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

Application of **TERRESTAR NETWORKS INC., DEBTOR-IN-POSSESSION; AND TERRESTAR LICENSE INC., DEBTOR-IN-POSSESSION** and **DISH NETWORK CORPORATION AND GAMMA ACQUISITION L.L.C.**	IB Docket No. _____ File Nos. _____ Call Signs: S2633; E060430; E070098; E090061; ITC-214-20100513-00194; and ITC-214-20100513-00195.

CONSOLIDATED APPLICATION FOR TRANSFER OF AUTHORIZATIONS

August 22, 2011

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CONSOLIDATED APPLICATION FOR TRANSFER OF AUTHORIZATIONS

I. INTRODUCTION AND SUMMARY

The Applicants seek the consent of the Federal Communications Commission ("Commission" or "FCC") to the transfer of the authorizations held by TerreStar License Inc., Debtor-in-Possession ("TSL DIP"), a wholly owned, direct subsidiary of TerreStar Networks Inc., Debtor-in-Possession ("TSN DIP"), to Gamma Acquisition L.L.C. ("Gamma"), a wholly owned, direct subsidiary of DISH Network Corporation ("DISH").[1] The proposed transaction is

[1] The Applicants are TSL DIP, TSN DIP, Gamma, and DISH. TSL DIP and TSN DIP are referred to collectively herein as "TerreStar" or the "TerreStar Parties." TerreStar Corporation, Debtor-in-Possession, the indirect parent of TSN DIP, is referred to herein as "TSC DIP." TerreStar License Inc., TerreStar Networks Inc., and TerreStar Corporation are referred to herein as TSL, TSN, and TSC, respectively, when referencing the entities prior to their filing bankruptcy petitions. When referencing TSL, TSN, and TSC after their emergence from bankruptcy, they are referred to herein as New TSL, New TSN, and New TSC.

both parallel to, and complements, DISH's proposed acquisition of New DBSD Satellite Services G.P., Debtor-in-Possession ("DBSD").[2]

TSL DIP and TSN DIP currently are in bankruptcy. The proposed transaction is a sale of substantially all of the assets of TSL DIP, TSN DIP, and certain of their affiliates (collectively, the "TerreStar Debtors")[3] pursuant to Section 363 of the United States Bankruptcy Code (the "Bankruptcy Code"). The sale was subject to the approval of the United States Bankruptcy Court for the Southern District of New York (the "Bankruptcy Court"). Specifically, on June 14, 2011, DISH, Gamma, and the TerreStar Debtors entered into a Purchase Agreement (the "Agreement"), whereby Gamma agreed to purchase substantially all of the TerreStar Debtors' assets, including TSL DIP's authorizations and related satellite and earth station facilities.[4] The Agreement resulted from an auction process that was open to any entity interested in placing a bid on the TerreStar Debtors' assets in accordance with certain auction and sale procedures approved by the Bankruptcy Court. The sale order approving the Agreement was entered by the

[2] 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").

[3] The TerreStar Debtors are TSN DIP, TSL DIP, TerreStar National Services, Inc., TerreStar Networks Holdings (Canada) Inc., TerreStar Networks (Canada) Inc., and 0887729 B.C. Ltd.

[4] On June 22, 2011, the Bankruptcy Court approved the TerreStar Debtors' entry into the Agreement, subject to the TerreStar Debtors' solicitation of higher and better offers for their assets through an auction conducted in accordance with Bankruptcy Court approved bid procedures. *TerreStar Networks Inc*., Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. June 22, 2010) [Docket No. 645] (Order (I) Authorizing the Debtors to Enter Into the Stalking Horse Agreement and (II) Approving the Bid Procedures and Bid Protections in Connection Therewith).

Bankruptcy Court on July 7, 2011, and became final and non-appealable on July 21, 2011.[5] The transaction proposed in this application ("Application") is intended to effectuate the Agreement.

Together, the proposed transactions will allow DISH to launch a hybrid satellite and terrestrial mobile and fixed broadband network ("Mobile-Satellite Service/Ancillary Terrestrial Component" or "MSS/ATC") using 40 MHz of 2 GHz Mobile-Satellite Service ("MSS") spectrum to provide American consumers with greater choice for mobile broadband services.

This transaction is a case of the whole being greater than the sum of the parts:

- ***Emerging from Bankruptcy.*** This transaction and the DBSD transaction will allow the authorizations and assets of the TerreStar Parties and DBSD, respectively, to be acquired out of bankruptcy by a vibrant new owner, DISH, a Fortune 200 company with deep-rooted experience in building a business from start-up to an award-winning, nationwide service with approximately 14 million subscribers.

- ***Ushering in Competition.*** By bringing together the two MSS S-Band assignments, DISH will be better able to meet the expansive bandwidth requirements of Internet access and other broadband services, and could offer at least a partial competitive substitute for services offered by Commercial Mobile Radio Service ("CMRS") carriers on a nationwide basis.

- ***Optimizing Underutilized Spectrum.*** At a time of exponential growth in the demand for mobile broadband services and a looming spectrum crunch, DISH will put underutilized 2 GHz MSS spectrum to use. The transactions will bring new investment to mobile broadband and advance the National Broadband Plan's call to "accelerate terrestrial deployment" in MSS spectrum while continuing to ensure the availability of a robust MSS offering. At the same time, DISH's plan will not raise the technical issues that have hampered the use of the MSS L-band, such as the interleaving of the operators' assignments and the severe interference claimed by systems operating in adjacent spectrum.

- ***Enabling Efficient LTE Deployment.*** By bringing together these two 2 GHz MSS providers, DISH will be better positioned to meet rising demand for broadband services, relying on the forthcoming LTE Advanced standard to bring the most

[5] *See TerreStar Networks Inc*., Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. July 7, 2011) [Docket No. 668] (Order (A) Approving Asset Purchase Agreement and Authorizing the Sale of Assets of Debtor Outside the Ordinary Course Of Business; (B) Authorizing the Sale of Assets Free and Clear of All Liens, Claims, Interests and Encumbrances; (C) Authorizing the Assumption and Sale and Assignment of Certain Executory Contracts and Unexpired Leases; and (D) Granting Related Relief).

spectrum efficient technology to market and leapfrogging the technologies currently in use.

- ***Capitalizing on DISH's Existing Services and Network.*** As a result of its experience in the Multichannel Video Programming Distributor ("MVPD") business, DISH has the resources, relationships, and experience to deploy an advanced MSS/ATC network in the S-Band that can potentially provide American consumers with greater choice of broadband services. DISH is also poised to take advantage of its nationwide "bricks-and-mortar" network of sales, support, installation, customer service, and maintenance infrastructure to facilitate the deployment of a new service.

- ***No Adverse Competitive Effects***. Neither transaction will adversely affect competition, as the transactions will not reduce the number of participants in any relevant market; neither DBSD nor DISH provides any voice or data MSS or MSS/ATC service, and TerreStar provides only a nascent MSS service.

With this Application,[6] the Applicants also request action by the Commission to increase DISH's flexibility to use 2 GHz spectrum to deliver next-generation broadband services.[7] If the requested flexibility is granted, DISH is prepared to make certain commitments regarding build out and service as discussed in Section IV.

First, the Applicants request a waiver of the integrated service requirement to allow DISH to offer dual-mode terminals to all customers who want them, but make single-mode terrestrial terminals available to customers who do not require the satellite function. As the National Broadband Plan observed, the gating criteria have made it difficult to achieve the Commission's goals of enabling MSS/ATC operators to make more efficient use of their assigned spectrum – a difficulty that calls for flexible application of these criteria.[8] There is

[6] The Applicants are filing contemporaneously a request to modify TerreStar's existing ATC authorization to reflect the waiver authority requested below. The Applicants request that the FCC process and act on both requests concurrently.

[7] Today, DISH and DBSD are also amending their pending applications in File Nos. SES-T/C-20110408-00424, SES-T/C-20110408-00425, and SAT-T/C-20110408-00071 to request the corresponding relief from the Commission, as well as a request to modify DBSD's existing ATC authorization to reflect the requested waiver authority.

[8] Federal Communications Commission, Connecting America: The National Broadband Plan, Recommendation at 87-88 (2010) ("National Broadband Plan").

good cause for relief here – the waiver will optimize the public interest benefits and economic efficiencies that can be generated from use of the MSS S-band and increase the likelihood that the service can evolve into a competitive mobile broadband service. At the same time, the proposed plan will ensure the viability of the service's satellite component. The ability to match customer equipment to the customers' needs will result in significant net economic benefits to customers.

Second, the Applicants request a waiver of the spare satellite requirement, as DISH will have at its disposal in-orbit capacity that can be marshaled in case of a catastrophic failure, whereas maintaining this requirement would unnecessarily drain resources that are better utilized to build a competitive service.

Third, the Applicants request that the Commission harmonize the regime 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.[9] These actions will enable DISH to make more efficient and consistent use of that spectrum to support next-generation mobile broadband services.

[9] *See* TerreStar Networks Inc., File No. SES-MOD-20100727-00963 (filed July 27, 2010) (requesting modification of its ATC authority to harmonize waivers with DBSD); *see also* 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 (2009) ("*DBSD ATC Order*") (granting certain waivers to DBSD).

II. THE PARTIES AND THE TRANSACTION

A. Description of the Parties

1. The DISH Parties

a. DISH

DISH and EchoStar Corporation ("EchoStar")[10] have a proven record of technological innovation, business acumen, and superior customer service in the Direct Broadcast Satellite ("DBS") industry. Over the past several decades, they have demonstrated in the video delivery market their ability to utilize their engineering expertise to launch a satellite service from scratch, grow it to approximately 14 million subscribing households, and in turn provide effective competition against the dominant MVPD incumbents.

DISH's roots reach back more than 30 years when its Chairman, Charles W. Ergen, first entered the satellite television business as a distributor of C-band television satellite systems. DISH's predecessor-in-interest received its first DBS construction permit in 1989. Of the more than a dozen entities that obtained such permits, only DISH and one other company have succeeded. DISH launched its first satellite, EchoStar 1, on December 28, 1995, and began providing service in 1996. Many analysts questioned DISH's ability to reach the 1 million household milestone, yet it vaulted past 1 million subscribers in 1997 and today serves approximately 14 million subscribers.

DISH is now a publicly traded Fortune 200 company and consists of the entities that made up the subscription television business of the former EchoStar Communications

[10] On January 1, 2008, DISH completed the distribution of its technology and set-top box business and certain infrastructure assets (the "Spin-off") into a separate publicly traded company, EchoStar. DISH and EchoStar operate as separate publicly-traded companies, and neither entity has any ownership interest in the other. However, a substantial majority of the voting power of both companies is owned beneficially by Charles W. Ergen, DISH's and EchoStar's Chairman, or by certain trusts established by Mr. Ergen for the benefit of his family.

Corporation,[11] founded in 1980 by Mr. Ergen, Cantey M. Ergen, and James DeFranco. Last year, DISH reported over $12.6 billion in revenue and more than $9.6 billion in total assets. DISH employs over 35,000 people in the United States.

Satellite Infrastructure, Services. From its 13 owned or leased geostationary satellites,[12] DISH provides extensive entertainment programming, including more than 280 basic video channels, 60 Sirius Satellite Radio music channels, 30 premium movie channels, 35 regional and specialty sports channels, 2,800 local channels, 250 Latino and international channels, and 55 channels of pay-per-view content. DISH is the only satellite distributor to retransmit local-into-local television stations in all 210 of the nation's markets, and currently offers High Definition ("HD") local channels in more than 160 markets. In addition, DISH offers 215 national HD channels, the single largest HD offering by any MVPD in the nation.

To control its satellites and uplink content to them, DISH uses two principal uplink facilities, owned by EchoStar and located in Cheyenne, Wyoming and Gilbert, Arizona. DISH also uses five regional uplink facilities, also owned and operated by EchoStar, that allow it to maximize the use of the spot-beam capabilities of certain owned and leased satellites. Programming content is delivered to these facilities by fiber or satellite, where it is then processed, compressed, encrypted, and then uplinked to satellites for delivery to consumers. DISH also has its own local receive facilities in most of the nation's markets, established to

[11] In connection with the Spin-off, DISH changed its name to "DISH Network Corporation" from "EchoStar Communications Corporation" to reflect DISH's decision to focus on its direct broadcast satellite subscription television service.

[12] DISH owns six satellites: EchoStar I, EchoStar VII, EchoStar X, EchoStar, XI, EchoStar XIV, and EchoStar XV. It leases capacity on seven additional satellites, including five leases with EchoStar – EchoStar VI, EchoStar VIII, EchoStar IX, EchoStar XII, and Nimiq 5 – and two from other third parties – Anik F3 and Ciel II. DISH has also leased capacity on two more satellites – QuetzSat-1 and EchoStar XVI – due to be launched later this year and next year, respectively.

collect local television stations' signals, which are then sent to its aforementioned uplink facilities via fiber optic networks.

DISH has also moved to satisfy burgeoning demand for online content and marry online distribution to its "linear" distribution service. DISHOnline.com, for example, gives DISH subscribers the ability to watch television programs, movies, and clips online at no additional charge with their paid subscription and compatible equipment. DISHOnline.com offers more than 150,000 movies, television shows, clips, and trailers. DISH's primary goal is to be the best at delivering video, anytime, anywhere. EchoStar's Slingbox with its "placeshifting" technology is another natural fit for that goal, complementing the service that DISH provides its subscribers by empowering them to access their programming wherever they are via an encrypted Internet connection. Through its recent acquisition of most of the assets of Blockbuster Inc. ("Blockbuster"), DISH has augmented its TV and streaming offerings with additional content and delivery methods, including more than 100,000 movies, TV shows, and games available via digital delivery as well as through the mail; new titles available 28 days before Netflix or Redbox; with the added benefit of instant exchanges at participating neighborhood Blockbuster stores.

