that TerreStar requests herein.² The Transfer Application is both parallel to, and complements, DISH's proposed acquisition of New DBSD Satellite Services G.P., Debtor-in-Possession ("DBSD").³

First, consistent with FCC precedent,⁴ TerreStar requests a waiver of the integrated service requirement to allow TerreStar to offer dual-mode terminals to all customers who want them, but make single-mode terrestrial terminals available to customers who do not need or desire the satellite function. Second, TerreStar requests a waiver of the spare satellite requirement. Third, TerreStar requests that the Commission harmonize certain regulatory requirements applicable to TerreStar and DBSD by extending across the entire 2 GHz MSS allocation various waivers of the FCC's rules previously obtained by DBSD.

II. WAIVER REQUESTS

A. Waiver Requests and Criteria

To increase its flexibility to fully and efficiently utilize 2 GHz MSS spectrum to provide terrestrial mobile broadband while continuing to provide a robust satellite offering, TerreStar requests certain waivers of the ATC rules addressed herein.

² TerreStar is currently in bankruptcy. Pursuant to Section 363 of the United States Bankruptcy Code, TerreStar has entered into a Purchase Agreement, whereby Gamma agreed to purchase substantially all of TerreStar's assets, including the authorization granted in the *MSS/ATC Order*.

³ DBSD and DISH have entered into an investment agreement pursuant to which DISH will acquire all of the issued and outstanding equity of reorganized DBSD upon its emergence from bankruptcy. Upon consummation of the transaction, DSBD will be a wholly owned subsidiary of DISH. *See* Consolidated Application of ICO Global Communications (Holdings) Limited et al. and DISH Network Corporation for Authority to Transfer Control, File Nos. SAT-T/C-20110408-00071, SES-T/C-20110408-00424, SES-T/C-20110408-00425 (filed Apr. 8, 2011) ("DISH-DBSD Application").

⁴ See LightSquared Subsidiary LLC, Request for Modification of its Authority for an Ancillary Terrestrial Component, *Order and Authorization*, 26 FCC Rcd. 566 (2011).

The Commission may waive its rules for good cause shown, particularly where strict compliance with a rule is inconsistent with the public interest when taking "into account considerations of hardship, equity, or more effective implementation of overall policy," especially when deviation on an individual basis does not require "evisceration of a rule by waivers." The Commission's grant of these waivers will enable DISH to make commitments regarding its terrestrial mobile broadband network and service deployments. In support of these waiver requests, TerreStar points to these commitments in the Transfer Application and hereby incorporates these commitments by reference.

The Commission should act here on the National Broadband Plan's recommendation that "[t]he FCC should take actions that will optimize licensee flexibility sufficient to increase terrestrial broadband use of MSS spectrum, while preserving market-wide capability to provide unique mission-critical MSS services." Grant of these waiver requests will better serve the public interest and the goals of the Commission's MSS/ATC policy than would strict application of the ATC rules. TerreStar emphasizes that it is asking for a waiver of the Commission's rules in the individual circumstances of this case, in light of DISH's plan for the entire MSS S-band, the availability of the GENUS™ phone and its future iterations, the unique features of the 2 GHz band and its existing licensees, and DISH's commitment to MSS services. It is not asking for the application of new or different rules for MSS/ATC services. ⁹

⁵ 47 C.F.R. § 1.3; WAIT Radio v. FCC, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

⁶ WAIT Radio, 418 F.2d at 1159.

⁷ See Transfer Application at 48.

⁸ Federal Communications Commission, Connecting America: The National Broadband Plan, Recommendation at 87 (2010) ("National Broadband Plan").

⁹ Compare WAIT Radio, 418 F.2d at 1153 (noting that the Commission may grant a waiver of its rules for good cause shown), with Cities of Anaheim, Riverside, Banning, Colton and Azusa, California v. FERC, 723 F.2d 656, 659 (9th Cir. 1984) (holding that an agency may not use an

B. "Integrated Service" Requirement

TerreStar requests that the Commission waive application of the ATC "integrated service" rule to permit TerreStar and DISH to provide dual-mode terminals to customers who want them, and single-mode terrestrial terminals to customers who do not want the satellite function. Allowing TerreStar and DISH to provide single-mode terrestrial terminals to customers who have no need for satellite functions will achieve significant public benefits, and will do so by better serving the important, underlying policy. TerreStar and DISH are committed to securing the opportunity to deploy a terrestrial broadband network and will provide substantial satellite service – however, relief from the integration requirement is an important component of the plan.

