

321721

READ INSTRUCTIONS CAREFULLY BEFORE PROCEEDING  
(1) LOCKBOX # 358210

FEDERAL COMMUNICATIONS COMMISSION  
REMITTANCE ADVICE

Approved by OMB  
3060-0589  
Page No 1 of 1

FCC/REGISTRATION NUMBER: S2435 SAT-LOA-20020225-00023

SPECIAL USE  
FCC USE ONLY

(2) PAYER NAME (if paying by credit card, enter name)  
**Stephoe & Johnson LLP**  
(4) STREET ADDRESS LINE NO. 1  
**Attn: Pantelis Michalopoulos**  
(5) STREET ADDRESS LINE NO. 2  
**1330 Connecticut Avenue, N.W.**

S2435 SAT-LOA-20020225-00023  
EchoStar Satellite Corporation  
New EchoStar-1

AMOUNT PAID (U.S. Dollars and cents)  
**\$755.00**

(6) CITY: **Washington** (7) STATE: **DC** (8) ZIP CODE: **20036-1795**

(9) DAYTIME TELEPHONE NUMBER (include area code): **202-429-6494** (10) COUNTRY CODE (if not in U.S.A.):

FCC REGISTRATION NUMBER (FRN) AND TAX IDENTIFICATION NUMBER (TIN) REQUIRED

(11) PAYER (FRN): **0003-7546-29** (12) PAYER (TIN): **521349790**

IF PAYER NAME AND THE APPLICANT NAME ARE DIFFERENT, COMPLETE SECTION B  
IF MORE THAN ONE APPLICANT, USE CONTINUATION SHEETS (FORM 159-C)

(13) APPLICANT NAME: **EchoStar Satellite Corporation**

(14) STREET ADDRESS LINE NO. 1: **Attn: David K. Moskowitz**

(15) STREET ADDRESS LINE NO. 2: **5701 South Santa Fe**

(16) CITY: **Littleton** (17) STATE: **CO** (18) ZIP CODE: **80120**

(19) DAYTIME TELEPHONE NUMBER (include area code): **303-723-1000** (20) COUNTRY CODE (if not in U.S.A.):

FCC REGISTRATION NUMBER (FRN) AND TAX IDENTIFICATION NUMBER (TIN) REQUIRED

(21) APPLICANT (FRN): **0004-2658-80** (22) APPLICANT (TIN): **841114039**

COMPLETE SECTION C FOR EACH SERVICE. IF MORE BOXES ARE NEEDED, USE CONTINUATION SHEET

(23A) CALL SIGN/OTHER ID: **New EchoStar-1** (24A) PAYMENT TYPE CODE: **MPD** (25A) QUANTITY:

(26A) FEE DUE FOR (PTC): **\$755.00** (27A) TOTAL FEE: **\$755.00** FCC USE ONLY

(28A) FCC CODE 1: (29A) FCC CODE 2:

(23B) CALL SIGN/OTHER ID: (24B) PAYMENT TYPE CODE: (25B) QUANTITY:

(26B) FEE DUE FOR (PTC): (27B) TOTAL FEE: FCC USE ONLY

(28B) FCC CODE 1: (29B) FCC CODE 2:

SECTION D - CERTIFICATION

(30) CERTIFICATION STATEMENT  
I, David K. Moskowitz, certify under penalty of perjury that the foregoing and supporting information is true and correct to the best of my knowledge, information and belief.  
SIGNATURE: David K. Moskowitz DATE: 2/25/2002

SECTION E - CREDIT CARD PAYMENT INFORMATION

(31)  MASTERCARD  VISA  
MASTERCARD/VISA ACCOUNT NUMBER: \_\_\_\_\_ EXPIRATION DATE: \_\_\_\_\_

I hereby authorize the FCC to charge my VISA or MASTERCARD for the service(s)/authorization herein described.  
SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

321722

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REMITTANCE ADVICE

Approved by OMB  
3060-0589  
Page No 1 of 1

(1) LOCKBOX # 358210

FCC/MELLON FEB 25 2002

SPECIAL USE

FCC USE ONLY

SECTION A - PAYER INFORMATION

(2) PAYER NAME (if paying by credit card, enter name exactly as it appears on your card)  
**Step toe & Johnson LLP**

(3) TOTAL AMOUNT PAID (U.S. Dollars and cents)  
**\$26,295.00**

(4) STREET ADDRESS LINE NO. 1  
**Attn: Pantelis Michalopoulos**

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**1330 Connecticut Avenue, N.W.**

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**Washington**

(7) STATE  
**DC**

(8) ZIP CODE  
**20036-1795**

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**202-429-6494**

(10) COUNTRY CODE (if not in U.S.A.)

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**0003-7546-29**

(12) PAYER (TIN)  
**521349790**

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IF MORE THAN ONE APPLICANT, USE CONTINUATION SHEETS (FORM 159-C)

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**Attn: David K. Moskowitz**

(15) STREET ADDRESS LINE NO. 2  
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**Littleton**

(17) STATE  
**CO**

(18) ZIP CODE  
**80120**

(19) DAYTIME TELEPHONE NUMBER (include area code)  
**303-723-1000**

(20) COUNTRY CODE (if not in U.S.A.)

FCC REGISTRATION NUMBER (FRN) AND TAX IDENTIFICATION NUMBER (TIN) REQUIRED

(21) APPLICANT (FRN)  
**0004-2658-80**

(22) APPLICANT (TIN)  
**841114039**

COMPLETE SECTION C FOR EACH SERVICE, IF MORE BOXES ARE NEEDED, USE CONTINUATION SHEET

(23A) CALL SIGN/OTHER ID  
**New EchoStar-1**

(24A) PAYMENT TYPE CODE  
**MXD**

(25A) QUANTITY

(26A) FEE DUE FOR (PTC)  
**\$26,295.00**

(27A) TOTAL FEE  
**\$26,295.00**

FCC USE ONLY

(28A) FCC CODE 1

(29A) FCC CODE 2

(23B) CALL SIGN/OTHER ID

(24B) PAYMENT TYPE CODE

(25B) QUANTITY

(26B) FEE DUE FOR (PTC)

(27B) TOTAL FEE

FCC USE ONLY

(28B) FCC CODE 1

(29B) FCC CODE 2

SECTION D - CERTIFICATION

(30) CERTIFICATION STATEMENT

I, David K. Moskowitz, certify under penalty of perjury that the foregoing and supporting information is true and correct to the best of my knowledge, information and belief.