***Engineering Experience*.** DISH's extensive engineering experience will facilitate the melding of satellite and terrestrial wireless capabilities into a compelling consumer service. DISH and EchoStar are responsible for numerous breakthroughs in satellite and wireless technology: the first to develop a UHF remote control; the first to offer a satellite receiver for less than $200; the first to offer an integrated receiver descrambler for C-band satellite TV; the first to offer satellite television receivers with built-in digital video recorders ("DVR"); the first to offer HD programming in 1080p; the first to offer a multi-room HD and DVR satellite

receiver; and more. Currently, DISH's wholly owned subsidiary, Manifest Wireless LLC ("Manifest"), is conducting testing in Atlanta, Georgia on technology to utilize Manifest's 700 MHz licenses, as well as on the technology for using the 2 GHz spectrum at issue in this Application.

Nationwide Customer-Oriented Infrastructure. DISH's existing nationwide customer-interfacing infrastructure is also directly relevant to ensuring the highest and best use of the 2 GHz frequencies covered by this Application. DISH uses twelve internally operated or outsourced customer-service centers to handle calls from prospective and existing customers – including call centers in Arizona, Colorado, New Jersey, New York, Ohio, Oklahoma, Texas, Virginia, and West Virginia. DISH also operates four service centers in Colorado, South Carolina, and Texas, and three distribution centers in California, Colorado, and Georgia.

To sell its service, install its equipment, and ensure customer satisfaction, DISH has built and manages a network that would be difficult for any new service provider to replicate. DISH has developed partnerships with thousands of independent third party retailers, local and regional consumer electronics stores, nationwide retailers, and telecommunications companies. New customers receive high quality installation service by one of over 5,000 installers employed by DISH and another 7,500 contractors, located nationwide, while existing customers receive support from maintenance and repair centers located across the nation. DISH's Blockbuster acquisition has further enhanced DISH's ability to reach consumers through 1,500 bricks-and-mortar retail stores spread across the country.

These investments have benefited consumers and ushered in effective competition in the subscription television market. DISH is known as the value leader among all MVPDs. The company has a reputation for keeping internal costs low in order to pass savings on to

subscribers. DISH's single-minded focus on continually improving the customer experience has consistently earned it accolades from customer surveys.

EchoStar. As discussed above, EchoStar was "spun off" from DISH on January 1, 2008. EchoStar continues to provide DISH with considerable technical expertise and facilities, both in satellite operations and the design of hardware and service solutions for DISH. EchoStar is the sole supplier of digital set-top boxes to DISH, is a key provider of engineering services to DISH, and is a major provider of core satellite capacity for DISH's DBS service. EchoStar also designs, develops, and distributes digital set-top boxes and related products, including its Slingbox "placeshifting" technology. It provides digital broadcast operations, including satellite uplinking/downlinking, transmission services, signal processing, conditional access management, and other services. EchoStar employs some 1,800 engineers, holds 76 patents, and has approximately 1,100 patent applications on file. Moreover, EchoStar recently acquired Hughes Communications, Inc. ("Hughes"), a leading provider of fixed satellite broadband and network management solutions to the consumer and business markets.[13] That acquisition will enable EchoStar to improve the effectiveness and availability of fixed satellite broadband nationwide.

b. Gamma

Gamma is a limited liability company and a wholly owned subsidiary of DISH that recently was formed for the purpose of acquiring the assets covered by the Agreement.

[13] BRH Holdings GP, Ltd., Transferor, and EchoStar Corporation, Transferee; Applications for Consent to Transfer Control of Hughes Communications, Inc., Hughes Network Systems, LLC and HNS License Sub, LLC, *Order*, 26 FCC Rcd. 7976 (2011).

2. The TerreStar Parties

a. TerreStar Authorization Holders

TSL DIP[14] holds a letter of intent ("LOI") authorization, originally granted in 2001 to TSL DIP's predecessor, TMI Communications and Company, Limited Partnership ("TMI"), to provide MSS in the United States on a non-common carrier basis using spectrum in the 2 GHz band.[15] In addition, in January 2010, the Commission granted TSN 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 MSS spectrum assigned to TSL.[16]

Overcoming recurrent challenges in raising the capital required to deploy its MSS network, TSN, TSL, and their affiliates have achieved several significant regulatory milestones

[14] TSL DIP is a direct and wholly owned subsidiary of TSN DIP. TSC DIP, in turn, through its wholly owned subsidiary, Motient Ventures Holding, Inc., holds an indirect 89.3 percent controlling voting interest in TSN DIP.

[15] *See* TMI Commc'ns and Co., *Order*, 16 FCC Rcd. 13808 (2001) (issuing TMI an LOI to use 2 GHz spectrum for the operation of a Canadian-licensed satellite), *affirmed*, *Memorandum Opinion and Order*, 18 FCC Rcd. 1405 (2003) (denying an application for review), *declared null and void*, TMI Commc'ns and Co., *Order*, 18 FCC Rcd. 1725 (2003) (declaring TMI's LOI null and void for failure to satisfy implementation milestones), *reinstated*, TMI Commc'ns and Co., *Memorandum Opinion and Order*, 19 FCC Rcd. 12603 (2004) (granting a waiver of certain implementation milestone requirements and reinstating TMI's LOI), *modified by*, Use of Returned Spectrum in the 2 GHz Mobile Satellite Service Frequency Bands, *Memorandum Opinion and Order*, 20 FCC Rcd. 19696 (2005) (modifying the LOI to grant TMI use of 20 MHz of 2 GHz MSS spectrum); TMI Commc'ns and Co., *Order*, 22 FCC Rcd. 8602 (2007) (modifying TMI's LOI to list it in the name of TerreStar Networks, LLC) ("*TSN Transfer of Control Order*"). In a letter filed on May 15, 2007, TSN requested that the Commission correct its records to reflect the fact that the parties had asked for the LOI authorization to be listed in the name of TSN, and not, as had been stated in the *TSN Transfer of Control Order*, in the name of TerreStar Networks, LLC. *See* Letter from Joseph A. Godles, Counsel to TerreStar Networks Inc., to Marlene H. Dortch, Secretary, FCC, *filed in* File No. SAT-ASG-20021211-00238 (May 15, 2007). TSN in turn assigned this authorization to TSL, a wholly owned, direct subsidiary of TSN, in February 2008. *See* Letter from Mr. Joseph A. Godles, Counsel to TerreStar Networks Inc., to Marlene H. Dortch, Secretary, FCC, *filed in* File No. SAT-MOD-20070529-00075 (Feb. 4, 2008).

[16] *See* TerreStar Networks Inc., *Order and Authorization*, 25 FCC Rcd. 228 (2010).

in the provision of MSS/ATC services. On July 1, 2009, the TerreStar-1 satellite was successfully launched and placed into its assigned orbital slot.[17] On July 20, 2009, TerreStar certified the TerreStar-1 satellite as operational.[18] On August 27, 2009, in-orbit testing of TerreStar-1 was successfully completed. As further described herein, today TerreStar is providing commercial wholesale MSS roaming as part of an AT&T Mobility ("AT&T") offering.

b. TerreStar Parties' Technology and Services

Today, TerreStar offers a next-generation mobile broadband network through a combination of the TerreStar-1 geostationary satellite, an all-Internet Protocol ("IP") core network, and the GENUS™ handset, North America's first integrated satellite/cellular smartphone. TerreStar currently provides consumers with ubiquitous satellite coverage throughout all 50 states, Puerto Rico, and the U.S. Virgin Islands, enabling applications tailored to homeland security, public safety, disaster preparedness, and rural or underserved community needs across North America.

The TerreStar-1 satellite has an 18 meter reflector, has a wing-span of approximately 106 feet, is roughly 5 stories tall, and weighs 15,220 pounds. TerreStar's spot-beam technology, coupled with Ground Based Beam Forming, allows TerreStar to allocate power and spectrum to situation-specific incidents, ensuring capacity when and where it is needed. In combination, this has allowed TerreStar to develop a consumer-sized device capable of two-way mobile communication directly with the satellite.

[17] TerreStar Networks Inc., Press Release, TerreStar Successfully Launches World's Largest, Most Powerful Commercial Communications Satellite (July 1, 2009).

[18] *See* Policy Branch Information, Public Notice, 24 FCC Rcd. 9329 (2009).

In September 2010, TerreStar began providing commercial service as a wholesale provider of satellite roaming to AT&T Mobility. AT&T markets the GENUS™ smartphone, enabling enterprise, government, and small business customers to add satellite access as a roaming option to AT&T's terrestrial mobile service. As a result, TerreStar's 2 GHz MSS service is now available to AT&T customers in unserved and underserved locations and as back-up capacity for public safety agencies, first responders, and others during times of crisis when terrestrial wireless networks may be unavailable.

The GENUS™ smartphone was developed by TerreStar and is a "quad-band" device capable of MSS in the 2 GHz band, in addition to multi-band communication on terrestrial GSM networks, using the licensed 800, 900, 1800, and 1900 MHz mobile bands.[19] At present, a GENUS™ device can be authenticated for standalone MSS use or for communication on any authorized GSM network. While the GENUS™ today does not utilize the 2 GHz MSS band for terrestrial service, instead relying on existing terrestrial networks, future iterations can have the capability to use the S-band for terrestrial transmissions. The GENUS™ incorporates GEO-Mobile Radio Third Generation (GMR-1 3G) release 3 specifications, an adaptation of the EDGE air interface for satellite-delivered VoIP and packet data applications over IP, such as email, Internet access, Web browsing, and FTP.

The satellite and smartphone technology developed by TerreStar and other MSS/ATC licensees is designed to integrate MSS into the broad 3G to 4G mobile wireless market to complement networks based on 3GPP and IP Multimedia Subsystem ("IMS") standards by providing the ubiquitous coverage that cannot be achieved solely through terrestrial networks.

All networks – wireline, wireless, and satellite – have been converging upon integrated, packet data architectures, and one of several defining characteristics of 4G wireless networks is an all-IP architecture. As a result, and owing to the evolution of satellite technology in recent years, TerreStar has deployed an all-IP core network managed by IMS software architecture to provide, aggregate, and customize applications across various access methods and media devices. All call processing by TerreStar's network is done in the packet-switched domain via a core IMS network that primarily uses Session Initiation Protocol. TerreStar's network also features Radio Resource Management capabilities that coordinate spectrum use, load factors, and transmission power between the satellite and terrestrial facilities. Devices are able to interconnect with TerreStar's network anchored to satellite gateway facilities and network operations centers in the United States and Canada.

c. TerreStar Bankruptcy Proceeding and Commission Approvals

To obtain the capital necessary to support these development initiatives and the operation of its MSS/ATC system, TSN issued secured payment-in-kind ("Senior PIK") notes in 2007 and exchangeable unsecured payment-in-kind ("Exchangeable PIK") notes in 2008. However, the subsequent global economic crisis created a precarious financial situation, hampering the ability of TSN and TSL to satisfy these debt obligations. On October 19, 2010, the TerreStar Debtors filed voluntary petitions with the Bankruptcy Court for reorganization under Chapter 11 of Bankruptcy Code.[20] As explained in papers accompanying those petitions, reorganization was

[19] Full specifications for the TerreStar GENUS™ are available at: http://www.terrestar.com/technology-solutions/products/specifications/. TerreStar believes that the GENUS™ is the only device to feature 3GPP standards-based MSS in a standard smartphone form factor that operates across multiple GSM bands.

[20] *See TerreStar Networks Inc*., Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. Oct. 19, 2010) [Docket No. 1](Voluntary Petition of TerreStar Networks Inc.); *TerreStar Networks Holdings (Canada) Inc.*, Case No. 10-15447 (SHL) (Bankr. S.D.N.Y. Oct. 19, 2010) [Docket No. 1]

intended to strengthen the TerreStar Debtors' financial position to help them achieve long-term success in the MSS market.[21] On October 20, 2010, the Bankruptcy Court granted the request of the TerreStar Debtors for procedural consolidation and joint administration of their Chapter 11 cases.[22]

In conjunction with these Chapter 11 cases, on November 3, 2010,[23] November 16, 2010,[24] and January 10, 2011,[25] the Commission approved applications for the *pro forma*

(Voluntary Petition of TerreStar Networks Holdings (Canada) Inc.); *TerreStar Networks (Canada) Inc.*, Case No. 10-15449 (SHL) (Bankr. S.D.N.Y. Oct. 19, 2010) [Docket No. 1] (Voluntary Petition of TerreStar Networks (Canada) Inc.); *0887729 B.C. Ltd.*, Case No. 10-15450 (SHL) (Bankr. S.D.N.Y. Oct. 19, 2010) [Docket No. 1] (Voluntary Petition of 0887729 B.C. Ltd.); *TerreStar License Inc.*, Case No. 10-15463 (SHL) (Bankr. S.D.N.Y. Oct. 19, 2010) [Docket No. 1] (Voluntary Petition of TerreStar License Inc.); *TerreStar National Services Inc.*, Case No. 10-15464 (SHL) (Bankr. S.D.N.Y. Oct. 19, 2010) [Docket No. 1] (Voluntary Petition of TerreStar National Services Inc.).

[21] *See TerreStar Networks Inc*., Case No. 10-15446 (SHL) ¶ 75 (Bankr. S.D.N.Y. Oct. 19, 2010) [Docket No. 3] (Declaration of Jeffrey W. Epstein Pursuant to Local Bankruptcy Rule 1007-2, in Support of First Day Pleadings). In early 2011, the cases of certain TerreStar affiliates, but not any of the TerreStar Debtors, were procedurally deconsolidated from Case No. 10-15443 (SHL) and added to the joint administration of Case No. 11-10612 (SHL), in which TSC DIP's case is the lead debtor case.

[22] *See TerreStar Networks Inc*., Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. Oct. 20, 2010) [Docket No. 32] (Order Directing Joint Administration of Related Chapter 11 Cases), *as amended by* [Docket No. 445] (Order Granting Debtors' Motion to Amend Joint Administration of Related Chapter 11 Cases).

[23] On November 3, 2010, the Commission approved the *pro forma* assignments from TSL to TSL DIP of the Section 214 authorization for international MSS (File No. ITC-214-20100513-00194) and the Section 214 authorization for global facilities-based and resale authority (File No. ITC-214-20100513-00195). *See* International Authorizations Granted, Public Notice, Report No. TEL-01464 (rel. Nov. 4, 2010) (granting File No. ITC-ASG-20101022-00423).