Because DISH now intends to acquire both TerreStar's and DBSD's authorizations, satellites, and facilities, DISH will be able to offer consumers choice by continuing to make available the existing dual-mode GENUSTM phone (or a successor device) to customers who want the satellite function, and also make available single-mode devices (terrestrial only) for other customers. Thus, rather than severely restricting consumers' choice of devices, DISH plans to provide customers with greater choice in devices according to their preferences. Furthermore, TerreStar understands that DISH will take steps to ensure that customers are aware that both satellite and integrated, satellite-terrestrial service options are available to them.

Today, a mobile voice and data provider's ability to attract customers depends in large measure on its ability to provide its customers with the types of devices that best suit their needs. In a world of lighter-and-smaller-is-better, consumers prefer lighter weight handsets with longer battery life. In addition, the requirement to make every device dual-mode severely limits a

adjudication to circumvent the Administrative Procedure Act's rulemaking procedures, by, for example, amending a rule).

provider's ability to enter into arrangements with multiple device and equipment manufacturers, thereby limiting consumer choice and severely impairing the business case economics.

Such a lack of choice compels consumers to shoulder the associated additional costs, while hampering the service's competitiveness by significantly limiting DISH's ability to attract customers. This does not make sense, particularly against the backdrop of increasing consolidation in the commercial mobile radio service arena, and does not further the Commission's goal of expanding the use of MSS/ATC service nationwide. To the contrary, it disserves the Commission's well-established policy in favor of efficient use of the spectrum. Waiver of the integrated service rule in these circumstances will better serve the underlying Commission policy of creating a robust MSS service than would strict adherence to it. As noted above, the flexibility sought will allow DISH to acquire the critical mass of MSS/ATC subscribers necessary to create a viable terrestrial service offering. That mass of subscribers, in turn, will allow DISH to support the integrated network upon which its MSS offering also depends, lessening the per-subscriber cost of maintaining the network. In other words, by helping to ensure the viability of DISH's MSS/ATC service through the provision of flexibility, the Commission will also help ensure a viable and substantial MSS service.

In the National Broadband Plan, the Commission rightly observed that its gating criteria had "made it difficult for MSS providers to deploy ancillary terrestrial networks." This militates for flexible application of the integrated service requirement and favorable consideration of this waiver request, subject to the safeguards described above.

¹⁰ National Broadband Plan at 88.

C. Spare Satellite Requirement

TerreStar also requests a waiver of the Commission's spare satellite "gating" requirement. Under that rule, an MSS/ATC operator must have a spare satellite available on the ground within one year after commencing ATC operations and launch that satellite in the first commercially reasonable launch window following the failure of an MSS satellite. The Commission adopted the spare satellite rule "to ensure that there would be redundancy of satellite service, while at the same time, retaining ATC operations as an 'ancillary' service in the event of launch failures or satellite malfunctions."

A waiver of the spare satellite requirement in this case will not undermine the purpose of the rule. That purpose is to ensure that MSS operators continue investment and innovation in their satellite systems, and that they move quickly to restore service following a satellite failure. The highest risk of such failure occurs during the first year after launch, which covers the risk areas of launch, deployment, and early life failures. The TerreStar-1 satellite has passed that risk period, meets its specifications, remains in good health, and is expected to provide uninterrupted service for the rest of its full design life of 15 years. As a result, the need to launch a replacement satellite before the satellite's end of life is already only a remote possibility. Moreover, given the significant capacity available as a result of potential interoperabilities between TerreStar's T-1 and DBSD's G-1 satellites, it is likely that any capacity shifting or

¹¹ 47 C.F.R. § 25.149(b)(2).

¹² *Id*.

 $^{^{13}}$ Mobile Satellite Ventures Subsidiary LLC, Application for Limited Waiver of On-Ground Spare Satellite Rule, *Memorandum Opinion and Order*, 22 FCC Rcd. 20548, 20549 ¶ 4 (2007) ("*MSV Waiver Order*").

¹⁴ Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands, *Report and Order and Notice of Proposed Rulemaking*, 18 FCC Rcd. 1962, 2006 ¶ 81 (2003).

redeployment that might be needed for business concerns could be accommodated with limited additional support.