SIGNATURE David K. Moskowitz

DATE 2/25/2002

SECTION E - CREDIT CARD PAYMENT INFORMATION

(31)  MASTERCARD

MASTERCARD/VISA ACCOUNT NUMBER:

EXPIRATION DATE:

VISA

I hereby authorize the FCC to charge my VISA or MASTERCARD for the service(s)/authorization herein described.

SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

February 25, 2002

Federal Communications Commission  
International Bureau -- Satellites  
P.O. Box 358210  
Pittsburgh, PA 15251-5210

Re: Application of EchoStar Satellite Corporation and Hughes Electronics Corporation for Authority to Launch and Operate NEW ECHOSTAR 1

To Whom It May Concern:

On behalf of EchoStar Satellite Corporation and Hughes Electronics Corporation, enclosed please find for filing an original and four copies of an application for authority to launch and operate a new state-of-the-art, spot-beam direct broadcast satellite, NEW ECHOSTAR 1, at the 110° W.L. orbital location.

Also enclosed is a check in the amount of \$26,295.00 for the applicable "Construction Permit and Launch Authority" filing fee, a check in the amount of \$755.00 for the applicable "License to Operate" filing fee, and two completed FCC Form 159s.

We are also enclosing an additional copy of the application, which we ask you to stamp and return with our messenger.

Please do not hesitate to contact us should you have any questions.

Respectfully submitted,



Pantelis Michalopoulos  
Philip L. Malet  
Rhonda M. Bolton  
Steptoe & Johnson LLP  
Counsel for EchoStar Satellite Corporation

Respectfully submitted,



Gary Epstein  
James H. Barker  
Arthur S. Landerholm  
Latham & Watkins  
Counsel for Hughes Electronics Corporation

**EXPEDITED PROCESSING REQUESTED**

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

In the Matter of )

FCC/MELLON

FEB 25 2002

EchoStar Satellite Corporation  
and Hughes Electronics Corporation

S2435 SAT-LOA-20020225-00023  
EchoStar Satellite Corporation  
New EchoStar-1

for Authority to Launch and Operate  
NEW ECHOSTAR 1 (USABBS-16) )

**APPLICATION FOR AUTHORITY TO LAUNCH  
AND OPERATE NEW ECHOSTAR 1 (USABBS-16)**

EchoStar Satellite Corporation ("EchoStar") and Hughes Electronics Corporation ("Hughes," and together with EchoStar, the "Applicants") hereby apply for authority to launch and operate a new state-of-the-art, spot-beam direct broadcast satellite, NEW ECHOSTAR 1, at the 110° W.L. orbital location. NEW ECHOSTAR 1 is a temporary name for what will become the fifth spot-beam satellite and the sixteenth overall satellite in the merged company's fleet.

Together with the other satellites operated or proposed by the Applicants, NEW ECHOSTAR 1 will help usher in one of the most dramatic of many public interest benefits that will flow directly from the merger of EchoStar's parent corporation, EchoStar Communications Corporation ("ECC"), and Hughes.<sup>1</sup> The companies' two services, DISH Network and DIRECTV®, today each transmit a total of more than *500 identical channels*.

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<sup>1</sup> By a separate application, ECC and Hughes have proposed to transfer their authorizations to Hughes, which will have a new ownership structure and will be renamed EchoStar Communications Corporation ("New EchoStar"). See Consolidated Application of EchoStar Communications Corporation, General Motors Corporation, Hughes Electronics Corporation for Authority to Transfer Control, CS Docket No. 01-348 (filed Dec. 3, 2001) ("New EchoStar Transfer Application").

**EXPEDITED PROCESSING REQUESTED**

Consumers will benefit from the massive increase in Direct Broadcast Satellite ("DBS") capacity that will result from the elimination of this duplicative programming. Indeed, as a direct result of the completion of this merger, consumers across the United States will have access to local broadcast channels with digital-quality television pictures and CD-quality sound in *every one of the 210 Designated Market Areas ("DMAs") covering the country.*

Subsequent to the announcement of the merger agreement on October 28, 2001, as part of the pre-merger transition process, meetings between EchoStar and DIRECTV personnel have been held to analyze the technical and economic feasibility of a "Local Channels, All Americans" plan by which the merged company could offer every U.S. consumer access to satellite-delivered local television signals. After an exhaustive examination of each company's spectrum and satellite assets, as well as questions of commercial feasibility, the companies determined that this plan could become a reality.

By this Application, New EchoStar presents a technically and commercially feasible plan to build, launch and operate a spot-beam spacecraft, NEW ECHOSTAR 1, that, when combined and integrated with the other satellite and spectrum assets of the merged company at all three DBS CONUS orbital locations, will serve all 210 DMAs in the United States, including Alaska and Hawaii, and including full compliance with must carry requirements. The DIRECTV and DISH Network engineers have designed a system that enables the receipt of local channels, other entertainment services and high-speed Internet access using one consumer friendly mini-dish. That 18 x 22-inch satellite dish will enable the receipt of signals from the merged company's multiple orbital locations. New EchoStar will deploy new set-top boxes and satellite dishes free of charge to all existing DIRECTV and DISH Network subscribers who may need them in order to receive their local channels. Consumers across the country will pay the same price for this

**EXPEDITED PROCESSING REQUESTED**

DBS service, *i.e.*, *one nation, one rate card*, regardless of a subscriber's location.

Implementation of the plan will begin immediately upon regulatory approval of the merger, and approval of this Application, and the rollout out can be completed as soon as 24 months thereafter.

Only New EchoStar will be able to undertake this "Local Channels, All Americans" service plan because only the merger will:

- end inefficient use of the DBS spectrum by eliminating the need for each of DIRECTV and EchoStar to transmit more than 500 channels of duplicative programming;
- combine and rationalize each company's spectrum and advanced satellite assets in a way that makes the plan technically feasible; and
- combine the companies' subscriber bases to make it commercially feasible to serve smaller markets and to construct and launch the additional satellite capacity that is necessary to implement the plan.