[24] On November 16, 2010, the Commission approved the *pro forma* assignments from TSN to TSN DIP of the FSS Ku-band earth station authorization for two antennas in Las Vegas, Nevada (Call Sign E070098) and the MET license that includes the ATC authorization (Call Sign E060430). *See* Satellite Communications Services Information, Actions Taken, Public Notice, Report No. SES-01296 (rel. Nov. 17, 2010) (granting File Nos. SES-ASG-20101101-01416 and SES-ASG-20101101-01417). On November 16, 2010, the Commission also approved the *pro forma* assignment of the 2 GHz earth station authorization for 15 calibration earth stations (Call Sign E090061) from TSL to TSL DIP. *See* Satellite Communications Services Information,

assignments of TSN's and TSL's licenses to TSN DIP and TSL DIP, respectively. Further, TSN DIP filed an application with the FCC on December 10, 2010 seeking the *pro forma* assignment of TSN DIP's licenses and authorizations to TSL DIP. The FCC approved these *pro forma* assignment applications on December 20, 2010.[26] As a result, TSL DIP currently holds all of the licenses and authorizations previously held by TSN and TSL that are related to TSN's MSS/ATC system.

Further, on February 21, 2011, TSC, the indirect parent company of TSL DIP, filed a separate petition with the Bankruptcy Court also seeking protection under Chapter 11 of the Bankruptcy Code.[27] In turn, TSL DIP filed applications seeking FCC consent to the involuntary *pro forma* transfer of control of TSL DIP to TSC DIP resulting from TSC's Chapter 11 bankruptcy filing.[28] The FCC approved these *pro forma* transfer-of-control applications on June 29, 2011[29] and July 7, 2011.[30]

Actions Taken, Public Notice, Report No. SES-01296 (rel. Nov. 17, 2010) (granting File No. SES-ASG-20101101-01419).

[25] On January 10, 2011, the Commission approved the *pro forma* assignment of the LOI (Call Sign S2633) to TSL DIP. *See* Policy Branch Information Actions Taken, Public Notice, Report No. SAT-00750 (rel. Jan. 14, 2011) (granting File No. SAT-ASG-20101022-00222).

[26] On December 20, 2010, the Commission approved the *pro forma* assignments from TSN DIP to TSL DIP of the FSS Ku-band earth station authorization for two antennas in Las Vegas Nevada (Call Sign E070098) and the MET license that includes the ATC authorization (Call Sign E060430). *See* Satellite Communications Services Information, Actions Taken, Public Notice, Report No. SES-01306 (rel. Dec. 22, 2010) (granting File Nos. SES-ASG-20101210-01529 and SES-ASG-20101210-01530).

[27] *See TerreStar Corporation*, Case No. 11-10612 (SHL) (Bankr. S.D.N.Y. Feb. 16, 2011) [Docket No. 1] (Voluntary Petition).

[28] *See* File Nos. SAT-T/C-20110623-00117, SES-T/C-20110623-00735, SES-T/C-20110623-00736, SES-T/C-20110623-00737, ITC-T/C-20110623-00174.

[29] On June 29, 2011, the Commission approved the *pro forma* transfer of control from TSC to TSC DIP of TSL DIP, the holder of a Section 214 authorization for international MSS (File No. ITC-214-20100513-00194) and a Section 214 authorization for global facilities-based and resale authority (File No. ITC-214-20100513-00195). *See* International Authorizations Granted, Public

In order to account for the possibility that TSN DIP and TSL DIP will exit their bankruptcy proceeding before consummation of the TSL DIP license transfer to Gamma, TSL DIP soon will request Commission authority in a separate application for the *pro forma* involuntary assignment of TSL DIP's licenses and authorizations to New TSL and the involuntary transfer of control of New TSL to a trust under the supervision of the Bankruptcy Court. The involuntary *pro forma* transfer of control of New TSL to the trust would be a technical interim step prior to the ultimate transfer of the authorizations to Gamma and would be irrelevant to the merits in the Commission's review of the transaction set forth in this Application.

B. Description of the Transaction

Under the Agreement, Gamma will acquire substantially all of the assets of TSN DIP, TSL DIP, and the other TerreStar Debtors for a purchase price of $1.375 billion and will assume certain liabilities associated with the ongoing operations of their business.[31] DISH is a party to

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Notice, Report No. TEL-01504 (rel. June 30, 2011) (granting File No. ITC-T/C-20110623-00174).

[30] On July 7, 2011, the Commission approved the *pro forma* transfers of control from TSC to TSC DIP of TSL DIP, the licensee of (i) a 2 GHz earth station authorization for 15 calibration earth stations (Call Sign E090061), (ii) an FSS Ku-band earth station authorization for two antennas in Las Vegas Nevada (Call Sign E070098), (iii) the MET license that includes the ATC authorization (Call Sign E060430), and (iv) the LOI (Call Sign S2633). *See* Satellite Communications Services Information, Actions Taken, Public Notice, Report No. SES-01363 (rel. July 13, 2011) (granting File Nos. SES-T/C-20110623-00735, SES-T/C-20110623-00736, and SES-T/C-20110623-00737); *see also* Policy Branch Information Actions Taken, Public Notice, Report No. SAT-00790 (rel. July 8, 2011) (granting File No. SAT-T/C-20110623-00117).

[31] Although the TerreStar Debtors ultimately agreed to sell substantially all of their assets to Gamma, the TerreStar Debtors' initial reorganization plan ("Initial Plan"), filed with the Bankruptcy Court on November 5, 2010, called for EchoStar to hold a majority voting interest in TSN upon TSN DIP's emergence from bankruptcy. *See TerreStar Networks Inc.*, Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. Nov. 5, 2010) [Docket No. 82] (Joint Chapter 11 Plan of TerreStar Networks Inc., TerreStar National Services, Inc., 0887729 B.C. Ltd., TerreStar License Inc., TerreStar Networks Holdings (Canada) Inc., and TerreStar Networks (Canada) Inc.). On

the Agreement solely as guarantor of certain obligations of Gamma. As noted above, Gamma's offer to purchase substantially all of the TerreStar Debtors' assets pursuant to the Agreement was subject to the solicitation by TerreStar of higher and better offers in accordance with certain auction and sale procedures (the "Sale Procedures") approved by the Bankruptcy Court.[32] After entering into the Agreement with Gamma on June 14, 2011, TerreStar received no competing bids that satisfied the requirements set forth in the Sale Procedures before the June 27, 2011 deadline for the submission of such bids. Therefore, in accordance with the Sale Procedures, on June 28, 2011, TerreStar cancelled the auction that had been scheduled for June 30, 2011.[33] As noted above, the asset sale to Gamma pursuant to the Agreement was approved by the Bankruptcy Court on July 7, 2011.[34]

December 23, 2010, the parties filed applications seeking Commission consent for the transfer of control of TSL DIP from TSC DIP to EchoStar pursuant to the Initial Plan. *See* File Nos. SAT-T/C-20101223-00267, SES-T/C-20101230-01643, SES-T/C-20101230-01644, SES-T/C-20101230-01645, ISP-PDR-20101223-00022 and ITC-T/C-20101230-00492 (collectively, "EchoStar Applications"). The Initial Plan, however, subsequently was withdrawn by the TerreStar Debtors on February 16, 2011, and the EchoStar Applications therefore were not placed on public notice by the Commission. *See TerreStar Networks Inc.*, Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. Feb. 16, 2011) [Docket No. 424] (Notice of Withdrawal of the Chapter 11 Plan Filed by the TerreStar Debtors); Letter from Tom Davidson, Counsel for TerreStar License Inc., and Pantelis Michalopoulos and Christopher Bjornson, Counsel for EchoStar Corporation, to Marlene H. Dortch, Secretary, FCC (Mar. 2, 2011) (withdrawing the EchoStar Applications); Satellite Communications Services Information, Actions Taken, Public Notice, Report No. SES-01328 (rel. Mar. 9, 2011) (reporting withdrawal by applicant of File Nos. SES-T/C-20101230-01643, SES-T/C-20101230-01644, and SES-T/C-20101230-01645).

[32] *See TerreStar Networks Inc.*, Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. May 4, 2011) [Docket No. 577] (Order, Pursuant to 11 U.S.C. §§ 105, 363, 364, 365, 503, and 507, and Fed. R. Bankr. P. 2002, 4001, 6004, 6006, 9008, and 9014, Approving (A) Bid Procedures, (B) Notice of Sale, Auction, and Sale Hearing, and (C) Assumption Procedures and Related Notices).

[33] *TerreStar Networks Inc.*, Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. June 28, 2011) [Docket No. 651] (Notice of Cancellation of Auction and Announcement Regarding Stalking Horse Bidder as the Winning Bidder).

[34] *See TerreStar Networks Inc.*, Case No. 10-15446 (SHL) (Bankr. S.D.N.Y. July 7, 2011) [Docket No. 668] (Order (A) Approving Asset Purchase Agreement and Authorizing the Sale of Assets of Debtor Outside the Ordinary Course Of Business; (B) Authorizing the Sale of Assets

Of the purchase price of $1.375 billion, Gamma has already paid $1.345 billion to the TerreStar Debtors, $50 million of which was deposited into an escrow account to provide funding for the Debtors' working capital through December 31, 2011, in accordance with the Agreement. The sale proceeds will be used to make distributions to claims of creditors of the TerreStar Debtors, which will facilitate the TerreStar Debtors' emergence from bankruptcy. Consummation of Gamma's acquisition of TerreStar's assets is subject to, among other things, approval by the Commission and the Canadian Federal Department of Industry, known as "Industry Canada."

C. Authorizations to Be Transferred

The Applicants are filing multiple concurrent applications seeking Commission consent to transfer the following FCC licenses and authorizations from TSL DIP to Gamma:

Call Sign/File No.	Description
S2633	LOI spectrum reservation to provide MSS in the 2 GHz spectrum band using the TerreStar-1 satellite.[35]
E090061	Authorization for 15 calibration earth stations operating in the 2 GHz band.
E070098	Fixed-Satellite Service ("FSS") Ku-band earth station authorization for two antennas in Las Vegas, Nevada.
E060430	License for two million common carrier MET handsets that includes ATC authorization.

Free and Clear of All Liens, Claims, Interests and Encumbrances; (C) Authorizing the Assumption and Sale and Assignment of Certain Executory Contracts and Unexpired Leases; and (D) Granting Related Relief).

[35] The transfer of control of the LOI authorization resulting from the instant transaction is not subject to public notice and prior Commission approval requirements. *See* New DBSD Satellite Services G.P., Debtor-in-Possession, Transfer of Control of Earth Station and Ancillary Terrestrial Component Licenses and Conforming Modifications to Commission Records, *Order*, 25 FCC Rcd. 13664, 13667-68 ¶ 7 (2010). Nonetheless, the Applicants have completed a Form 312 with respect to that transfer for informational purposes and to assist the Commission in making the appropriate administrative updates to its records.

ITC-214-20100513-00194	Section 214 authorization for international MSS.
ITC-214-20100513-00195	Section 214 authorization for global facilities-based and resale authority.

The Applicants request that the Commission also grant consent for the transfer to Gamma of any authorizations granted to TSL DIP or TSN DIP after the date of this Application.[36] In addition, the Applicants will file a letter under Section 1.65 of the Commission's rules[37] advising the Commission of any change to the real-party-in-interest for applications that may still be pending at the time of approval of this Application. Attached hereto as Attachment 3 are the Section 63.18 disclosures required by the Commission's rules, 47 C.F.R. §§ 63.18, 63.24(e), for assignment of the Section 214 authorizations.

III. THE TRANSACTION SERVES THE PUBLIC INTEREST

The proposed transaction satisfies every element of the Commission's public interest analysis under Section 310(d) of the Communications Act of 1996, as amended (the "Act"): (i) the transaction is in compliance with, and will not result in any violation of, the Act, other applicable statutes, or the Commission's rules; (ii) the transaction promises to yield substantial affirmative public interest benefits, as further discussed below; and (iii) the transaction will not frustrate or impair the Commission's implementation or enforcement of the Act or other related statutes or interfere with the Act's objectives.[38]

[36] Further, the Applicants respectfully request that the Commission waive application of its "cut-off" rules with respect to any applications that may be filed by TSN DIP or TSL DIP during the Commission's review of the instant application to the extent that any such applications become subject to a Commission cut-off notice. No currently pending applications are subject to the cut-off rule.

[37] 47 C.F.R. § 1.65.

[38] 47 U.S.C. § 310(d); *see also, e.g.*, Comcast Corp., General Electric Co., and NBC Universal, Inc., *Memorandum Opinion and Order*, 26 FCC Rcd. 4238, 4247-49 ¶¶ 22-23, 26 (2011)

Indeed, the proposed transaction will yield substantial public interest benefits related to the "broad aims of the Communications Act,"[39] which include a deeply rooted preference for preserving and enhancing competition in relevant markets, accelerating private-sector deployment of advanced services, and generally managing spectrum in the public interest.[40] Importantly, the proposed transaction will also extricate the MSS/ATC authorizations and assets of TSN DIP and TSL DIP from the bankruptcy process and will enable their full deployment for competitive purposes. Further, the transaction will place these assets and authorizations under the control of DISH, a company whose technical expertise, financial resources, nationwide customer-interface infrastructure, and approximately 14-million subscriber base, provides a foundation for the deployment of an MSS/ATC service using the 2 GHz frequencies. The transaction will also combine the resources of the two 2 GHz MSS operators; these resources would otherwise remain balkanized and inefficiently used, and the creation of a long-term viable service benefitting the public would be far less likely.

("*Comcast-NBC Order*"); XM Satellite Radio Holdings Inc. and Sirius Satellite Radio Inc., *Memorandum Opinion and Order and Report and Order*, 23 FCC Rcd. 12348, 12363 ¶ 30 (2008) ("*Sirius-XM Order*"); News Corp. and DIRECTV Group, Inc. and Liberty Media Corp., *Memorandum Opinion and Order*, 23 FCC Rcd. 3265, 3276 ¶ 22 (2008) ("*Liberty Media-DIRECTV Order*"); SBC Comm. Inc. and AT&T Corp., *Memorandum Opinion and Order*, 20 FCC Rcd. 18290, 18300 ¶ 16 (2005); Time Warner Inc. and America Online, Inc., *Memorandum Opinion and Order*, 16 FCC Rcd. 6547, 6555 ¶¶ 20-21 (2001).