As noted above, DISH plans to deploy an MSS/ATC system using the full 40 MHz of MSS spectrum with in-orbit active and spare capacity on TerreStar's T-1 satellite (currently positioned at 111° W.L.) and DBSD's G-1 satellite (currently positioned at 92.85° W.L). As a result, post-transaction, DISH will have two state-of-the-art satellites in orbit and capable of providing MSS service in the S-Band over all 50 states, Puerto Rico, and the U.S. Virgin Islands.

On the other hand, requiring DISH to complete and earmark two satellites as spares – one for each of DBSD's and TerreStar's authorizations – would be to require expenditure of over half a billion dollars and would serve no discernible policy. Worse, strict compliance with the spare satellite requirement would only serve to divert DISH's resources away from developing its hybrid MSS/ATC network. This is an unnecessary and unreasonable expense that would jeopardize the business case for entering the market in the first place. In particular, it would not increase the reliability of the MSS service to be provided and would, in fact, unnecessarily lengthen any potential service outage. Indeed, as the Commission noted in the *MSV Waiver Order*, launch of a spare satellite may take as long as 18 months, ¹⁵ during which time customers would have limited or no service.

This is not a case in which a nascent satellite operator is undertaking its first-ever satellite venture on a shoe-string. Managing a satellite fleet is at the core of DISH's business. DISH has a long history of building, launching, and operating satellites. DISH currently ensures continued operations of a satellite system relied upon by approximately 14 million households in a market

 $^{^{15}}$ Mobile Satellite Ventures Subsidiary LLC, Application for Limited Waiver of On-Ground Spare Satellite Rule, *Memorandum Opinion and Order*, 22 FCC Rcd. 20548, 20550 ¶ 8 (2007) ("*MSV Waiver Order*").

where interruptions of service can be fatal to customer satisfaction. DISH has consistently done so without being subject to a ground spare requirement. This request amounts to no more than allowing DISH the flexibility to do with its MSS satellites what it does on a daily basis with its DBS satellites.

The Commission waived the spare satellite rule in the *MSV Waiver Order* based on a showing that each of the two operational L-band satellites would provide sufficient backup capacity for the other.¹⁶ The Commission concluded that a waiver in that case "will strike an appropriate balance between ensuring continuity of satellite service to customers and minimizing cost burdens on the satellite operator." A waiver in the present circumstances is equally justified, as strict compliance with the rule would not serve the public interest, and the requested waiver more effectively implements the Commission's overall policy.

D. Harmonization of TerreStar and DBSD Regulatory Treatment

TerreStar also requests that the Commission harmonize the ATC service environment applicable to the 2 GHz band by granting certain waivers of the ATC base station and mobile terminal technical requirements, most of which have already been granted to DBSD and requested in similar form by TerreStar in a modification filed on June 27, 2010.¹⁸ Specifically, TerreStar requests the following waivers, all but one of which (the Section 25.252(b)(2) request) were previously requested in the referenced modification request:

¹⁶ *Id.* at 20550-51 ¶¶ 8, 12.

¹⁷ *Id.* 20551 ¶ 12.

¹⁸ See TerreStar Networks Inc., File No. SES-MOD-20100727-00963 (filed July 27, 2010) ("TerreStar Modification Request") (requesting modification of its ATC authority to harmonize waivers with DBSD).

Section	Rule	Waiver Request
25.252(a)(1)	[ATC base stations shall not]	[ATC base stations shall not] Exceed an
	Exceed EIRP of -100.6 dBW/4 kHz	out-of-channel emissions limit at the
	for out-of-channel emissions at the	edge of the MSS licensee's selected
	edge of the MSS licensee's selected	assignment specified by an attenuation
	assignment.	of the transmitter power (P), in watts, by
		a factor of at least 43 + 10 log (P) dB. ¹⁹
25.252(c)(2)	Emissions on frequencies lower than	Emissions on frequencies higher than
	1995 MHz and higher than 2025	2020 MHz shall be attenuated by at least
	MHz shall be attenuated by at least	$43 + 10 \log (P) dB$. Emissions in the
	$70 + 10 \log P$. Emissions in the	band 1995-2000 MHz shall be
	bands 1995-2000 MHz and 2020-	attenuated by at least a value as
	2025 MHz shall be attenuated by at	determined by linear interpolation from
	least a value as determined by linear	70 + 10 log (P) dB at 1995 MHz, to 43 +
	interpolation from 70 + 10 log P at	10 log (P) dB to the MSS band edge at
	1995 MHz or 2025 MHz, to 43 + 10	2000 MHz.
	log P dB at the nearest MSS band	
	edge at 2000 MHz or 2020 MHz	
	respectively.	