The addition of NEW ECHOSTAR 1 to New EchoStar's existing and planned constellation of DBS satellites will provide the necessary additional satellite capacity to implement the "Local Channels, All Americans" plan in a technically feasible and commercially viable manner, rather than the technically infeasible and commercially unrealistic approaches proposed by some opponents of the merger.<sup>2</sup> NEW ECHOSTAR 1 will use a combination of the DBS

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<sup>2</sup> Certain petitioners have speculated that each company alone might be able to replicate the benefits of the merger by building "super-satellites" of the petitioners' own design. *See, e.g.*, Petition to Deny of the National Rural Telecommunications Cooperative, CS Docket No. 01-348 (Feb. 4, 2002), Exhibit O (Declaration of Walter L. Morgan); Petition to Deny of Pegasus Communications Corporation, CS Docket No. 01-348 (Feb. 4, 2002), Attachment B (Affidavit and Report of Roger J. Rusch). To the extent not mooted by the "Local Channels, All Americans" plan that will be facilitated by the successful launch and positioning of New EchoStar 1 at 110 °W.L., such proposals are both technically flawed and disregard entirely the issue of commercial feasibility. *See* Hughes and EchoStar, Opposition to Petitions to Deny (Feb. 25, 2002), at Attachment B (Declaration of Dr. Richard J. Barnett), at ¶¶ 45-72; *Id.*, Attachment A (Declaration of Dr. Robert D. Willig), at ¶¶ 9-17. Only the merger will rationalize the available DBS spectrum and

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frequencies<sup>3</sup> at 110° W.L. that are currently licensed to EchoStar and DIRECTV Enterprises, Inc. (“DIRECTV”), a wholly owned subsidiary of Hughes, and will work as an integrated system with the current and planned spot-beam satellite assets of EchoStar and DIRECTV at all three DBS CONUS orbital locations to provide the capacity and coverage necessary to provide the “Local Channels, All Americans” service.

The “Local Channels, All Americans” plan will allow New EchoStar to offer, for the first time, *to all consumers nationwide* a complete substitute to incumbent cable system video offerings, and thereby permit New EchoStar to achieve a new level of vigorous competition to incumbent cable operators. In this regard, the merger is the only way to truly implement Congress’ vision under the Satellite Home Viewer Improvement Act of 1999.<sup>4</sup> The merger will allow New EchoStar to implement Congress’ goal of true, nationwide competition to cable television by allowing satellite carriage of local television signals. Thus, the Applicants submit that grant of this Application is manifestly in the public interest.

This Application is being filed pursuant to established precedent and the Commission’s policy permitting conditional “accommodation” applications.<sup>5</sup> The Applicants request this

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provide the capacity, scale and subscriber base necessary to achieve full local channel service coverage of every DMA in the United States.

<sup>3</sup> The FCC has channelized the available DBS spectrum into thirty-two frequency bands or RF channels. For clarity, these channelized frequency bands will be referred to in this Application as “DBS frequencies.”

<sup>4</sup> Satellite Home Viewer Improvement Act of 1999, Pub. L. No. 106-113, 113 Stat. 1501, 1501A-526 to 1501A-545 (Nov. 29, 1999) (“SHVIA”).

<sup>5</sup> The FCC has explicitly allowed such applications in the satellite area. *See, e.g., Applications of Hughes Communications Galaxy, Inc.*, 3 FCC Rcd 6989, ¶ 11 (1988) (replacement satellite applications filed in anticipation of assignment of satellite licenses from Western Union to Hughes). The submission of such applications also has a long history in the broadcast area. *See, e.g., KTB Broadcasting, Inc.*, 48 FCC 2d 635 (1974); *In re Bronco Broadcasting Co.*, 32 RR 2d 213 (1974). In fact, in the broadcast area, this

authority subject to, and contingent upon, the grant of the New EchoStar Transfer Application. The Applicants request that the authority applied for herein be held by EchoStar Satellite Corporation, which, upon consummation of the ECC-Hughes merger will be a wholly-owned subsidiary of New EchoStar.

**I. BACKGROUND**

NEW ECHOSTAR 1 will be collocated with the other existing and planned New EchoStar-controlled spacecraft at the 110° W.L. orbital location, and will be integrated into the overall New EchoStar DBS constellation. As set forth in the New EchoStar Transfer Application, the New EchoStar DBS constellation will result from the proposed combination of the existing DBS systems operated by EchoStar and by DIRECTV.<sup>6</sup>

EchoStar and other EchoStar subsidiaries own and operate six operational DBS satellites located at the 61.5° W.L., 110° W.L., 119° W.L., and 148° W.L. orbital positions. EchoStar's seventh DBS satellite, EchoStar 7, which is equipped with state-of-the-art spot-beam technology, was launched four days ago on February 21, 2002. EchoStar also plans to launch an additional spot-beam satellite, EchoStar 8, in 2002. Through its DISH Network brand, EchoStar is now a provider of DBS service to more than 6 million U.S. subscribers.

DIRECTV Enterprises, Inc.<sup>7</sup> currently is the licensee for a DBS system consisting of six high-power DBS satellites, which are located at the 101° W.L., 110° W.L. and 119° W.L. orbital

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concept has actually been codified in a rule that allows a proposed assignee to file the application directly. *See* 47 C.F.R. Sec. 73.3517 (a).

<sup>6</sup> *See generally* New EchoStar Transfer Application.