[39] *See Sirius-XM Order*, 23 FCC Rcd. at 12364-65 ¶ 31; *Liberty Media-DIRECTV Order*, 23 FCC Rcd. at 3277-78 ¶ 23; AT&T Wireless Services, Inc. and Cingular Wireless Corp., *Memorandum Opinion and Order*, 19 FCC Rcd. 21522, 21544 ¶ 41 (2004) ("*Cingular-AT&T Wireless Order*"); General Motors Corp., Hughes Electronics Corp., and The News Corp., *Memorandum Opinion and Order*, 19 FCC Rcd. 473, 483-84 ¶ 16 (2004) ("*News Corp.–Hughes Order*").

[40] *See Comcast-NBC Order*, 26 FCC Rcd. at 4248 ¶ 23; *Sirius-XM Order*, 23 FCC Rcd. at 12365 ¶ 31; *Liberty Media-DIRECTV Order*, 23 FCC Rcd. at 3278 ¶ 23; *Cingular-AT&T Wireless Order*, 19 FCC Rcd. at 21544 ¶ 41; Comcast Corp., and AT&T Corp., *Memorandum Opinion and Order*, 17 FCC Rcd. 23246, 23255 ¶ 27 (2002).

The transaction will create competition, not harm it. DISH does not provide mobile services today, and DBSD has not yet begun providing service. Only TerreStar has a current MSS (but no MSS/ATC) service offering, and it is one that remains in the early stage.

Without reducing the number of choices in any relevant market, the transaction will thus create a strengthened competitor for the provision of MSS/ATC services. Furthermore, it has the potential of creating a competitor against the mobile broadband incumbents, especially if the Commission grants the flexibility that the parties request in this Application with respect to the MSS/ATC requirements.

A. The Transaction Meets All Applicable Statutory and Regulatory Requirements

DISH, TSN DIP, and TSL DIP are all Commission licensees, and the qualifications of all relevant parties are therefore a matter of record before the Commission. The proposed transaction does not implicate any foreign ownership, aggregation, cross-ownership, or any other restrictions imposed by the Act, other applicable statute, or Commission regulation.

B. The Transaction Provides the TerreStar Debtors' Creditors with a Meaningful Recovery and Promotes the Productive Commercial Use of the TerreStar Debtors' Assets and Authorizations Emerging Out of Bankruptcy

The Commission has found that a transaction facilitating the retirement of debt and improving access to capital is likely to offer substantial public benefits.[41] This transaction has secured for the TerreStar Debtors' creditors a meaningful recovery on their debt. More generally, the Commission has routinely found that license transfers effectuating bankruptcy-related restructurings benefit the public interest by facilitating the introduction of new services

[41] *See, e.g.*, Iridium Holdings LLC and GHL Acquisition Corp., *Memorandum Opinion and Order and Declaratory Ruling*, 24 FCC Rcd. 10725, 10736 ¶ 26 (2009).

and continuation of existing services to the public.[42] In approving this transaction, the Commission will enable the TerreStar assets and authorizations to come under the ownership of a well-financed, capable, and recognized innovator in communications technology, which moreover has unique experience in developing an innovative and competitive retail operation and growing it from zero to approximately 14 million subscribers.

C. The Transaction Will Facilitate the More Efficient Use of 2 GHz MSS Spectrum

The Applicants expect that the proposed transaction taken together with DISH's proposed acquisition of DBSD, will result in the provision of next-generation broadband services through the combination of DISH's experience, existing service, and customer base, on the one hand, and TerreStar's and DBSD's MSS/ATC spectrum resources, facilities, expertise, and technology, on the other.

1. MSS Spectrum Plays a Key Role in Optimizing Spectrum for Mobile Broadband

MSS spectrum – and the 2 GHz MSS band in particular – offers an important opportunity to address the nation's mobile broadband spectrum gap. The Commission and the Administration are keenly aware of mobile broadband's benefits. In June 2010, President Obama issued a Presidential Memorandum, *Unleashing the Wireless Broadband Revolution*, which accurately extols the benefits of mobile communications – and mobile broadband in particular: "Few technological developments hold as much potential to enhance America's competitiveness, create jobs, and improve the quality of our lives as wireless high-speed access

[42] *See* International Authorizations Granted, Public Notice, 19 FCC Rcd. 4079, 4080 (2004); Space Station Licensee, Inc. and Iridium Constellation LLC, *Memorandum Opinion and Order*, 17 FCC Rcd. 2271, 2288-89 ¶¶ 40-44 (2002); ICO-Teledesic Global Ltd., *Memorandum Opinion and Order*, 16 FCC Rcd. 6403, 6407 ¶ 10 (2001); *see also* Loral/Qualcomm Partnership, *Order*, 10 FCC Rcd. 2333, 2334 ¶ 12 (1995) (holding that, even if a "major" change of ownership occurs, it is in the public interest when it is motivated by a need for financing).

to the Internet."[43] The President went on to emphasize our national interest in ensuring sufficient spectrum availability to support wireless innovation:

> This new era in global technology leadership will only happen if there is adequate spectrum available to support the forthcoming myriad of wireless devices, networks, and applications that can drive the new economy.[44]

These benefits are naturally accompanied by the exponential growth of mobile broadband demand, which has also justly been a primary telecommunications policy focus of the Administration and the Commission alike. Chairman Genachowski has been a stalwart leader for the advancement of mobile broadband with his call to action to make available additional spectrum for mobile broadband. As he has observed,

> [M]obile broadband is being adopted faster than any computing platform in history. The number of smartphones and tablets being sold now exceeds the number of PCs. . . . Smartphones use twenty-four times the amount of data of traditional cell phones; other wireless devices, like tablets, can use more than 122 times the data.[45]

In the Chairman's words, "[t]his explosion in demand for spectrum is putting strain on the limited supply available for mobile broadband, leading to a spectrum crunch."[46]

The National Broadband Plan, for its part, acknowledges the underutilized nature of MSS spectrum and recognizes that it must be a key element of any plan to optimize spectrum for mobile broadband. The National Broadband Plan observes that MSS spectrum represents a significant amount of bandwidth with propagation characteristics suitable for mobile broadband

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[43] The White House, Presidential Memorandum: Unleashing the Wireless Broadband Revolution (June 28, 2010) ("Presidential Memorandum"), http://www.whitehouse.gov/the-press-office/presidential-memorandum-unleashing-wireless-broadband-revolution.

[44] *Id.*

[45] Julius Genachowski, Chairman, FCC, Remarks at Mobile Future Forum, Washington, D.C., at 5 (Mar. 16, 2011), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-305225A1.pdf.

and goes on to conclude, "[f]rom the standpoint of promoting broadband through increased use of the MSS spectrum, the FCC can take action to accelerate terrestrial deployments in the MSS bands."[47]

The Commission has started taking steps to help realize the potential of this spectrum. Earlier this year, the Commission adopted an MSS/ATC *Report and Order* "to make additional spectrum available for new investment in mobile broadband networks while also ensuring that the United States maintains robust mobile satellite service capabilities."[48] First, the Commission added co-primary Fixed and Mobile allocations to the 2 GHz MSS band in order to "lay the groundwork for more flexible use of the band, including for terrestrial broadband services, in the future."[49] Second, "[i]n contemplation of [MSS] spectrum being used for terrestrial wireless services," the Commission extended its secondary-markets leasing rules to MSS spectrum used for ATC.[50]

2. DISH's Plan

DISH plans to deploy an MSS/ATC system using the full 40 MHz of S-band spectrum with in-orbit active and spare capacity on TerreStar's T-1 and DBSD's G-1 satellites, subject to grant of TerreStar's and DBSD's modification applications and waiver requests, and using the latest in satellite and terrestrial technologies. These broadband services will be offered over a single, technically integrated network for all satellite and terrestrial traffic. The offerings could

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[46] *Id.*

[47] National Broadband Plan at 88-89.

[48] Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz, *Report and Order*, 26 FCC Rcd. 5710, 5710 ¶ 1 (2011).

[49] *Id.* at 5710 ¶ 2.

[50] *Id.* at 5710 ¶ 1.

consist of mobile, portable, or fixed broadband services individually or a combination thereof. DISH expects that the consumer equipment will include broadband-capable tablet computers, among other devices. Once the network is deployed, consumers will be able to use their devices for high-speed Internet access as well as a myriad of IP-based, over-the-top applications, including video. DISH anticipates offering broadband services both on a stand-alone basis and in a consumer-friendly bundle with its multichannel video services.

As part of its offering, DISH intends to continue supporting the GENUS™ handset phone (including, among other things, sales, marketing, technical assistance, and software and network maintenance) unless and until a new satellite/terrestrial hybrid device can be developed and deployed by DISH. Future iterations of the GENUS™ phone (or a successor device) may also feature improved interoperability with DBSD's G-1 satellite – the current GENUS™ already has a level of operability with that satellite.

3. Resulting Benefits and a Much Needed Check on Incumbents' Market Power

This transaction represents an important first step in obtaining spectrum necessary to establish DISH as a viable provider of mobile broadband services. Although still modest in comparison to the holdings of many incumbent mobile broadband providers, the spectrum assignments contemplated by the TerreStar and DBSD transactions, taken together, provide an essential foundation for DISH's ability to compete against them.

As DISH explained when it filed its application to acquire control over DBSD, DISH has been exploring the amount of spectrum necessary to fulfill the bandwidth demands of mobile broadband service and create a viable stand-alone provider.[51] In this respect, DISH believes that each of the two 2 GHz MSS assignments likely would not be enough, standing alone, to support

[51] DISH-DBSD Application at 15.

a robust nationwide service. Although the combination of the two 2 GHz assignments will yield a total of 40 MHz of spectrum and will allow DISH to compete to some extent against the terrestrial mobile broadband incumbents, DISH will potentially be facing other CMRS and MSS players with far more significant spectrum holdings for mobile broadband.[52] For example, LightSquared now claims that it controls up to 59 MHz of spectrum.[53] As for major CMRS providers, as of January 2011, Sprint controlled an average of 133.2 MHz, and Verizon Wireless ("Verizon") commanded more than 87 MHz of spectrum in most of the largest markets in the country, while AT&T boasted approximately 82 MHz, and T-Mobile was in control of 50.4 MHz.[54] The ability to combine the 2 GHz MSS spectrum, if coupled with the regulatory flexibility needed to implement DISH's plans as requested in this Application, would further enhance the effectiveness and competitiveness of DISH's proposed broadband service offerings.

A 2x20 MHz spectrum assignment, moreover, will allow DISH to deploy an advanced 4G network and maximize its spectrum efficiency. As part of its broadband availability model,

[52] DISH's subsidiary, Manifest Wireless, LLC, holds licenses for 6 MHz of 700 MHz spectrum (Block E) in 170 of 178 of the Basic Economic Areas ("BEAs") throughout the country, which could be used to support a mobile broadband network. These 700 MHz E Block licenses cover all of the nation's BEAs except for New York City, Los Angeles, San Francisco, Boston, Philadelphia, Guam, American Samoa, and the Gulf of Mexico. Certain DISH and EchoStar affiliates also hold Multichannel Video and Data Distribution Service licenses in the 12.2 – 12.7 GHz band and Local Multipoint Distribution Service licenses in the 29 GHz band.

[53] Lightsquared, Press Release, LightSquared Delivers Notice to Inmarsat Triggering Phase 2 of Re-Banding of L-Band Spectrum in North America (Jan. 28, 2011) ("When Phase 2 is fully executed, LightSquared will have the use of up to 59 MHz of terrestrial and L-Band ATC spectrum over the continental United States and Canada to operate its nationwide integrated 4G-LTE and satellite network.").

[54] In its recent application for control of certain Qualcomm spectrum, for example, AT&T claims a per-transaction average of 82 MHz of spectrum available to it, and attributes available holdings of 133.2 MHz, 87.7 MHz, and 50.4 MHz to Sprint, Verizon, and T-Mobile, respectively. *See* AT&T Mobility Spectrum and Qualcomm Incorporated Seek FCC Consent to the Assignment of Lower 700 MHz Band Licenses, WT Docket No. 11-18, Application of AT&T, Exhibit 1, at 30-31 (filed Jan. 13, 2011).

the Commission used a 2x20 MHz frequency pairing as the baseline wireless broadband network because of its technical superiority.[55] As the Commission noted in that analysis, a 20 MHz carrier is more efficient in part because wider bands enable better statistical multiplexing.[56] As a result, "the capacity with a single 2x20 MHz carrier is 20 percent higher than with two 2x10 MHz carriers."[57] The spectrum efficiency of a 2x20 MHz allocation will enable DISH to offer much improved wireless broadband to consumers.

DISH plans to deploy its network based on the LTE Advanced standard from the outset for its next generation MSS/ATC operations.[58] LTE Advanced is the focus of standardization work by vendors and carriers in 3GPP for broadband wireless communications globally, and commercial devices are expected to be generally available by 2014. As proposed, LTE Advanced significantly increases the capacity of wireless networks relative to current LTE systems, with downlink capacity that can meet the growing demand for wireless broadband by using the combination of advanced interference management techniques, heterogeneous networks that optimize system capacity, and the combining of radio carriers to generate higher degrees of spectral efficiency than current LTE systems.

One of the key advantages of LTE Advanced is its support for heterogeneous networks composed of cells of many different sizes and strengths. Such networks are more spectrally

[55] The Broadband Availability Gap, OBI Technical Paper No. 1, at 60, 73, 80 (April 2010) (noting that a 2x20 MHz frequency pairing has more capacity per MHz than narrower allocations).

[56] *Id.* at 73.

[57] *Id.* (citing QUALCOMM, Europe, Ericsson, Nokia and Nokia Siemens Networks in 3GPP TSG-RAN WG1 *in Text Proposal for TR on System Simulation Results*, http://www .3gpp .org/ftp/tsg_ran/WG1_RL1/TSGR1_53/Docs/R1-082141.zip).