¹⁹ TerreStar requests relief only to the same extent as the Commission chose to grant relief to DBSD – namely, only outside 133 km from a U.S. government earth station. *See* Letter from Adam Krinsky, Counsel to TerreStar Networks, Inc., Debtor-in-Possession, to Marlene H. Dortch, Secretary, FCC, *filed in* SES-MOD-20100727-00963 (July 18, 2011).

25.252(c)(4)	Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater.	Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e., 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at
25.252(a)(2)	[ATC base stations shall not] Exceed a peak EIRP of 27 dBW in 1.23 MHz.	[ATC base stations shall not] Exceed an EIRP of 32 dBW/MHz.
25.252(a)(3)	[ATC base stations shall not] Exceed an EIRP toward the physical horizon (not to include man-made structures) of 25.5 dBW in 1.23 MHz.	Waive rule. DISH's unification of the band eliminates concern over inter-party operational interference.
25.252(a)(5)	[ATC base stations shall not] Exceed an aggregate power flux density of -51.8 dBW/m2 in a 1.23 MHz bandwidth at all airport runways and aircraft stand areas, including takeoff and landing paths and all ATC base station antennas shall have an overhead gain suppression according to [Rule 25.252(a)(8)].	Waive rule. DISH's unification of the band eliminates concern over inter-party operational interference.

25.252(a)(8)	[ATC base stations shall not] Use ATC base station antennas that have a gain greater than 17 dBi and must have an overhead gain suppression according to [Table 1.]	Waive rule. DISH's unification of the band eliminates concern over inter-party operational interference.
25.252(b)(2)	[ATC mobile terminals shall] Limit out-of-channel emissions at the edge of a MSS licensee's selected assignment to an EIRP density of -67 dBW/4 kHz.	[ATC mobile terminals shall] Limit out- of-channel emissions at the edge of a MSS licensee's selected assignment to a limit specified by an attenuation of the transmitter power (P), in watts, by a factor of at least 43 + 10 log(P) dB.

There is good cause for granting the requested waivers here. Indeed, these waivers are identical to those requested by DBSD and subsequently approved by the Commission on January 15, 2009, 20 and TerreStar agrees to abide by the same limitations, restrictions, and conditions applicable to DBSD pursuant to its waiver, including that certain of these waivers are potentially subject to the Commission's adoption of service rules in the adjacent AWS bands. As a result, the Commission's rationale for granting those identical waivers applies with equal force here.

As described in TerreStar's previous modification request, the requested waivers of the base station EIRP spectral density, peak EIRP limit, EIRP toward the horizon, power flux density at runways, and overhead rules – laid out in Section 25.252(a)(1)-(3), (a)(5), and (a)(8) – create no interference concerns, largely because they were created to protect certain 2 GHz MSS operators from receiving interference from other operators.²¹ Through this application, however, DISH now intends to unify the band by combining DBSD's and TerreStar's 2 GHz MSS

²⁰ See New ICO Satellite Service G.P., Application for Blanket Authority to Operate Ancillary Terrestrial Component Base Stations and Dual-Mode MSS-ATC Mobile Terminals in the 2 GHz MSS Bands, *Order and Authorization*, 24 FCC Rcd. 171, 185-89, 192-96 ¶¶ 41-49, 58-64, 69 (2009) ("DBSD ATC Order").

²¹ TerreStar Modification Request at 7-11. With respect to Section 25.252(a)(1), TerreStar recognizes the interests of U.S. Government agencies in protecting government earth stations from interference, and TerreStar is working with the National Telecommunications and Information Administration and related federal agencies on an operator-to-operator agreement.

holdings. This eliminates any inter-party operational interference concerns that may have otherwise arisen. As a result, the requested waivers will relieve DISH and TerreStar of these restrictions without threat of interference concerns.

As also explained in TerreStar's previous request for waiver of the mobile terminal attenuation requirements, a waiver of Section 25.252(c)(2) will not create significant risk of interference above the uplink band edge at 2020 MHz.²² The Commission has already granted DBSD this relief, and given that TerreStar's spectrum is some 10 MHz further from the uplink band edge at 2020 MHz, it will be, if anything, even easier to design the network to ensure that the requested limits can be met from this portion of the S-band.