<sup>7</sup> USSB II, Inc., a wholly owned subsidiary of DIRECTV, is the licensee of five of the thirty-two frequencies at the 101° W.L. orbital location and three of the thirty-two frequencies at the 110° W.L. orbital location. *See United States Satellite Broadcasting Co., Inc. Transferor and DIRECTV Enterprises, Inc. Transferee; For Consent to Transfer of Control of the USSB II, Inc. Authorization to Operate a Direct Broadcast Satellite*

positions.<sup>8</sup> This constellation includes DIRECTV's newest satellite, a spot-beam satellite known as DIRECTV 4S, which is located at 101° W.L. In addition, DIRECTV has contracted with Space Systems/Loral to construct another high-power spot-beam satellite, DIRECTV 7S. DIRECTV uses its satellites to provide DBS service to more than 10.7 million U.S. customers.<sup>9</sup>

## II. NEW ECHOSTAR LOCAL BROADCAST CHANNEL CAPABILITY

EchoStar currently provides satellite-delivered local broadcast channels in 36 DMAs using full-CONUS<sup>10</sup> satellite beams, as well as satellites at the 61.5° W.L. and 148° W.L. orbital locations. With EchoStar 7 and 8, EchoStar expects to be able to provide local broadcast channels in approximately 50 DMAs from satellites located at CONUS orbital locations. With all of these satellite assets in place, EchoStar would be capable of utilizing ten of its fifty licensed CONUS DBS frequencies – or 20% of its licensed CONUS spectrum – to deliver local broadcast channels to approximately 50 DMAs.

DIRECTV currently provides satellite-delivered local broadcast channels in 41 DMAs by utilizing the spot-beam capability on DIRECTV 4S and six of the thirty-two DBS frequencies at

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*System Using Five Channels at the 101° W.L. Orbital Location; Authorization to Construct, Launch, and Operate a Direct Broadcast Satellite System Using Three Channels at the 110° W.L. Orbital Location; and the Related Earth Registration (Call Sign E930437); United States Satellite Broadcasting Co. Inc. Application for Additional Time to Construct and Launch a Direct Broadcast Satellite at the 110° W.L. Orbital Location, Order and Authorization, 14 FCC Rcd 4585 (1999).*

<sup>8</sup> DIRECTV has been granted authority to launch and operate its seventh high-power DBS satellite, DIRECTV 5 (formerly Tempo 1), at the 119° W.L. orbital location. *DIRECTV Enterprises, Inc. (For Authority to Launch and Operate a Direct Broadcast Satellite Service Space Station)*, Order and Authorization, 15 FCC Rcd 23630 (2000).

<sup>9</sup> This figure includes approximately 1.9 million customers served by NRTC, its members and affiliates.

<sup>10</sup> The Applicants have designed their respective satellite constellations to provide national coverage, *i.e.*, coverage of the contiguous United States, Alaska and Hawaii. However, for ease of reference, the Applicants will use the term "CONUS" beams herein.

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the 101° W.L. orbital location.<sup>11</sup> In addition, DIRECTV plans to launch DIRECTV 7S, a state-of-the-art spot-beam satellite, into the 119° W.L. orbital location in 2003.<sup>12</sup> DIRECTV 7S is capable of utilizing four of the thirty-two DBS frequencies at the 119° W.L. orbital location. DIRECTV plans to use DIRECTV 7S to provide local broadcast channels to approximately 29 additional DMAs. With all of these satellite assets in place, DIRECTV would be capable of utilizing ten of its forty-six licensed DBS frequencies – or more than 22% of its licensed spectrum – to deliver local broadcast channels to approximately 70 DMAs.

The ECC-Hughes merger will dramatically increase the spectrum resources available to New EchoStar by eliminating the current duplication of more than 500 channels of programming

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<sup>11</sup> DIRECTV uses a small amount of CONUS capacity in conjunction with this spot-beam capacity to deliver local broadcast channels to these 41 DMAs.

<sup>12</sup> Pending the launch of DIRECTV 7S, DIRECTV has announced plans to add local stations in 10 additional DMAs in 2002 through the interim use of CONUS beam capability on several of the DBS frequencies at the 119° W.L. orbital location.

and will provide the combined firm with the necessary capacity to provide local broadcast channel service to all 210 DMAs and 107 million television households, as shown below:

**107 Million Households**



New EchoStar's plan will involve five spot-beam satellites, capable of utilizing 28 DBS frequencies for spot beams. New EchoStar will use that constellation to provide local broadcast channel service to all 210 DMAs, along with necessary back-up and service expansion capabilities. The key to the "Local Channels, All Americans" plan is the combination of the DIRECTV and EchoStar spectrum at 110° W.L. and the elimination of duplicative programming currently provided to customers from the 110° W.L. orbital location and the other DBS orbital locations. This more efficient frequency use will allow New EchoStar to utilize eight of the thirty-two available DBS downlink frequencies at 110° W.L. – five DBS frequencies that currently are licensed to EchoStar and three DBS frequencies that currently are licensed to DIRECTV – for spot-beam delivery of local broadcast channels without displacing capacity for

EXPEDITED PROCESSING REQUESTED

national programming that is necessary to meet consumer demand and compete with incumbent cable operators.

In addition, the ability of New EchoStar to consolidate and utilize all thirty-two DBS frequencies at 110° W.L. will further facilitate the provision of local broadcast channels to all 210 DMAs by vastly simplifying and streamlining the facilities needed to uplink the local broadcast channel programming from these disparate DMAs. The Applicants expect that the NEW ECHOSTAR 1 satellite will require two distinct uplink facilities, including existing DIRECTV and EchoStar facilities located in Los Angeles, CA and Cheyenne, WY, respectively, and that the overall plan will require a minimum of four uplink facilities. Only New EchoStar will realistically be able to accumulate the uplink facilities necessary to implement the "Local Channels, All Americans" plan.

Under the new plan, New EchoStar will still be able to devote a significantly greater number of DBS frequencies to national programming than each company does today. The frequencies allocated for local broadcast channel service will represent a commercially and technically reasonable balance between local broadcast channel programming and the national programming that DBS providers must continue to develop and expand to provide true competition to the services offered by incumbent cable operators.