[58] LTE Advanced is the name for LTE Release 10 and beyond. Today's commercially deployed LTE networks generally use LTE Release 8. *See* Qualcomm August 2011 Presentation of LTE

efficient than today's homogeneous networks. Heterogeneous networks increase geographic re-use of spectrum in high-traffic, dense user areas through additional use of "pico" and "femto" cells, while still permitting wide coverage in less dense, lower traffic areas using more traditional "macro" cells. Networks incorporating pico and femto cells are expected to become much more efficient with the availability of LTE Advanced commercial devices, and their improved efficiencies will be a key part of increasing network capacity as network designers approach the theoretical limits of how much data can be packed into a single wireless signal. Future releases of LTE Advanced are expected to utilize advanced interference management technology to enable a device to communicate with multiple base stations at the same time. This would allow users to seamlessly transition through these topologically complex wireless networks and therefore facilitate optimal integration with MSS. In short, this innovative technology will allow DISH's initial deployment to use the most advanced, spectrally efficient technology, and generate significant public interest benefits. Notably, to capture the efficiencies of an LTE Advanced network, network rollout and device availability must go hand in hand.

To be sure, these benefits will be no panacea for all of the ills afflicting the increasingly concentrated CMRS market today, and particularly for the problems that the proposed AT&T/T-Mobile combination[59] bodes for competition. DISH's plan is threatened by that transaction; it would produce the nation's single largest CMRS provider and would result in a virtual duopoly within the mobile voice and data services market, with the top two carriers, AT&T and Verizon, controlling almost 80 percent of the market and over 90 percent of the industry's free cash

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Advanced, Slide 6, *available at* http://www.qualcomm.com/documents/lte-advanced-global-4g-solution (last visited Aug. 10, 2011). S-Band is not included in the LTE Release 8 standard.

[59] Applications of AT&T Inc. and Deutsche Telekom AG, for Consent to Assign or Transfer Control of Licenses and Authorizations, WT Docket No. 11-65 (filed Apr. 21, 2011).

flow.[60] As the Commission has previously recognized, entrants into mobile voice and data services already face "major structural features that may act as entry barriers."[61] Permitting this level of market consolidation, however, would raise significant additional barriers. In particular, at 80 percent market concentration, the top two CMRS providers would be able to hinder DISH's ability to gain subscribers by temporarily subsidizing their rates, withholding critical interconnection and roaming agreements, and otherwise abusing their market power to thwart any potential entrant into the market.[62] Even for a company like DISH, with its long history of taking on incumbents and bringing competition to new markets, these barriers would be high indeed. Therefore, quick approval of these transactions and related waivers need not justify any less vigilance in the Commission's evaluation of the proposed AT&T/T-Mobile combination.

D. The Transaction Will Promote, and Not Harm, Competition

Instead of eliminating any competitive choice, the TerreStar and DBSD transactions will create a strengthened competitor for the provision of MSS voice and data services, MSS/ATC service, and 4G mobile broadband services. In all potentially relevant markets, DISH will face strong competition from other MSS operators and from the formidable mobile broadband incumbents. The transaction will also promote competition among MSS providers by

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[60] *See* Cecilia Kang, *Leap Wireless Opposes AT&T Bid to Buy T-Mobile*, Washington Post, May 24, 2011, *available at* http://www.washingtonpost.com/blogs/post-tech/post/leap-wireless-opposes-atandt-bid-to-buy-t-mobile/2011/05/23/AFDSeQAH_blog.html (last accessed August 19, 2011) (if AT&T's takeover of T-Mobile is approved, "about 90 percent of pre-tax earnings for the wireless industry would go to AT&T and Verizon Wireless"); DISH Network LLC, Petition to Deny, Applications of AT&T Inc. and Deutsche Telekom AG, For Consent to Assign or Transfer Control of Licenses and Authorizations, WT Docket No. 11-65, at 4 (filed May 31, 2011) ("DISH Petition to Deny AT&T-T-Mobile Merger").

[61] Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, WT Docket No. 10-133, *Fifteenth Report*, FCC 11-103 ¶ 56 (rel. June 27, 2011) ("*Fifteenth Mobile Competition Report*").

[62] DISH Petition to Deny AT&T-T-Mobile Merger at 9.

eliminating an MSS cross-ownership interest in the U.S. market – namely, the interest in TerreStar held by Harbinger Capital Partners Funds, which currently controls fellow MSS licensee LightSquared. Moreover, the combined TerreStar and DBSD spectrum is significantly below the levels approved by the FCC in the *Harbinger-SkyTerra Order*.[63]

1. MSS and MSS/ATC

The proposed transaction will not adversely affect competition for MSS or MSS/ATC services. Neither DISH nor its affiliates currently provide MSS services. Further, DBSD currently does not provide commercial MSS. And, while TerreStar is an active participant in the MSS industry, its services are themselves still in the early stages. In addition to TerreStar, another five operators – Inmarsat PLC, LightSquared, Iridium Communications Inc., Globalstar, Inc. ("Globalstar"), and Orbcomm Inc. – all provide commercial MSS.[64] As a result, DISH's proposed acquisition of DBSD and of the TerreStar Debtors' authorizations and assets will not reduce the number of actual MSS competitors or the competition among active MSS participants.

MSS/ATC services, on the other hand, have yet to materialize. Most MSS operators have, or may obtain, ATC authorizations, and currently, three are authorized to provide ATC services in the United States: LightSquared, TerreStar, and DBSD.[65] Currently, neither TerreStar nor DBSD provides ATC service, and therefore their combination will not reduce the number of current MSS/ATC competitive choices. LightSquared, for its part, appears to be on the verge of

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[63] SkyTerra Communications, Inc., and Harbinger Capital Partners Funds, *Memorandum Opinion and Order and Declaratory Ruling*, 25 FCC Rcd. 3059 (2010) ("*Harbinger-SkyTerra Order*").

[64] *See id*. at 3078-79 ¶¶ 33-36 (describing the MSS offerings of current MSS competitors).

[65] Until recently, Globalstar was also authorized to provide ATC services over its Big LEO MSS spectrum, which it had leased to Open Range. The Commission, however, has suspended for now Globalstar's authority for failing to meet the Commission's gating requirements within the allotted timeframe. *See* Globalstar Licensee LLC, Application for Modification of License to Extend Dates for Coming into Compliance with Ancillary Terrestrial Component Rules, *Order*, 25 FCC Rcd. 13114, 13115 ¶ 1 (2010).

deploying an ATC network pursuant to its MSS/ATC waiver, which is conditioned on resolving interference issues related to adjacent-band Global Positioning System ("GPS") operations.[66]

Ultimately, the promise of MSS/ATC has yet to be fully realized for four principal reasons:

- Use of the maritime band by LightSquared and Inmarsat has been hampered by technical issues, including the interleaving of the L-band and the severe interference claimed by systems operating in adjacent spectrum;
- The MSS/ATC spectrum has been balkanized into relatively small assignments not optimized for delivering the broadband services desired by consumers;
- Financial difficulties, including the costs associated with market entry and access to sufficient funds for business plans, have pushed a number of the licensees into bankruptcy; and
- Licensees have been unable to achieve a critical mass of subscribers to create economies of scale to reduce costs and increase penetration.

The proposed TerreStar and DBSD transactions mitigate these problems substantially and advance the public interest with respect to effective utilization of the 2 GHz band. The combination and use of the 2 GHz band for MSS/ATC eliminates many of the technical coordination issues that have plagued other MSS bands. Use of the band also does not give rise to the GPS interference issues that have hampered the use of the L-band.[67] Moreover, the combination of the two 2 GHz MSS spectrum assignments helps to mitigate the bandwidth constraints that have limited the utility of these bands for broadband services. Further, DISH has

[66] LightSquared Subsidiary LLC, Request for Modification of its Authority for an Ancillary Terrestrial Component, *Order and Authorization*, 26 FCC Rcd. 566 (2011) ("*LightSquared ATC Order*").

[67] *See* National Executive Committee, National Space-Based Positioning, Navigation, and Timely System Engineering Forum, Assessment of LightSquared Terrestrial Broadband System Effects on GPS Receivers and GPS-dependent Applications, *filed in* File No. SAT-MOD-20101118-00239, § 9-7 (filed Jul. 6, 2011) (suggesting that using the 2 GHz band for ATC services "could resolve existing interference issues" currently experienced by LightSquared).

adequate financial, technical, and operational resources and demonstrated ability to deliver on the broadband potential of these spectrum bands.

In any event, as the Commission recognized in the *Harbinger-SkyTerra Order*, the MSS industry is "not yet mature enough to allow [the Commission] to confidently assess competitive effects."[68] While MSS providers have been in considerable flux,[69] one thing is certain: all MSS providers face competition from other MSS providers as well as from a multitude of other sources.[70] As a result, any potential competitive harms would be too "difficult and inherently speculative" to merit serious consideration.[71]

2. Mobile Broadband Services

As noted above, Chairman Genachowski repeatedly has stressed the benefits of mobile broadband: "no sector now holds more promise for opportunity, for economic growth, for improvements to our quality of life, and for our global competitiveness."[72] In the Chairman's words, mobile broadband "could surpass all prior platforms in [its] potential to drive economic growth and opportunity."[73] As the Chairman also stated recently:

> Mobile broadband can also power innovations in areas like public safety, education, health care, and energy – including 21st century devices that can help police and firefighters save lives – digital textbooks and software that can help teachers teach and students learn – remote monitoring technologies for people with diabetes or heart disease – and smart-grid technologies that can reduce energy costs and increase energy security. . . .

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[68] *Harbinger-SkyTerra Order*, 25 FCC Rcd. at 3077 ¶ 29.

[69] *Fifteenth Mobile Competition Report* ¶ 39 ("The mobile satellite service industry is undergoing major technological and structural changes.").

[70] *See, e.g.*, *Harbinger-SkyTerra Order*, 25 FCC Rcd. at 3080-81 ¶ 41.

[71] *Id.* at 3076 ¶ 29.

[72] *See, e.g.*, Julius Genachowski, Chairman, FCC, Remarks as Prepared for Delivery, CTIA Wireless 2011, at 4 (Mar. 22, 2011).

[73] *Id.* at 5.

> The opportunities of mobile communications are huge. We need to seize them.[74]

Further, as the Commission concluded in the *Fifteenth Mobile Competition Report*, construction of "a satellite/terrestrial 4G mobile broadband network . . . will help enhance competition among current mobile wireless providers."[75] This is consistent with the Commission's sentiment, offered in several wireless competition reports, that MSS operators offering "high-speed data services, especially in connection with terrestrial networks using their Ancillary Terrestrial Component (ATC) authority[,] . . . . could potentially enhance competition in the provision of mobile terrestrial wireless services."[76]

The market for mobile voice, low-speed data, and high-speed data services is occupied today primarily by four nationwide incumbents, two of which are now proposing to merge. Together, these providers boast over 273 million subscribers nationwide as of 2010 and have an overwhelmingly commanding presence in mobile voice services.[77] And the level of concentration in the mobile wireless services industry, including CMRS, is at a high point and still increasing.[78] This consolidation is a major factor as to why the Commission has not been able to conclude that effective competition exists with respect to mobile wireless services, including CMRS. As Commissioner Copps has remarked, this consolidation amounts to "darkening clouds over the state of mobile competition" and requires the Commission to

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[74] Julius Genachowski, Chairman, FCC, Remarks on Spectrum as Prepared for Delivery, White House (Apr. 6, 2011).

[75] *Fifteenth Mobile Competition Report* ¶ 39 n.102 (quoting *Harbinger-SkyTerra Order*, 25 FCC Rcd. at 3087 ¶ 62).

[76] *Id.* ¶ 39.

[77] *See id.* ¶ 31 & Table 3.

[78] *Id.* ¶¶ 2, 51-52 & Table 9.

"examine areas where [it] can act to encourage mobile competition."[79] This concentration is only likely to increase further if plans for two of the four largest providers to merge are consummated because such a transaction would "produce the single largest carrier, with an estimated 43 percent market share; at that point, the top two carriers would control almost 80 percent of the market."[80] Likewise, the provision of high-speed data services is dominated today by wireline cable companies and telephony providers. The role of the major CMRS providers in high-speed data services is also in the ascendancy and will only expand as 4G rollouts continue. The new, nationwide competition that a successful MSS/ATC deployment by DISH will introduce to CMRS providers will help offset increasing consolidation among terrestrial mobile broadband incumbents.

The reverse also is true. DISH will be subject to competitive pressure from incumbent CMRS carriers even if it proves unable to bring competitive pressure to bear upon these legacy operators. CMRS providers will continue to constrain the prices MSS/ATC operators can charge for their services. The ubiquitous availability of 3G services, and the coming near-ubiquity of 4G services, offered by the major CMRS providers mean that MSS/ATC providers will face direct competition nationwide.

Moreover, a combination of DBSD's and TerreStar's spectrum would create MSS spectrum holdings far below the levels held by major CMRS carriers and the levels that the Commission evaluated in the *Harbinger-SkyTerra Order*. As DISH noted already in its application to acquire control over DBSD, if TerreStar and DBSD were to be combined, the

[79] *Id.* at 305 (Commissioner Copps, concurring).

[80] *See, e.g.*, DISH Petition to Deny AT&T–T-Mobile Merger at 4; Sprint Nextel Corporation, Petition to Deny, Applications of AT&T Inc. and Deutsche Telekom AG, For Consent to Assign or Transfer Control of Licenses and Authorizations, WT Docket No. 11-65, at 8 (filed May 31, 2011).

combined spectrum of TerreStar and DBSD would total only 40 MHz and, even when adding Manifest's 6 MHz of E Block 700 MHz spectrum (which does not provide national coverage, given that Manifest's 700 MHz holdings do not include rights in the nation's largest metropolitan regions), would total only 46 MHz of spectrum. This is less than half of the 95 MHz CMRS spectrum screen that the Commission uses in wireless acquisitions as a threshold to determine if a concentration warrants additional competitive inquiry.[81] It is an even smaller fraction of the spectrum than the large CMRS carriers have at their command in virtually every local market. Finally, it is significantly less than the spectrum that Harbinger had an interest in as a result of the *SkyTerra* proceeding (as much as 86 MHz).[82]

3. Fixed-Satellite Broadband Access

The recent acquisition of Hughes by DISH's affiliate EchoStar will not lead to competitive harm because Hughes's FSS broadband access service is not currently a full substitute for mobile broadband services to be provided over the 2 GHz MSS spectrum. The services that are offered, or could be offered in the future, by MSS and FSS providers are at best only imperfect substitutes for each other. The two services are fundamentally different: one is a fixed service; the other is a mobile one. While MSS/ATC service could have fixed uses, MSS

[81] AT&T Inc. and Centennial Communications Corp., *Memorandum Opinion and Order*, 24 FCC Rcd. 13915, 13936 ¶ 46 (2009).