Further, the requested waiver of the emission measurement requirement found in Section 25.252(c)(4) merely asks for an alternative measurement,²³ which is currently used for PCS and AWS-1 terminals.²⁴ The Commission previously found that use of this alternative measurement would "have no adverse consequences" and constituted "the most appropriate way of measuring out-of-band emissions into adjacent spectrum." Nothing has occurred since the Commission granted DBSD's waiver to alter this determination.

Finally, TerreStar adds one additional waiver request beyond those in its previous modification application: waiver of the limit on out-of-channel emissions under Section

²² TerreStar Modification Request at 12-13.

Although the Commission has adopted an OOBE limit for ATC base stations under Section 25.252(a)(1), the measurement technique to be used to measure compliance with the rule is not specifically enumerated. TerreStar intends to demonstrate conformance with the base station limit using the same emission measurement technique that the Commission has previously approved to measure compliance with the equivalent requirement for handsets in the band. *DBSD ATC Order*, 24 FCC Rcd. at 195 ¶ 64 (citing 47 C.F.R. §§ 24.238(b), 27.53(g)(1)). TerreStar requests that the Commission clarify that this measurement procedure is acceptable.

²⁴ TerreStar Modification Request at 13.

²⁵ DBSD ATC Order, 24 FCC Rcd. at 195 ¶ 64.

25.252(b)(2). As noted above, DISH plans to unify the band, thereby eliminating any concern over inter-party operational interference. Further, as the Commission noted in its grant of DBSD's waiver request, "attenuating transmitter power at the edge of its terminal transmission band by at least (43 + 10*log(P) dB)[,] while limiting in-band power spectral density as required by Section 25.252(b)(1)," effectively limits the power spectral density of the band-edge "to essentially the same extent" as the previous -67 dBW/4 kHz limit. The Commission has already granted the identical waiver to DBSD for similar reasons, and its rationale remains sound. The commission has sound. The commission has already granted the identical waiver to DBSD for similar reasons, and its rationale remains sound.

Just as when the Commission granted them to DBSD, grant of these requested waivers remains in the public interest. Moreover, grant of these waivers will now produce added benefit by allowing DISH to better and more efficiently use the ATC authority granted to DBSD and TerreStar in harmony. And as stated in TerreStar's previous request, TerreStar agrees to accept the same conditions the Commission attached to the grant of these waivers to DBSD.

III. PROCEDURAL REQUESTS

A. Permit-But-Disclose Status

TerreStar asks that the Commission designate the ex parte status of this proceeding as "permit but disclose" under the Commission's rules. Doing so will facilitate the development of a complete record and is consistent with Commission decisions in similar proceedings.

B. Consolidation Treatment with Transfer Application

TerreStar requests that the Commission consider this modification request jointly with the Transfer Application. Because grant of the Transfer Application and consummation of the transaction proposed therein will result in the transfer of this authorization to Gamma and will

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 $^{^{26}}$ *Id.* at 194 ¶ 62.

extinguish the interest of TSL DIP in the authorization, the certifications on the FCC Form 312 accompanying this exhibit, Questions 20 to 41 (including Attachments 1 and 2 hereto responding to Questions 36 and 40, respectively) were completed with respect to Gamma. Therefore, the response on the instant From 312 to these Questions are the same as the responses provided on the FCC Form 312s filed with the Commission as part of the Transfer Application.

IV. CONCLUSION

Grant of the requested modification will enhance TerreStar's ability to provide a robust and viable MSS/ATC service nationwide. As a result and as further set forth herein, the grant of this application is in the public interest.

Tom Davidson Akin Gump Strauss Hauer & Feld LLP 1333 New Hampshire Avenue, NW Washington, DC 20036 (202) 887-4348 Counsel for TerreStar License Inc., Debtorin-Possession Respectfully submitted,

Douglas Brandon General Counsel and Secretary **TerreStar License Inc., Debtor-in-Possession** 12010 Sunset Hills Road Reston, VA 20190

(703) 483-7800

August 22, 2011

²⁷ *Id*.

ATTACHMENT 1

RESPONSE TO FCC FORM 312, QUESTION 36

This attachment provides details as to any "FCC station authorization or license revoked or . . . any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission," as requested by FCC Form 312, Question 36, for DISH Network Corporation (with its affiliates DISH Operating L.L.C. (f/k/a EchoStar Satellite Operating L.L.C.) and Gamma Acquisition L.L.C., "DISH").