In stark contrast, if either EchoStar or DIRECTV were to attempt to offer a "Local Channels, All Americans" plan without the merger, the DBS frequencies necessary to provide local broadcast channels to 210 DMAs would require EchoStar or DIRECTV to *drop* a significant number of national channels (or the advanced services that could be carried in lieu of these national channels) from its programming line-up. For example, for each additional frequency needed to provide local broadcast service, the DBS firms would be unable to carry

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roughly ten channels of national programming or to expand advanced services by an equivalent amount. The cost of dropping so many national channels (or advanced services) would be devastating to their respective businesses. Simply put, neither EchoStar nor DIRECTV could allocate such an imbalanced amount of their scarce licensed CONUS spectrum to providing local broadcast channels without destroying the financial viability of their respective DBS businesses by sacrificing spectrum needed for new and additional national programming necessary to compete with cable, including expansion capacity for HDTV, pay-per-view, video-on-demand, and interactive and foreign language channels.<sup>13</sup> Thus, it is only the ECC-Hughes merger that will free up the spectrum that is needed to implement a "Local Channels, All Americans" plan.

New EchoStar will implement the satellite constellation for the "Local Channels, All Americans" plan by using a flexible combination of capacity from NEW ECHOSTAR 1 (at 110° W.L.) and the four current and planned EchoStar and DIRECTV spot-beam satellites, Echostar 8 (at 110° W.L.), DIRECTV 4S (at 101° W.L.), Echostar 7 (at 119° W.L.) and DIRECTV 7S (at 119° W.L.). When fully implemented, the combination of these assets will provide sufficient spot-beam capacity to cover all 210 DMAs, allow for significant spot-beam capacity at each of the three DBS CONUS orbital locations, and supply mutual, in-orbit back-up of spot-beam capability and allow for the development and expansion of new services.

Freeing up spectrum will, of course, require a transition process. The EchoStar and DIRECTV spot-beam satellites will continue to serve their respective customer bases until the transition period is complete, at which time the newly freed up spot-beam capacity can be used to expand the number of DMAs provided with local broadcast channel service.

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<sup>13</sup> As set forth in the ECC-Hughes Opposition it is not technically or economically feasible for either EchoStar or DIRECTV alone to provide local broadcast channels to all 210 DMAs. See Opposition at Attachment B (Declaration of Dr. Richard J. Barnett), at ¶¶ 3-7, 13-15; *Id.*, Attachment A (Declaration of Dr. Robert D. Willig), at ¶¶ 9-15.

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However, even after the transition to a common platform, the four existing and planned spot-beam satellites will not be sufficient to provide local broadcast channels in all 210 DMAs. NEW ECHOSTAR 1 fills that void. NEW ECHOSTAR 1 will provide the capacity necessary to serve the remaining DMAs. NEW ECHOSTAR 1 will be an all spot-beam satellite using eight DBS frequencies at 110° W.L. that are now split between the two companies – five DBS frequencies that currently are licensed to EchoStar and three DBS frequencies that currently are licensed to DIRECTV.

Finally, each of the four current and planned spot-beam satellites has the flexibility to provide CONUS capacity in addition to the available spot-beam capacity. Once NEW ECHOSTAR 1 is launched and in service, some or all of these four satellites will be able to provide New EchoStar in-orbit capacity to launch new and additional national programming.

### **III. AUTHORITY REQUESTED**

NEW ECHOSTAR 1 will be a 3-axis stabilized 10 kW class spacecraft designed to provide U.S. domestic broadcast satellite service. NEW ECHOSTAR 1 will be a spot-beam satellite specifically intended to provide additional local broadcast channel programming capacity for New EchoStar's DBS system. The satellite is described in detail in the Technical Annex attached hereto.

At the time of the launch of NEW ECHOSTAR 1, the New EchoStar constellation of satellites at 110° W.L. is expected to include the DIRECTV 1 satellite and the EchoStar 5 and 8 satellites. New EchoStar will control the licenses for all thirty-two frequencies at the 110° W.L. orbital location. By this Application, New EchoStar requests authorization to launch and operate NEW ECHOSTAR 1 at the 110° W.L. orbital location, collocated with the other New EchoStar satellite assets listed above.

**IV. GENERAL TECHNICAL INFORMATION AND INTERFERENCE ANALYSES**

The Technical Annex contains a technical description of the NEW ECHOSTAR 1 satellite. Interference analyses performed in accordance with ITU Radio Regulations Appendices S30 and S30A will be submitted shortly. Although the complex analysis of Section 2 of Annex 1 of Appendix S30 (MSPACE) will be performed in the near future for NEW ECHOSTAR 1 to determine if coordination with other administrations is required, NEW ECHOSTAR 1 expects to be in full compliance with all other applicable international interference criteria and limitations of Appendices S30 and S30A.

**V. APPLICANT QUALIFICATIONS**

DIRECTV and EchoStar each are DBS licensees whose legal qualifications are a matter of public record. New EchoStar is likewise fully qualified to control DBS licenses, and the Commission will have so found upon the grant of the New EchoStar Transfer Application. For DBS systems, the Commission has not required a prior demonstration of financial qualifications, but instead has relied on the applicant meeting due diligence milestones once a system is authorized.<sup>14</sup> DIRECTV and EchoStar have fully met the due diligence milestones for their respective DBS systems, and upon consummation of the ECC-Hughes merger, New EchoStar will have sufficient financial resources available to cover the costs of launching and operating the NEW ECHOSTAR 1 satellite.

**VI. TYPE OF OPERATIONS**

New EchoStar intends to operate NEW ECHOSTAR 1 on a non-broadcast, non-common carrier basis. New EchoStar may sell and/or lease a portion of its capacity on a non-common carrier basis for complementary business purposes.

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<sup>14</sup> See 47 C.F.R. §100.19.

## VII. SCHEDULE

The expected launch date of NEW EHOSTAR 1 is twenty-four months after the grant of this Application and the New EchoStar Transfer Application.