[82] *Harbinger-SkyTerra Order*, 25 FCC Rcd. at 3076-77 ¶ 29 (approving a transfer of control that gave Harbinger control over SkyTerra, one of the two L-band operators, in addition to its then extant interest in Inmarsat, the other L-band operator, and its status as the largest shareholder of TSN). LightSquared's authorization extends to as much of the 66 MHz of L-band spectrum as it can coordinate under the Mexico City Memorandum of Understanding. *See* Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz, the L-band, and the 1.6/2.4 GHz Bands, *Memorandum Opinion and Order and Second Order on Reconsideration*, 20 FCC Rcd. 4616, 4629 ¶ 38 (2005) ("In the L-band, unlike other MSS bands, each MSS operator is licensed for the entire band, but must coordinate with other users of the L-band to determine which channels each MSS operator may use."). Further, it was only

spectrum is generally more appropriate for the provision of mobile voice and data applications to be complemented by a mobile terrestrial service at higher data rates, while the Hughes spectrum is better suited for fixed satellite broadband services at higher data rates than the satellite portion of MSS/ATC service.

IV. REQUESTED FLEXIBILITY

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.

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,"[83] especially when deviation on an individual basis does not require "evisceration of a rule by waivers."[84] The Commission's grant of these waivers will enable DISH to make commitments regarding its terrestrial mobile broadband network and service deployments.

First, consistent with FCC precedent,[85] the Applicants request a waiver of the integrated service requirement to allow DISH 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*, the Applicants request a waiver of the spare satellite requirement. *Third*, the Applicants request that the Commission harmonize certain regulatory requirements

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subsequent to approval of the SkyTerra acquisition that Harbinger divested its interest in Inmarsat. As for TerreStar, its authorization covers 20 MHz in the 2 GHz MSS band.

[83] 47 C.F.R. § 1.3; *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

[84] *WAIT Radio*, 418 F.2d at 1159.

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.

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."[86] 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. DISH emphasizes that it is asking for a waiver of the Commission's rules in the individual circumstances of this case, in light of its plan, 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.[87]

B. "Integrated Service" Requirement

The Applicants request 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

[85] *See LightSquared ATC Order*, 26 FCC Rcd. 566.

[86] National Broadband Plan at 87.

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

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 DISH's 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 GENUS™ 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, 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 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 CMRS 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.

Finally, as detailed below, if it is awarded the flexibility requested in this Application, DISH is also prepared to commit to other significant measures to ensure that the purpose of the integrated service requirement will be met. Among other things, DISH can commit to ensuring a sufficient amount of satellite capacity to support a nationwide MSS service. In addition, DISH can commit to a realistic terrestrial mobile broadband network buildout schedule that would provide MSS/ATC service to millions of Americans and that would be consistent with FCC precedent and based upon buildout principles established in the Sprint/Nextel and Sprint/Clearwire transaction decisions.[88] Furthermore, the network will be technically integrated, with all network traffic, whether terrestrial or satellite, being processed and handled by the same integrated network and support systems.

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."[89] This

[88] Nextel Commc'ns, Inc., and Sprint Corp., *Memorandum Opinion and Order*, 20 FCC Rcd. 13967 (2005) ("*Sprint-Nextel Order*"); Sprint Nextel Corp. and Clearwire Corp., *Memorandum Opinion and Order*, 23 FCC 17570 (2008) ("*Sprint-Clearwire Order*").

[89] National Broadband Plan at 88.

militates for flexible application of the integrated service requirement and favorable consideration of this waiver request, subject to the safeguards described above.

C. Spare Satellite Requirement

Applicants also request a waiver of the Commission's spare satellite "gating" requirement.[90] 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.[91] 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."[92]

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.[93] 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.

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[90] 47 C.F.R. § 25.149(b)(2).

[91] *Id.*

[92] 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*").

[93] 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).

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 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 111º W.L.) and DBSD's G-1 satellite (currently positioned at 92.85º 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,[94] 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

[94] *MSV Waiver Order*, 22 FCC Rcd. at 20550 ¶ 8.

operations of a satellite system relied upon by approximately 14 million households in a market 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.[95] 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."[96] 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

In conjunction with this Application, Applicants request that the Commission harmonize the ATC service rules 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.[97] Specifically, Applicants request the following waivers, all but one of which (the Section 25.252(b)(2) request) were previously requested in the referenced modification request:

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[95] *Id.* at 20550-51 ¶¶ 8, 12.

[96] *Id.* 20551 ¶ 12.

[97] *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] Exceed EIRP of -100.6 dBW/4 kHz for out-of-channel emissions at the edge of the MSS licensee's selected assignment.	[ATC base stations shall not] Exceed an out-of-channel emissions limit at the edge of the MSS licensee's selected assignment specified by an attenuation of the transmitter power (P), in watts, by a factor of at least 43 + 10 log (P) dB.[98]
25.252(c)(2)	Emissions on frequencies lower than 1995 MHz and higher than 2025 MHz shall be attenuated by at least 70 + 10 log P. Emissions in the bands 1995-2000 MHz and 2020-2025 MHz shall be attenuated by at least a value as determined by linear interpolation from 70 + 10 log P at 1995 MHz or 2025 MHz, to 43 + 10 log P dB at the nearest MSS band edge at 2000 MHz or 2020 MHz respectively.	Emissions on frequencies higher than 2020 MHz shall be attenuated by at least 43 + 10 log (P) dB. Emissions in the band 1995-2000 MHz shall be attenuated by at least a value as determined by linear interpolation from 70 + 10 log (P) dB at 1995 MHz, to 43 + 10 log (P) dB to the MSS band edge at 2000 MHz.

[98] Applicants request 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 least 26 dB below the transmitter power.
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,[99] and the Applicants agree 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.[100] Through this application, however, DISH now intends to unify the band by combining DBSD's and TerreStar's 2 GHz MSS holdings. This eliminates any inter-party operational interference concerns that may have

[99] *See DBSD ATC Order*, 24 FCC Rcd. at 185-89, 192-96 ¶¶ 41-49, 58-64, 69.

[100] TerreStar Modification Request at 7-11. With respect to Section 25.252(a)(1), the Applicants recognize 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.

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.[101] 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,[102] which is currently used for PCS and AWS-1 terminals.[103] 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."[104] 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 25.252(b)(2). As noted above, DISH plans to unify the band, thereby eliminating any concern

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[101] TerreStar Modification Request at 12-13; Declaration of Stephen Thompson ¶ 8.

[102] 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. The Applicants intend 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. Declaration of Stephen Thompson ¶ 10; *DBSD ATC Order*, 24 FCC Rcd. at 195 ¶ 64 (citing 47 C.F.R. §§ 24.238(b), 27.53(g)(1)). The Applicants request that the Commission clarify that this measurement procedure is acceptable.

[103] TerreStar Modification Request at 13; Declaration of Stephen Thompson ¶ 9.

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.[105] The Commission has already granted the identical waiver to DBSD for similar reasons, and its rationale remains sound.[106]

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, the Applicants agree to accept the same conditions the Commission attached to the grant of these waivers to DBSD.

E. DISH's Commitments if Flexibility Is Granted

1. Buildout Commitments

In addition to its commitment to provide nationwide MSS service, if the above requested flexibility is granted, DISH will also make certain substantial terrestrial network deployment commitments intended to increase wireless broadband competition, including in rural areas. Specifically, at the commencement of its terrestrial wireless operations, DISH plans to deploy the most advanced wireless broadband service using the LTE Advanced standard. The requested flexibility is, in fact, critical to DISH's ability to obtain base station equipment and handsets. Chipset and other manufacturers might not be willing to develop and supply devices for ATC

[104] *DBSD ATC Order*, 24 FCC Rcd. at 195 ¶ 64; Declaration of Stephen Thompson ¶ 11.
[105] *Id.* at 194 ¶ 62.
[106] *Id.*

service in the S-band without certainty that DISH has obtained the necessary regulatory approvals to proceed with its plan.

Based on the projected availability of the LTE Advanced standard and related technology, and assuming that DISH obtains all of the flexibility requested in this Application, DISH is prepared to work with the Commission to develop a reasonable, attainable buildout schedule keyed to commercial availability of the LTE Advanced standard. DISH is committed to developing a buildout schedule consistent with FCC precedent and based on the buildout principles established in the Sprint/Nextel and Sprint/Clearwire transaction decisions.[107]

2. Integrated Network, Sufficient Satellite Capacity

Additionally, and also contingent upon the grant of the requested flexibility, DISH commits to creating a technically integrated network in which all network traffic, whether terrestrial or satellite, is processed and handled by the same integrated network and support systems. Moreover, to ensure a continuing robust MSS service, DISH will ensure sufficient satellite capacity is available to support a viable nationwide MSS offering.

V. PROCEDURAL REQUESTS

A. Permit-But-Disclose Status

The Applicants request 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 other transactions.

[107] *See generally Sprint-Nextel Order*, 20 FCC Rcd. 13967; *Sprint-Clearwire Order*, 23 FCC Rcd. 17617.

B. Consolidation with TerreStar's Application for Modification of ATC Authority

The Applicants have filed a contemporaneous request to modify the TerreStar ATC authorization,[108] to the extent necessary, in conformity with any grant of the waivers requested herein. The public interest justifies these modifications for the same reasons that were discussed above in connection with the waiver request.[109] Applicants request that the Commission consider and act on the modification request and this Application jointly and concurrently.

C. Consolidation with DBSD's Transfer and Modification Applications

Applicants request that the Commission consolidate its review of this Application with that previously submitted by DISH for approval of the transfer of control of DBSD, as well as with the amendment and modification requests being filed today by DISH and DBSD.[110] Consolidated review of these applications will minimize the burden on both the Commission and the Applicants, and provide the Commission with the benefit of a more complete record and context. Indeed, the DISH-DBSD Application, filed months before the Agreement was entered into by the Applicants, discussed the competitive effects and benefits of that transaction with reference to DISH's interest in both DBSD and TerreStar.[111] An evaluation of the benefits of the transaction requires precisely this "holistic" view.

VI. CONCLUSION

The transaction complies with all applicable Commission rules and regulations and will serve the public interest. It will enhance competition and help a company distribute meaningful

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[108] TerreStar License Inc, Debtor-in-Possession, SES-LIC-20061206-02100 (granted Dec. 13, 2010) (Call Sign E060430).

[109] *See* discussion, *supra*, Part IV.

[110] *See* DISH-DBSD Application.

[111] *Id*. at 16-17.

recoveries to its creditors in its bankruptcy proceedings. These public interest benefits are not undermined by any threat, either to any Commission objective or to competition. Consequently, the Applicants respectfully request that the Commission grant the Application promptly and provide for any other authority that the Commission finds necessary or appropriate to enable the Applicants to consummate the proposed transaction.

Respectfully submitted,

_____/s/_____

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General Counsel and Secretary
Alexandra Field
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August 22, 2011

DECLARATION OF THOMAS CULLEN

I, Thomas Cullen, being over 18 years of age, swear and affirm as follows:

1. I make this declaration in support of the application for the transfer of the Federal Communications Commission authorizations held by TerreStar License Inc., Debtor-in-Possession ("TerreStar") to DISH Network Corporation's ("DISH") wholly owned subsidiary, Gamma Acquisition L.L.C. ("Gamma").

2. I am the Executive Vice President for DISH. I make this declaration based upon personal knowledge, information provided to me, and belief. I will provide a brief description of DISH's current business and then describe some of the public benefits I expect to come from DISH's acquisition of TerreStar's assets. DISH has also proposed to acquire control over DBSD North America, Inc. ("DBSD").

DISH'S INTEREST IN ACQUIRING TERRESTAR'S AUTHORIZATIONS

3. The TerreStar and DBSD transactions are synergistic. The benefits to the public from both of these are significantly greater than the benefits of each standing alone. DISH has been exploring the amount of spectrum necessary to fulfill the bandwidth demands of a mobile broadband service and to create a viable stand-alone provider. In this respect, DISH believes that each of the two 2 GHz Mobile-Satellite Service ("MSS") assignments (the "S-band") likely would not be enough, standing alone, to support a robust nationwide service. Although the combination of the two S-band assignments will yield a total of 40 MHz of spectrum and will allow DISH to compete to some extent against the terrestrial mobile broadband incumbents, DISH will potentially be facing other Commercial Mobile Radio Service ("CMRS") and MSS players with far more significant spectrum holdings. The ability to combine the S-band spectrum would, if coupled with the regulatory flexibility needed to implement DISH's plans as requested

in the Application, further enhance the effectiveness and competitiveness of DISH's proposed broadband service offering.

4. By bringing together these two 2 GHz MSS providers, DISH will be better positioned to meet rising demand for broadband services, relying on the forthcoming LTE Advanced standard to bring the most spectrum efficient technology to market and leapfrogging the technologies currently in use. These steps are necessary if DISH's service is to become at least a partial competitive substitute for services offered by CMRS carriers on a nationwide basis.

5. This new competitive service will, of course, be propelled by DISH's existing presence in the retail market. As a result of its experience in the Multichannel Video Programming Distribution ("MVPD") business, DISH has the resources, relationships, and experience to deploy an advanced MSS/Ancillary Terrestrial Component ("ATC") network in the S-Band that can potentially provide American consumers with innovative services and greater choice of broadband services. DISH is also poised to take advantage of its nationwide "bricks-and-mortar" network of sales, support, installation, customer service, and maintenance infrastructure to facilitate the deployment of a new service.

DISH'S CURRENT BUSINESS

6. DISH and its affiliate, EchoStar Corporation ("EchoStar"), have a proven record of technological innovation, business acumen, and superior customer service in the satellite industry. Over the past several decades, they have demonstrated in the video delivery market their engineering expertise to launch a satellite service from scratch, grow it to approximately 14 million subscribing households, and in turn provide effective competition against the dominant MVPD incumbents.