In a *Memorandum Opinion and Order* released May 16, 2002, the Satellite Division of the International Bureau cancelled two conditional construction permits held by affiliates of the applicant DISH for 22 channels at the 175° W.L. orbital location.¹

By an *Order* released July 1, 2002, the International Bureau cancelled DISH's license for a Ka-band satellite system and dismissed a related modification application filed by DISH.² On November 8, 2002, the International Bureau reinstated DISH's license for a Ka-band system as well as the related modification application.³

In a *Memorandum Opinion and Order* released April 29, 2004, the International Bureau denied, in part, four applications filed by DISH to operate GSO FSS satellites using the Ka and/or Extended Ku-bands at the 83° W.L., 105° W.L., 113° W.L., and 121° W.L. orbital locations. DISH's petition for reconsideration of this decision was denied.

In a *Memorandum Opinion and Order* released August 3, 2004, the International Bureau declared null and void the space station authorization held by VisionStar, a DISH affiliate, for use of the Ka-band at the 113° W.L. orbital location.⁶

¹ See EchoStar Satellite Corporation, Directsat Corporation, Direct Broadcasting Satellite Corporation, Consolidated Request for Additional Time to Commence Operation, *Memorandum Opinion and Order*, DA 02-1164 (rel. May 16, 2002).

² See EchoStar Satellite Corporation, Application for Authority to Construct, Launch, and Operate a Ka-band Satellite System in the Fixed-Satellite Service, *Memorandum Opinion and Order*, DA 02-1534 (rel. July 1, 2002).

³ See EchoStar Satellite Corporation, Application for Authority to Construct, Launch, and Operate a Ka-band Satellite System in the Fixed-Satellite Service, *Memorandum Opinion and Order*, DA 02-3085 (rel. Nov. 8, 2002).

⁴ See EchoStar Satellite LLC, Applications for Authority to Construct, Launch, and Operate Geostationary Satellites in the Fixed-Satellite Service Using the Ka and/or Extended Ku Bands at the 83° W.L., 105° W.L., 113° W.L., and 121° W.L. orbital locations, *Memorandum Opinion and Order*, DA 04-1167 (rel. Apr. 29, 2004).

⁵ See EchoStar Satellite LLC, Petition for Reconsideration, Applications for Authority to Construct, Launch, and Operate Geostationary Satellites in the Fixed-Satellite Service Using the Ka and/or Extended Ku Bands at the 83° W.L., 105° W.L., 113° W.L., and 121° W.L. orbital locations, *Memorandum Opinion and Order*, DA 06-865 (rel. Apr. 14, 2006).

⁶ See VisionStar, Inc., Application for Modification of Authority to Construct, Launch and Operate a Ka-Band Satellite System in the Fixed Satellite Service, *Memorandum Opinion and Order*, DA 04-2449 (rel. Aug. 3, 2004).

By letter dated May 19, 2005, the Satellite Division of the International Bureau denied DISH's applications for a Fleet Management Modification and for a Special Temporary Authority to move the EchoStar 4 satellite to 61.5° W.L., pending the Commission's consideration of another DISH request to move the satellite to 77° W.L., on the grounds that the purpose of the proposed fleet management modification was not consistent with the purposes of the Commission's rules and that there were no extraordinary circumstances for the grant of temporary authority.⁷

In a *Memorandum Opinion and Order* released June 3, 2005, the International Bureau denied DISH's application for a Special Temporary Authority to move the EchoStar 4 satellite to 77° W.L. on the grounds that DISH had failed to establish extraordinary circumstances for the grant of such authority.⁸ However, the International Bureau later granted partial reconsideration of this order and then granted DISH's request to move the satellite to 77° W.L. where it would operate pursuant to Mexican authority.⁹

⁷ See Letter from Thomas S. Tycz, Chief, Satellite Division, International Bureau, FCC to Pantelis Michalopoulos, Counsel to EchoStar Satellite L.L.C., DA 05-1405 (May 19, 2005).

⁸ See EchoStar Satellite L.L.C., Application for Special Temporary Authority to Conduct Telemetry, Tracking and Command Operations During the Relocation of EchoStar 4 to the 77° W.L. Orbital Location, *Memorandum Opinion and Order*, DA 05-1581 (rel. Jun. 3, 2005).