## VIII. PUBLIC INTEREST CONSIDERATIONS

As described more fully in the Applicants' pleadings filed in connection with the New EchoStar Transfer Application, the merger of Hughes and ECC will provide New EchoStar access to a tremendous amount of DBS capacity freed up by the elimination of more than 500 identical channels of duplicative programming content. When combined with the spectrum and other efficiencies that can result *only* from the merger, the integration of the existing and planned satellite assets of EchoStar and DIRECTV, and the successful launch and positioning of NEW EHOSTAR 1 at the 110° W.L. orbital position will allow New EchoStar to achieve its "Local Channels, All Americans" service vision, and in the process, will have a number of specific and important public interest benefits. These include:

- **Local Channel Service In Every DMA, Including Rural Areas**

Neither EchoStar nor DIRECTV as a standalone DBS provider has the necessary spectrum and subscriber base to warrant serving more than 50-70 DMAs with current or planned DBS satellites.<sup>15</sup> The creation of New EchoStar radically changes that equation, and the corresponding launch of NEW EHOSTAR 1 will make possible a service vision that will bring local broadcast channel service with digital-quality pictures and CD-quality sound to all Americans.

Today, only 65 million television households – *i.e.*, those viewers residing within the 42 DMAs presently served by EchoStar and DIRECTV – can receive local channel service via

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<sup>15</sup> See Opposition at Attachment A (Declaration of Dr. Robert D. Willig) at ¶¶ 9-15.

satellite. That leaves some *42 million* television households that are not served with satellite-delivered local channels – consumers who are therefore forced either to pay additional fees to subscribe to basic cable service in order to receive local channels, or to install an off-air rooftop antenna – and hope for good reception.

By supplementing the current and planned satellite configuration of EchoStar and DIRECTV with NEW ECHOSTAR 1, New EchoStar will address this fundamental service discrepancy in less densely populated markets. New EchoStar will offer local channel service in every one of the 210 DMAs covering the entire United States, including Alaska and Hawaii. Thus, the launch of NEW ECHOSTAR 1, in conjunction with the Applicants' other satellites, helps achieve one of the most fundamental public interest objectives of the Communications Act, namely, "mak[ing] available, so far as possible, to all the people of the United States" the benefits of local broadcast television.<sup>16</sup>

- **Benefits to Local Broadcasters**

As discussed, the "Local Channels, All Americans" plan will be a tremendous benefit to television viewers outside of the top 50-70 DMAs because, without the merger, they would otherwise likely never have access to satellite-delivered local broadcast channels.

Correspondingly, television broadcasters in these areas will have their signals delivered into many additional households with digital-quality television pictures and CD-quality sound. In fact, in many of these areas, which may be distant from a television transmitter site, television viewers cannot obtain an over-the-air signal that provides a clear picture without ghosting or "snow." And some of these areas may not have access to over-the-air broadcast television signals at all, meaning that NEW ECHOSTAR 1 will directly facilitate the receipt of local

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<sup>16</sup> 47 U.S.C. § 151.

broadcast stations by new viewers. Finally, in offering local broadcast channel service on a nationwide basis, New EchoStar will comply fully with must carry obligations.

In opposing the creation of New EchoStar, the National Association of Broadcasters (“NAB”) expressed its members’ strong desire to see the satellite carriage of local television stations in all of the nation’s 210 DMAs. The NAB expressed the fear that the merger of ECC and Hughes would end “a DBS rivalry that has led to carriage of local broadcast stations in many markets on one or both DBS systems.”<sup>17</sup> The NAB has also testified as to the “enormous economic and technical hurdles” involved in attempting to bring local channel service to “markets 101 through 210.”<sup>18</sup>

New EchoStar’s “Local Channels, All Americans” plan answers these complaints dispositively. Television broadcast station owners should now welcome the merger as it is the only way their desire for DBS carriage in all 210 DMAs will be satisfied.

- **Enhanced DBS Competition to Incumbent Cable Television Operators**

The “Local Channels, All Americans” service vision that will be achieved by the merger of ECC and Hughes and the concomitant launch of NEW ECHOSTAR 1 will finally allow DBS service to be the complete substitute to traditional cable television offerings envisioned by Congress when it enacted the Satellite Home Viewer Improvement Act of 1999.<sup>19</sup> Due to a federal statute that prevented DBS providers from retransmitting local broadcast channels to subscribers located in the markets of those stations, DBS providers historically had operated at a

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<sup>17</sup> National Association of Broadcasters, Petition to Deny, CS Docket No. 01-348 (Feb. 4, 2002) (“NAB Petition”), at 3.

<sup>18</sup> Written Testimony of Michael J. Fiorile, Dispatch Broadcast Group & National Association of Broadcasters, Before the House Subcommittee on Telecommunications and the Internet (Dec. 4, 2001), at 25.

<sup>19</sup> *See, supra*, note 4.

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significant competitive disadvantage vis-à-vis cable operators in the multichannel video programming distributor (“MVPD”) market. Consumers in the past reported that their inability to receive local broadcast signals from DBS operators negatively affected their decision to subscribe to DBS. In enacting the SHVIA in 1999, Congress granted satellite carriers a permanent compulsory copyright license to retransmit local broadcast television programming, thereby removing one of the most significant barriers to DBS operators fully competing in the MVPD market. Congress acknowledged that without the legal authority to distribute local broadcast signals, satellite television simply would not be a complete substitute for the MVPD services offered by market dominant incumbent cable television operators.<sup>20</sup>

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<sup>20</sup> H.R. REP. NO. 106-79, pt. 1, at 11-15 (1999).

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As shown on the map below, currently 104 million of the 107 million television households reside in a cable franchise area.

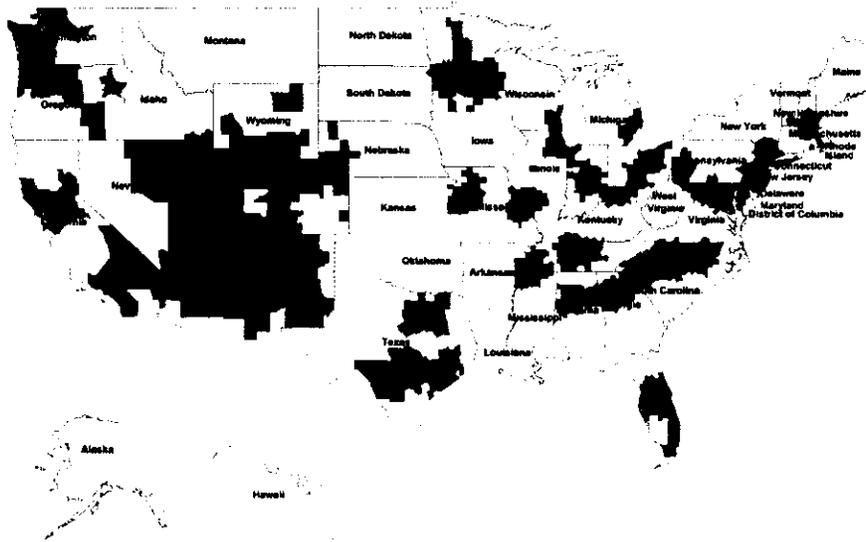
**104 Million Households**



**EXPEDITED PROCESSING REQUESTED**

Today, as shown below, only 65 million of the 107 million television households, those within the 42 DMAs served with local channels by DIRECTV and DISH Network, have a fully competitive alternative to cable.