7. DISH's roots reach back more than 30 years when its Chairman, Charles W. Ergen, first entered the satellite television business as a distributor of C-band television satellite systems. DISH's predecessor in interest received its first DBS construction permit in 1989. Of the more than a dozen entities that obtained such permits, only DISH and one other company have succeeded. DISH launched its first satellite, EchoStar 1, on December 28, 1995, and began providing service in 1996. Many analysts questioned DISH's ability to reach the 1 million household milestone, yet it vaulted past 1 million subscribers in 1997 and today serves approximately 14 million subscribers.

8. DISH is now a publicly traded Fortune 200 company and consists of the entities that made up the subscription television business of the former EchoStar Communications Corporation (now known as DISH Network Corporation), founded in 1980 by Mr. Ergen, Cantey M. Ergen, and James DeFranco. Last year, DISH reported over $12.6 billion in revenue and more than $9.6 billion in total assets. DISH employs over 35,000 people in the United States.

9. ***Satellite Infrastructure, Services.*** From its 13 owned or leased geostationary satellites, DISH provides extensive entertainment programming, including more than 280 basic video channels, 60 Sirius Satellite Radio music channels, 30 premium movie channels, 35 regional and specialty sports channels, 2,800 local channels, 250 Latino and international channels, and 55 channels of pay-per-view content. DISH is the only satellite distributor to retransmit local-into-local television stations in all 210 of the nation's markets, and currently offers High Definition ("HD") local channels in more than 160 markets. In addition, DISH offers 215 national HD channels, the single largest HD offering by any MVPD in the nation.

10. To control its satellites and uplink content to them, DISH uses two principal uplink facilities, owned by EchoStar and located in Cheyenne, Wyoming and Gilbert, Arizona.

DISH also uses five regional uplink facilities, also owned and operated by EchoStar, that allow it to maximize the use of the spot-beam capabilities of certain owned and leased satellites. Programming content is delivered to these facilities by fiber or satellite, where it is then processed, compressed, encrypted, and then uplinked to satellites for delivery to consumers. DISH also has its own local "receive" facilities in most of the nation's markets, established to collect local television stations' signals, which are then sent to its aforementioned uplink facilities via fiber optic networks.

11. DISH has also moved to satisfy burgeoning demand for online content and marry online distribution to its "linear" distribution service. DISHOnline.com, for example, gives DISH subscribers the ability to watch television programs, movies, and clips online at no additional charge with their paid subscription and compatible equipment. DISHOnline.com offers more than 150,000 movies, television shows, clips, and trailers. DISH's primary goal is to be the best at delivering video, anytime, anywhere. EchoStar's Slingbox with its "placeshifting" technology is another natural fit for that goal, complementing the service that DISH provides its subscribers by empowering them to access their programming wherever they are via an encrypted Internet connection. Through its recent acquisition of most of the assets of Blockbuster Inc. ("Blockbuster"), DISH has augmented its TV and streaming offerings with additional content and delivery methods, including more than 100,000 movies, TV shows, and games available via digital delivery as well as through the mail; new titles available 28 days before Netflix or Redbox; with the added benefit of instant exchanges at participating neighborhood Blockbuster stores.

12. ***Engineering Experience.*** DISH's extensive engineering experience will facilitate the melding of satellite and terrestrial wireless capabilities into a compelling consumer

service. DISH and EchoStar are responsible for numerous breakthroughs in satellite and wireless technology: the first to develop a UHF remote control; the first to offer a satellite receiver for less than $200; the first to offer an integrated receiver descrambler for C-band satellite TV; the first to offer satellite television receivers with built-in digital video recorders ("DVRs"); the first to offer HD programming in 1080p; the first to offer a multi-room HD and DVR satellite receiver; and more. Currently, DISH's wholly owned subsidiary, Manifest Wireless LLC, is conducting testing in Atlanta, Georgia on technology to utilize Manifest's 700 MHz licenses, as well as on the technology for using the 2 GHz spectrum at issue in this Application.

13. ***Nationwide Customer-Oriented Infrastructure.*** DISH's existing nationwide customer-interfacing infrastructure is also directly relevant to ensuring the highest and best use of the 2 GHz frequencies covered by this Application. DISH uses twelve internally operated or outsourced customer-service centers to handle calls from prospective and existing customers – including call centers in Arizona, Colorado, New Jersey, New York, Ohio, Oklahoma, Texas, Virginia, and West Virginia. DISH also operates four service centers in Colorado, South Carolina, and Texas, and three distribution centers in California, Colorado, and Georgia.

14. To sell its service, install its equipment, and ensure customer satisfaction, DISH has built and manages a network that would be difficult for any new service provider to replicate. DISH has developed partnerships with thousands of independent third-party retailers, local and regional consumer electronics stores, nationwide retailers, and telecommunications companies. New customers receive high quality installation service by one of over 5,000 installers employed by DISH and another 7,500 contractors, located nationwide, while existing customers receive support from maintenance and repair centers located across the nation. DISH's Blockbuster

acquisition has further enhanced DISH's ability to reach consumers through 1,500 bricks-and-mortar retail stores spread across the country.

15. These investments have benefited consumers and ushered in effective competition in the subscription television market. DISH is known as the value leader among all MVPDs. The company has a reputation for keeping internal costs low in order to pass savings on to subscribers. DISH's single-minded focus on continually improving the customer experience has consistently earned it accolades from customer surveys.

16. ***EchoStar.*** EchoStar was "spun off" from DISH on January 1, 2008. EchoStar continues to provide DISH with considerable technical expertise and facilities both in satellite operations and the design of hardware and service solutions for DISH. EchoStar is the sole supplier of digital set-top boxes to DISH, is a key provider of engineering services to DISH, and is a major provider of core satellite capacity for DISH's DBS service. EchoStar also designs, develops, and distributes digital set-top boxes and related products, including its Slingbox "placeshifting" technology. It provides digital broadcast operations, including satellite uplinking/downlinking, transmission services, signal processing, conditional access management, and other services. EchoStar employs some 1,800 engineers, holds 76 patents, and has approximately 1,100 patent applications on file. Moreover, EchoStar recently acquired Hughes Communications, Inc., a leading provider of fixed satellite broadband and network management solutions to the consumer and business markets. That acquisition will enable EchoStar to improve the effectiveness and availability of fixed satellite broadband nationwide.

BENEFITS FROM THE MERGER AND DISH'S PLAN TO INCORPORATE TERRESTAR'S AUTHORIZATIONS INTO DISH

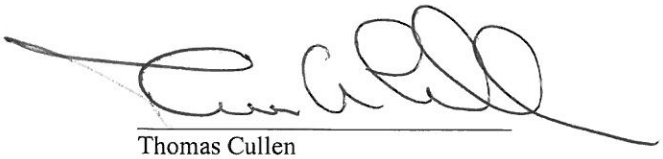
17. DISH plans to deploy an MSS/ATC system using the full 40 MHz of S-band spectrum with in-orbit active and spare capacity on TerreStar's T-1 and DBSD's G-1 satellites,

subject to grant of TerreStar's and DBSD's modification applications and waiver requests, and using the latest in satellite and terrestrial technologies. These broadband services will be offered over a single, technically integrated network for all satellite and terrestrial traffic. The offerings could consist of mobile, portable, or fixed broadband services individually or a combination thereof. DISH expects that the consumer equipment will include broadband-capable tablet computers, among other devices. Once the network is deployed, consumers will be able to use their devices for high-speed Internet access as well as a myriad of IP-based, over-the-top applications, including video. DISH anticipates offering broadband services both on a stand-alone basis and in a consumer-friendly bundle with its multichannel video services.

18. As part of its offering, DISH intends to continue supporting the GENUS™ handset phone (including, among other things, sales, marketing, technical assistance, and software and network maintenance) unless and until a new satellite/terrestrial hybrid device can be developed and deployed by DISH. Future iterations of the GENUS™ phone (or a successor device) may also feature improved interoperability with DBSD's G-1 satellite – the current GENUS™ already has a level of operability with that satellite.

19. This transaction represents an important first step in obtaining spectrum necessary to establish DISH as a viable provider of mobile broadband services. Although still modest in comparison to the holdings of many incumbent mobile broadband providers, the spectrum assignments contemplated by the TerreStar and DBSD transactions, taken together, provide an essential foundation for DISH's ability to compete against them.

The foregoing declaration has been prepared using facts of which I have personal knowledge or upon information provided to me. I declare under penalty of perjury that the foregoing is true and correct to the best of my information, knowledge, and belief. Executed on August 22, 2011.



Thomas Cullen
Executive Vice President

DECLARATION OF DENNIS MATHESON

I, Dennis Matheson, being over 18 years of age, swear and affirm as follows:

1. I make this declaration in support of the application for the transfer of the Federal Communications Commission ("FCC") authorizations held by TerreStar License Inc., Debtor-in-Possession to DISH Network Corporation's ("DISH") wholly owned subsidiary, Gamma Acquisition L.L.C. ("Gamma").

2. I am the Chief Technology Officer for TerreStar Networks, Inc., Debtor-in-Possession ("TerreStar"). In this capacity, I am responsible for planning and driving the technical direction and delivery for development of the satellite and network systems and handset technologies for TerreStar.

3. I make this declaration based upon personal knowledge, information provided to me, and belief. I will provide a brief description of TerreStar's Mobile-Satellite Service ("MSS") system in furtherance of deploying a hybrid mobile broadband system using its MSS and Ancillary Terrestrial Component ("MSS/ATC") authority and its hybrid satellite/terrestrial capabilities.

TERRESTAR'S TECHNOLOGY AND SERVICES

4. Today, TerreStar offers a next-generation mobile broadband network through a combination of the TerreStar-1 geostationary satellite, an all-Internet Protocol ("IP") core network, and the GENUS™ handset, North America's first integrated satellite/cellular smartphone. TerreStar currently provides consumers with ubiquitous satellite coverage throughout all 50 states, Puerto Rico, and the U.S. Virgin Islands, enabling applications tailored to homeland security, public safety, disaster preparedness, and rural and underserved community needs across North America.

5. The TerreStar-1 satellite has an 18 meter reflector, has a wing-span of approximately 106 feet, is roughly 5 stories tall, and weighs 15,220 pounds. TerreStar's spot-beam technology, coupled with Ground Based Beam Forming, allows TerreStar to allocate power and spectrum to situation-specific incidents, ensuring capacity when and where it is needed. In combination, this has allowed TerreStar to develop a consumer-sized device capable of two-way mobile communication directly with the satellite.

6. In September 2010, TerreStar began providing commercial service as a wholesale provider of satellite roaming to AT&T Mobility ("AT&T"). AT&T markets the GENUS™ smartphone, enabling enterprise, government, and small business customers to add satellite access as a roaming option to AT&T's terrestrial mobile service. As a result, TerreStar's 2 GHz MSS service is now available to AT&T customers in unserved and underserved locations and as back-up capacity for public safety agencies, first responders, and others during times of crisis when terrestrial wireless networks may be unavailable.

7. The GENUS™ smartphone was developed by TerreStar and is a quad-band device capable of MSS in the 2 GHz band, in addition to multi-band communication on terrestrial GSM networks, using the licensed 800, 900, 1800, and 1900 MHz mobile bands. At present, a GENUS™ device can be authenticated for standalone MSS use or for communication on any authorized GSM network. While the GENUS™ today does not utilize the 2 GHz MSS band for terrestrial service, instead relying on existing terrestrial networks, future iterations can have the capability to use the S-band for terrestrial transmissions. The GENUS™ incorporates GEO-Mobile Radio Third Generation (GMR-1 3G) release 3 specifications, an adaptation of the EDGE air interface for satellite-delivered VoIP and packet data applications over IP, such as email, Internet access, Web browsing, and FTP.

8. The satellite and smartphone technology developed by TerreStar and other MSS/ATC licensees is designed to integrate MSS into the broad 3G to 4G mobile wireless market to complement networks based on 3GPP and IP Multimedia Subsystem ("IMS") standards by providing the ubiquitous coverage that cannot be achieved solely through terrestrial networks.

9. All networks – wireline, wireless, and satellite – have been converging upon integrated, packet data architectures, and one of several defining characteristics of 4G wireless networks is an all-IP architecture. As a result, and owing to the evolution of satellite technology in recent years, TerreStar has deployed an all-IP core network managed by an IMS software architecture to provide, aggregate, and customize applications across various access methods and media devices. All call processing by TerreStar's network is done in the packet-switched domain via a core IMS network that primarily uses Session Initiation Protocol. TerreStar's network also features Radio Resource Management capabilities that will coordinate spectrum use, load factors, and transmission power between the satellite and terrestrial facilities. Devices are able to interconnect with TerreStar's network anchored to satellite gateway facilities and network operations centers in the United States and Canada.

10. Notwithstanding these achievements, in recent years TerreStar has also faced significant challenges. These include accessing sufficient funds for its business plans and the inability to achieve a critical mass of subscribers sufficient to create the economies of scale necessary to reduce costs and increase penetration. I believe the proposed acquisition by DISH will address these challenges.

SUPPORT FOR WAIVER OF SPARE SATELLITE REQUIREMENT

11. The highest risk of satellite 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 redeployment that might be needed for business concerns could be accommodated with limited additional support.

PREVIOUS WAIVER REQUEST

12. The engineering assessments submitted in support of TerreStar's previous waiver requests relating to ATC service, and which are reiterated in the request to transfer the authorizations held by TerreStar to DISH, remain accurate and fully support the corresponding technical waivers sought in the current transfer request.

The foregoing declaration has been prepared using facts of which I have personal knowledge or upon information provided to me. I declare under penalty of perjury that the foregoing is true and correct to the best of my information, knowledge and belief. Executed on August 19, 2011.

Dennis Matheson
Chief Technology Officer

DECLARATION OF STEPHEN THOMPSON

I, Stephen Thompson, being over 18 years of age, swear and affirm as follows:

1. I make this declaration in support of the application for the transfer of the Federal Communications Commission authorizations held by TerreStar License Inc., Debtor-in-Possession ("TerreStar") to DISH Network Corporation's ("DISH") wholly owned subsidiary, Gamma Acquisition L.L.C. ("Gamma").

2. I am a Staff Engineer for DISH. In that capacity, I oversee the technical analysis of DISH spectrum assets and wireless deployment opportunities. I have over 25 years of experience in radio frequency ("RF") and systems engineering.