⁹ See EchoStar Satellite L.L.C., Application for Special Temporary Authority to Conduct Telemetry, Tracking and Command Operations During the Relocation of EchoStar 4 to the 77° W.L. Orbital Location, *Order on Reconsideration*, DA 05-2067 (rel. Jul. 25, 2005); EchoStar Satellite L.L.C., Application for Special Temporary Authority to Conduct Telemetry, Tracking and Command Operations During the Relocation of EchoStar 4 to the 77° W.L. Orbital Location, *Order and Authorization*, DA 06-868 (rel. Apr. 18, 2006).

ATTACHMENT 2

RESPONSE TO FCC FORM 312, QUESTION 40, AND SCHEDULE A, QUESTION A20

This attachment provides details as to the ownership and corporate structure of Gamma Acquisition L.L.C. ("Gamma") and its parent, DISH Network Corporation ("DISH").

OWNERSHIP OF DISH AND GAMMA

Gamma is a direct wholly owned subsidiary of DISH. DISH is a publicly traded Nevada corporation. The stockholders owning of record and/or voting 10 percent or more of the voting stock of DISH include:

Ownership Interest	Citizenship	Approx. Equity Interest ¹	Approx. Voting Interest ¹
Charles W. Ergen ² Chairman DISH Network Corporation 9601 South Meridian Blvd. Englewood, CO 80112	USA	53.3%	90.4%
The Goldman Sachs Group, Inc. ³ 200 West Street New York, NY 10282	USA	10.5%	0.85%

¹ As of July 15, 2011.

² Includes both Class A common stock and Class B common stock ownership. Class B common stock is owned through several trusts. Mr. Ergen is deemed to own beneficially all of the Class A Shares owned by his spouse, Cantey M. Ergen. Mr. Ergen's beneficial ownership includes: (i) 478,302 Class A Shares; (ii) 19,026 Class A Shares held in the Corporation's 401(k) Employee Savings Plan (the "401(k) Plan"); (iii) the right to acquire 1,415,000 Class A Shares within 60 days upon the exercise of employee stock options; (iv) 235 Class A Shares held by Mr. Ergen's spouse; (v) 1,466 Class A Shares held in the 401(k) Plan by Mrs. Ergen; (vi) 20,130 Class A Shares held as custodian for Mr. Ergen's children; (vii) 27,000 Class A Shares held by a charitable foundation for which Mr. Ergen is an officer and (viii) 234,190,057 Class A Shares issuable upon conversion of Mr. Ergen's Class B Shares. Mr. Ergen has sole voting and dispositive power with respect to 149,183,340 shares. Mr. Ergen's beneficial ownership of Class A Shares excludes 4,245,151 Class A Shares issuable upon conversion of Class B Shares held by certain trusts established by Mr. Ergen for the benefit of his family.

³ According to the Form 13F filed by The Goldman Sachs Group, Inc. (along with its affiliates, "Goldman") with the SEC on August 15, 2011, Goldman held in aggregate 21,821,878 Class A Shares as of June 30, 2011 (the 13F reporting date).

CORPORATE OFFICERS AND DIRECTORS⁴

DISH Network Corporation

Executive Officers:

Joseph P. Clayton President and Chief Executive Officer

Thomas A. Cullen

Bernard L. Han

Robert E. Olson

R. Stanton Dodge

W. Erik Carlson

James DeFranco

Executive Vice President, Corporate Development

Executive Vice President and Chief Operating Officer

Executive Vice President and Chief Financial Officer

Executive Vice President, General Counsel and Secretary

Executive Vice President, DNS and Service Operations

Executive Vice President and Special Advisor to CEO

Michael Kelly President, Blockbuster L.L.C.

Roger Lynch Executive Vice President, Advanced Technologies

Stephen Wood Executive Vice President, Human Resources

Board of Directors:

Charles W. Ergen Chairman

Joseph P. Clayton
Carl E. Vogel
James DeFranco
David K. Moskowitz
Cantey M. Ergen
Steven R. Goodbarn
Gary S. Howard
Tom A. Ortolf

Gamma Acquisition L.L.C.

Executive Officers:

Charles W. Ergen Chairman

R. Stanton Dodge Executive Vice President and General Counsel

James DeFranco Executive Vice President

⁴ The address for all officers and directors of DISH Network Corporation and DISH Operating L.L.C. is 9601 South Meridian Blvd., Englewood, CO 80112.