**65 Million Households**



That leaves 42 million television households without a true competitive alternative to cable because residents in those markets do not have access to a DBS offering that includes satellite-delivered local broadcast channels, as shown on the map below.

**42 Million TV Households Unserved**



As mentioned above, customers who live in markets in which neither EchoStar nor DIRECTV provide local channels are forced either to pay additional subscription fees for a basic cable service, or install an off-air roof-top antenna. The merger of ECC and Hughes, and the subsequent implementation of the “Local Channels, All Americans” plan, will allow all 107 million television households in the United States to have a fully competitive cable alternative.

As Congress and the Commission both have recognized, the continued success of DBS is integral to the establishment of a more competitive market for the delivery of MVPD services. In the Commission’s most recent report on the status of competition in the MVPD market, the

Commission reiterated that “DBS is the largest competitor to cable in the MVPD market.”<sup>21</sup> Nevertheless, as of June 2001, approximately 80% of all MVPD subscribers still receive their video programming from a franchised cable operator.<sup>22</sup> As the Commission has found, DBS’s MVPD market share has grown. Indeed, the Commission stated that the increase in DBS’s share of MVPD households to more than 18% nationally<sup>23</sup> has been attributed, in part, to the authority granted by SHVIA to DBS providers to distribute local broadcast television stations in their local markets.<sup>24</sup>

By offering attractive programming packages that include local broadcast offerings to all consumers at competitive prices set on a uniform nationwide basis, New EchoStar will continue to drive the evolution of DBS as the most formidable competitor to incumbent cable operators. As cable systems continue to “go digital” to compete with the product features that DBS operators have already brought to the MVPD marketplace, New EchoStar will continue to compete aggressively with the cable incumbents and drive them to improve their own products, pricing, and service quality. The launch and operation of NEW ECHOSTAR 1 is necessary to achieve this goal.

- **Continuation of Satellite Innovation and Spectrum Efficiency**

The new state-of-the-art NEW ECHOSTAR 1 satellite, which employs spot-beam technology to provide service while limiting interference, is designed to provide expanded capacity for New EchoStar’s DBS system on a spectrally efficient basis. Moreover, new

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<sup>21</sup> *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Eighth Annual Report, CS Docket No. 01-129 (rel. Jan. 14, 2002) (“Eighth Report”) at ¶ 56.

<sup>22</sup> *Id.* at ¶ 5.

<sup>23</sup> *Id.* at ¶ 8.

<sup>24</sup> *Id.*

## EXPEDITED PROCESSING REQUESTED

consumer receiving equipment will be deployed that will allow consumers to receive satellite signals from multiple orbital positions with a single 18 x 22-inch mini-dish.

As described in the Technical Annex, the NEW EHOSTAR 1 satellite will provide up to 54 RF transponders to selected geographic regions. The 54 transponders will reuse eight of the defined 32 frequencies in the BSS Region 2 plan. The 54 transponders will form thirty-eight distinct spot beams to provide service to the U.S. DMAs not previously served by New EchoStar's other spot-beam satellites, EchoStar 7 and 8, and DIRECTV 4S and 7S, while limiting interference into adjoining spot beams and maximizing the frequency reuse.

New EchoStar also will reuse frequency on the uplink. Programming material to feed the spot beams will be transmitted on up to 32 BSS feeder link frequencies. Programming for the NEW EHOSTAR 1 satellite will be transmitted simultaneously from two distinct feeder link sites: existing DIRECTV and EchoStar facilities in Los Angeles, CA, and Cheyenne, WY, respectively. The overall constellation will require at least four distinct feeder link sites, including these two facilities.

Thus, the deployment of NEW EHOSTAR 1 will allow for the continued maximization of frequency reuse, an important Commission policy goal. Because DBS ultimately is a spectrum-constrained service, the Commission should provide DBS operators with every opportunity to increase system capacity by utilizing the spectrum more efficiently. Authorization and deployment of NEW EHOSTAR 1 advances this goal.

### **IX. THE NEED FOR EXPEDITED PROCESSING**

In order for New EchoStar to commence construction of NEW EHOSTAR 1 promptly after the consummation of the ECC-Hughes merger, the Applicants request that this Application be processed on an expedited basis, and that it be granted simultaneously with the New EchoStar

Transfer Application or as soon as possible thereafter. Accordingly, expedited processing of this Application is requested.

**X. SECTION 304 WAIVER**

In accordance with Section 304 of the Communications Act,<sup>25</sup> the parties to this Application hereby waive any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise.

**XI. CONCLUSION**

As the Applicants have described in their pleadings in the proceeding on the New EchoStar Transfer Application, the ECC-Hughes merger will eliminate the duplication of spectrum use, rationalize the use of satellites at the 101° W.L., 110° W.L. and 119° W.L. orbital locations, and aggregate the subscriber bases of the two firms. Together, these merger-specific effects all combine to allow New EchoStar to achieve what neither company could standing alone: satellite delivery of local broadcast channel service in *every* DMA in the United States, including smaller markets, rural and underserved areas, and Alaska and Hawaii, all areas that would not receive this service absent a merger.