3. I make this declaration based upon personal knowledge, information provided to me, and belief.

4. I make this declaration in support of DISH's request for waivers of certain of the Commission's technical rules for Ancillary Terrestrial Component ("ATC") operations to harmonize those rules with the waivers already provided to New DBSD Satellite Services G.P., Debtor-in-Possession ("DBSD").

HARMONIZATION OF TERRESTAR AND DBSD REGULATORY TREATMENT

5. DISH and TerreStar are requesting the following waivers in their application, to harmonize the service environment between TerreStar and DBSD:

Section	Rule	Waiver Request
25.252(a)(1)	[ATC base stations shall not] Exceed EIRP of -100.6 dBW/4 kHz for out-of-channel emissions at the edge of the MSS licensee's selected assignment.	[ATC base stations shall not] Exceed an out-of-channel emissions limit at the edge of the MSS licensee's selected assignment specified by an attenuation of the transmitter power (P), in watts, by a factor of at least 43 + 10 log (P) dB.

25.252(c)(2)	Emissions on frequencies lower than 1995 MHz and higher than 2025 MHz shall be attenuated by at least 70 + 10 log P. Emissions in the bands 1995-2000 MHz and 2020-2025 MHz shall be attenuated by at least a value as determined by linear interpolation from 70 + 10 log P at 1995 MHz or 2025 MHz, to 43 + 10 log P dB at the nearest MSS band edge at 2000 MHz or 2020 MHz respectively.	Emissions on frequencies higher than 2020 MHz shall be attenuated by at least 43 + 10 log (P) dB. Emissions in the band 1995-2000 MHz shall be attenuated by at least a value as determined by linear interpolation from 70 + 10 log (P) dB at 1995 MHz, to 43 + 10 log (P) dB to the MSS band edge at 2000 MHz.
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 least 26 dB below the transmitter power.
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.

6. These waivers are identical to those requested by DBSD on January 15, 2009, and DISH and TerreStar agree 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.

7. 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. DISH now intends to unify the band by combining DBSD's and TerreStar's 2 GHz MSS 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.

8. A waiver of Section 25.252(c)(2) also will not create significant risk of interference above the uplink band edge at 2020 MHz. 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.

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

10. 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. The Applicants therefore intend 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.

11. Finally, the requested waiver of the limit on out-of-channel emissions under Section 25.252(b)(2) will also not raise interference concerns. As noted above, DISH plans to unify the band, thereby eliminating any concern over inter-party operational interference. Further, 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.

ADVANTAGES OF LTE ADVANCED

12. The ability to combine the spectral assignments of DBSD and TerreStar into 2x20 MHz blocks will allow DISH to deploy an advanced 4G network and maximize its spectrum efficiency. The spectrum efficiency of a 2x20 MHz allocation will enable DISH to offer much improved wireless broadband to consumers.

13. DISH plans to deploy its network based on the LTE Advanced standard from the outset for its next generation MSS/ATC operations. LTE Advanced is the focus of standardization work by vendors and carriers in 3GPP for broadband wireless communications globally, and commercial devices are expected to be generally available by 2014. As proposed, LTE Advanced significantly increases the capacity of wireless networks relative to current LTE systems, with downlink capacity that can meet the growing demand for wireless broadband by using the combination of advanced interference management techniques, heterogeneous networks that optimize system capacity, and the combining of radio carriers to generate higher degrees of spectral efficiency than current LTE systems.

14. One of the key advantages of LTE Advanced is its support for heterogeneous networks composed of cells of many different sizes and strengths. Such networks are more spectrally efficient than today's homogeneous networks. Heterogeneous networks increase geographic re-use of spectrum in high-traffic, dense user areas through additional use of "pico" and "femto" cells, while still permitting wide coverage in less dense, lower traffic areas using

more traditional “macro” cells. Networks incorporating pico and femto cells are expected to become much more efficient with the availability of LTE Advanced commercial devices, and their improved efficiencies will be a key part of increasing network capacity as network designers approach the theoretical limits of how much data can be packed into a single wireless signal. Future releases of LTE Advanced are expected to utilize advanced interference management technology to enable a device to communicate with multiple base stations at the same time. This would allow users to seamlessly transition through these topologically complex wireless networks and therefore facilitate optimal integration with MSS. In short, this innovative technology will allow DISH’s initial deployment to use the most advanced, spectrally efficient technology and generate significant public interest benefits. Notably, to capture the efficiencies of an LTE Advanced network, network rollout and device availability must go hand in hand.

The foregoing declaration has been prepared using facts of which I have personal knowledge or upon information provided to me. I declare under penalty of perjury that the foregoing is true and correct to the best of my information, knowledge and belief. Executed on August 22, 2011.

Stephen Thompson
Staff Engineer

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 175º 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 83º W.L., 105º W.L., 113º W.L., and 121º W.L. orbital locations.[4] DISH's petition for reconsideration of this decision was denied.[5]

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 113º W.L. orbital location.[6]

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[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 83º W.L., 105º W.L., 113º W.L., and 121º 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 83º W.L., 105º W.L., 113º W.L., and 121º 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 77º 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 DIRECTORS[4]

DISH Network Corporation

Executive Officers:

Joseph P. Clayton	President and Chief Executive Officer
Thomas A. Cullen	Executive Vice President, Corporate Development
Bernard L. Han	Executive Vice President and Chief Operating Officer
Robert E. Olson	Executive Vice President and Chief Financial Officer
R. Stanton Dodge	Executive Vice President, General Counsel and Secretary
W. Erik Carlson	Executive Vice President, DNS and Service Operations
James DeFranco	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.

ATTACHMENT 3

SECTION 63.18 DISCLOSURES

In support of this Application, TerreStar License Inc., Debtor-in-Possession ("TSL DIP") and Gamma Acquisition L.L.C. ("Gamma") (together with TSL DIP, the "Applicants") submit the following information pursuant to Section 63.24(e) of the Commission's rules, including the information requested in Section 63.18:

A. Name, address and telephone number of each Applicant[1]

Information for Assignor: TerreStar License Inc., Debtor-in-Possession, 12010 Sunset Hills Road, Reston, VA 20190, (703) 483-7800.

Information for Assignee:[2] Gamma Acquisition L.L.C., 9601 South Meridian Boulevard, Englewood, CO 80112, (303) 723-1000.

B. Applicant's jurisdiction of organization[3]

Information for Assignor: TerreStar License Inc., Debtor-in-Possession is a corporation organized under the laws of Delaware.

Information for Assignee: Gamma is a corporation organized under the laws of Colorado.

C. Contact persons for correspondence (Answer to Question 10 to FCC Form 214)[4]

Information for Assignor:

Douglas Brandon
TerreStar License Inc., Debtor-in-Possession
12010 Sunset Hills Road
Reston, VA 20190
(703) 483-7800

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[1] *See* 47 C.F.R. § 63.18(a).

[2] The 214 authorizations are being assigned directly to Gamma, which is a wholly owned subsidiary of DISH Network Corporation. DISH Network Corporation is located at 9601 South Meridian Boulevard, Englewood, CO 80112, tel. (303) 723-1000, and is a corporation organized under the laws of Nevada.

[3] *See id.* § 63.18(b).

[4] *See id.* § 63.18(c).

With copy to:

Tom W. Davidson
Akin Gump Strauss Hauer and Feld LLP
1333 New Hampshire Avenue, NW
Washington, DC 20036
(202) 887-4000

Information for Assignee:

R. Stanton Dodge
DISH Network Corporation
9601 South Meridian Boulevard
Englewood, CO 80112
(303) 723-1000

With copy to:

Pantelis Michalopoulos
Steptoe & Johnson, LLP
1333 Connecticut Avenue, NW
Washington, DC 20036
(202) 429-6494

D. International Section 214 authorizations (Answer to Question 10 to FCC Form 214)[5]

Information for Assignor: TSL DIP currently holds two international Section 214 authorizations, which authorize it to provide (1) facilities-based and resale services and (2) international MSS via the TerreStar-1 satellite.[6]

Information for Assignee: Gamma has not previously received international Section 214 authority.

E. Section 63.18(e) is not applicable.

F. Section 63.18(f) is not applicable.

[5] *See id.* § 63.18(d).

[6] On June 28, 2010, the Commission granted TerreStar License Inc.'s ("TSL") applications for two international Section 214 authorizations. *See* ITC-214-20100513-00194 and ITC-214-20100513-00195. On November 3, 2010, the Commission granted TSL's *pro forma* assignment of its international Section 214 authorizations from TSL to TSL DIP. *See* ITC-ASG-20101022-00423.

G. Section 63.18(g) is not applicable.

H. Address citizenship and principal businesses of any person or entity that directly or indirectly owns at least ten percent of the equity of the Applicant (Answer to Question 11 to FCC Form 214)[7]

Pursuant to the Asset Purchase Agreement approved by the Bankruptcy Court for the Southern District of New York, the Section 214 authorizations referenced above will be transferred to Gamma, a wholly owned subsidiary of DISH Network Corporation ("DISH").[8]

DISH is controlled by Mr. Charles W. Ergen, Chairman of its Board of Directors. Directly or indirectly through trusts, Mr. Ergen holds shares representing 53.3% of the equity interest (assuming conversion of all shares of outstanding Class B Common Stock into Class A Common Stock) and 90.4% of the voting interest in the company.[9] The address for DISH and Mr. Ergen is 100 Inverness Terrace East, Englewood, Colorado 80112. DISH's primary business is providing satellite television service to residential and business customers.

Additionally, Goldman Sachs Asset Management L.P. holds shares representing 10.5%

[7] *See id.* § 63.18(h).

[8] In order to account for the possibility that TSN DIP and TSL DIP will exit their bankruptcy proceeding before consummation of the section 214 authorization transfer from TSL DIP to Gamma, TSL DIP soon will request Commission authority in a separate application for the *pro forma* involuntary assignment of TSL DIP's licenses and authorizations to TerreStar License Inc. after its emergence from bankruptcy ("New TSL") and to the involuntary transfer of control of New TSL to a trust under the supervision of the bankruptcy court. The involuntary *pro forma* transfer of control of New TSL to the trust is a technical interim step prior to the ultimate transfer of the authorizations to Gamma and would be irrelevant to the merits of the Commission's review of the instant transaction.

[9] Mr. Ergen is deemed to own beneficially all of the Class A Shares owned by his spouse, Cantey M. Ergen.

of the equity interest (assuming conversion of all shares of outstanding Class B Common Stock into Class A Common Stock) and 0.85% of the voting interest in DISH.[10]

No other person or entity is believed to own more than 10% of any class of outstanding stock in DISH.

I. Interlocking directorates (Answer to Question 12 to FCC Form 214)[11]

Gamma does not have any interlocking directorates with a foreign carrier.

J. Statement as to affiliation with foreign carriers (Answer to Questions 14 and 15 to FCC Form 214)[12]

Gamma hereby certifies that it is affiliated with Gamma Acquisition Canada ULC ("Gamma ULC"), a Nova Scotia, Canada ULC. Gamma ULC is wholly owned by Gamma Acquisition Holdings Corporation, a Colorado Corporation, which in turn is wholly owned by DISH. DISH therefore wholly owns both Gamma and Gamma ULC. Pursuant to its existing authorization, TSL DIP may offer service to Canada. After the transfer, such authority will be held by Gamma, and Gamma and Gamma ULC will be under the common control of DISH.

K. Destination markets

The destination country, Canada, is a member of the World Trade Organization.

L. Services to affiliated destination markets[13]

Gamma will not resell the international switched services of an unaffiliated U.S. carrier to a destination country in which an Applicant is a foreign carrier or is affiliated with a foreign carrier. Even were Gamma to do so, the Applicants would satisfy the requirements of Section

[10] 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).

[11] *See* 47 C.F.R. § 63.18(h).

[12] *See id.* § 63.18(i).

[13] *See id.* § 63.18(k)-(l).

63.10(a)(3) of the Commission's rules because their only foreign carrier affiliate, Gamma ULC, is a relatively new entrant into the telecommunications market in Canada and does not hold a significant share of Canada's domestic or international telecommunications market. Thus, for the purposes of resale of international switched services of unaffiliated U.S. carriers, Gamma will meet the criteria for non-dominant classification under Section 63.10(a)(3) of the Commission's rules.

M. Non-dominant classification (Answer to Question 16 to FCC Form 214)[14]

Gamma should be authorized to serve all destination markets as a non-dominant carrier for the provision of (1) facilities-based and resale services, and (2) international MSS via the TerreStar-1 satellite because no company affiliated with an Applicant will hold a 50% or greater share of the international transport or local access markets in a destination country. Gamma's only foreign affiliate, Gamma ULC, is a relatively new entrant into the telecommunications market in Canada and does not hold a significant share of Canada's domestic or international telecommunications market. Therefore, based on the Commission's rules governing the regulatory classification of international carriers, Gamma should be authorized to serve all destination markets as a non-dominant carrier.

N. Special concessions[15]

The Applicants hereby certify that they have not agreed to accept special concessions directly or indirectly from any foreign carrier with respect to any U.S. international route in which the foreign carrier possess market power on the foreign end of the route. The Applicants will not enter into such agreements in the future.

[14] *See id.* § 63.18(m).

[15] *See id.* § 63.18(n).

O. Anti-Drug Abuse Act certification[16]

Each of the Applicants hereby certifies that it is not subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862.

P. Streamlined processing (Answer to Question 20 to FCC Form 214)[17]

This Application qualifies for streamlined processing pursuant to Section 63.12 of the Commission's rules because, in accordance with Section 63.12(c): (i) the Applicants are not affiliated with any dominant U.S. carrier whose services Gamma may resell; (ii) Gamma is affiliated with Gamma ULC, a foreign carrier which qualifies for a presumption of nondominance under Section 63.10(a)(3) of the Commission's rules because Gamma ULC lacks a 50% market share with respect to Canada's international transport and local access markets; and (iii) none of the other scenarios outlined in Section 6.12(c) of the Commission's rules apply.

The Applicants agree not to consummate the transaction as proposed herein until the Commission approves the transfer of the authorizations requested herein.

[16] *See id.* § 63.18(o).

[17] *See id.* § 63.18(p).