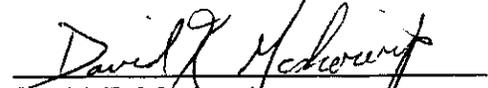
This Application to launch and operate the NEW ECHOSTAR 1 satellite complies with all relevant Commission rules, and is the linchpin for New EchoStar's "Local Channels, All Americans" plan. Therefore, this Application is manifestly in the public interest, and Hughes Electronics Corporation and EchoStar Satellite Corporation respectfully request that the Commission process this Application in an expedited fashion and grant this Application promptly.

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<sup>25</sup> 47 U.S.C. § 304.

Respectfully submitted,

**EchoStar Satellite Corporation**

A handwritten signature in cursive script, reading "David K. Moskowitz", is written over a horizontal line.

David K. Moskowitz  
Senior Vice President and General Counsel

**EchoStar Satellite Corporation**

5701 South Santa Fe  
Littleton, CO 80120  
(303) 723-1000

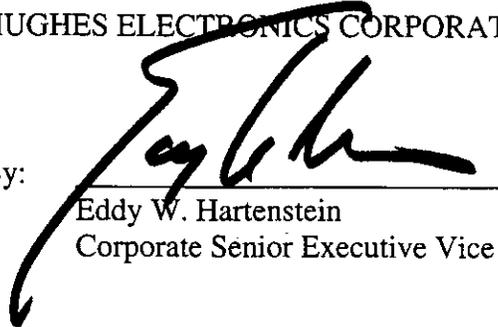
Dated: February 25, 2002

EXPEDITED PROCESSING REQUESTED

Respectfully submitted,

HUGHES ELECTRONICS CORPORATION

By:

A handwritten signature in black ink, appearing to read 'Eddy W. Hartenstein', written over a horizontal line.

Eddy W. Hartenstein

Corporate Senior Executive Vice President

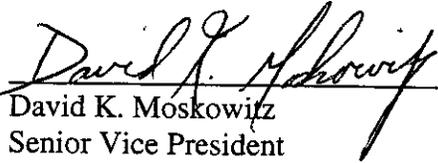
## ANTI-DRUG ABUSE ACT CERTIFICATION

Pursuant to Section 1.2002 of the Commission's rules, 47 C.F.R. Section 1.2002 (1997), Applicants certify that neither the Applicants nor any of their shareholders, not any of their officers or directors, are subject to a denial of Federal benefits pursuant to authority granted in Section 5301 of the Anti-Drug Abuse Act of 1988.

Respectfully submitted,

EchoStar Satellite Corporation

By:

  
\_\_\_\_\_

David K. Moskowitz  
Senior Vice President  
and General Counsel

**EchoStar Satellite Corporation**  
5701 South Santa Fe  
Littleton, CO 80120  
(303) 723-1000

Dated: February 25, 2002

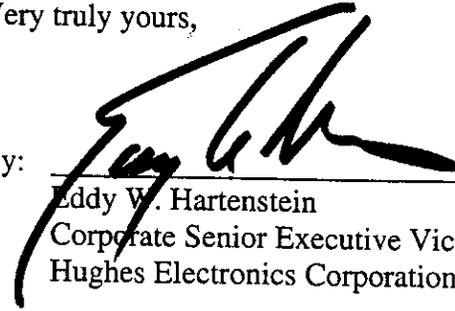
EXPEDITED PROCESSING REQUESTED

ANTI-DRUG ABUSE ACT CERTIFICATION

Pursuant to Section 1.2002 of the Commission's rules, 47 C.F.R. § 1.2002, Hughes Electronics Corporation certifies that neither it, nor any of its shareholders, nor any of its officers or directors, are subject to a denial of Federal benefits pursuant to authority granted in Section 5301 of the Anti-Drug Abuse Act of 1988.

Very truly yours,

By:



Eddy W. Hartenstein  
Corporate Senior Executive Vice President  
Hughes Electronics Corporation

February 25, 2002

**CERTIFICATION OF PERSON RESPONSIBLE**  
**FOR PREPARING ENGINEERING INFORMATION**

I hereby declare under penalty of perjury that I am the technically qualified person responsible for preparation of the engineering information contained in the foregoing submission, that I am familiar with Part 25 of the Commission's rules, that I have either prepared or reviewed the engineering information submitted in this pleading, and that it is true and correct to the best of my knowledge and belief.



Richard J. Barnett, PhD, BSc  
Telecomm Strategies, L.L.C.  
6404 Highland Drive  
Chevy Chase, Maryland 20815  
(301) 656-8969

Dated: February 25, 2002

**EXPEDITED PROCESSING REQUESTED**

**CERTIFICATION OF PERSON RESPONSIBLE  
FOR PREPARING ENGINEERING INFORMATION  
SUBMITTED IN THIS APPLICATION**

I hereby certify that I am the technically qualified person responsible for preparation of the engineering information contained in this Application, that I am familiar with Parts 25 and 100 of the Commission's Rules, that I have either prepared or reviewed the engineering information submitted in this Application, and that it is complete and accurate to the best of my knowledge.

By:



James R. Butterworth  
Vice President, Communications Systems  
DIRECTV, Inc.

February 25, 2002



**TECHNICAL ANNEX**

**NEW ECHOSTAR 1 (USABSS-16)**

**SYSTEM DESCRIPTION AND INTERFERENCE ANALYSES**

**February 2002**

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## NEW EHOSTAR 1 SYSTEM DESCRIPTION

### OVERVIEW

This section provides a brief technical description of the NEW EHOSTAR 1 satellite for the 110° W.L. orbital position. NEW EHOSTAR 1 (USABSS-16) is a 3-axis stabilized 10 kW class spacecraft available from Boeing, Lockheed or Loral designed to provide U.S. domestic broadcast satellite service. NEW EHOSTAR 1 contains an active attitude and position control subsystem, a telemetry, command and ranging subsystem, a thermal control subsystem, and an electrical power subsystem.

The repeater consists of 54 spot-beam transponders, each with 24 MHz of usable bandwidth. Uplink frequencies will be in the 17.3-17.8 GHz band, and downlink frequencies in the 12.2-12.7 GHz band. When paired with existing and planned satellites, Echostar 7 and Echostar 8, DIRECTV 4S and DIRECTV 7S, NEW EHOSTAR 1 will enable New Echostar to make the most efficient use of its existing capacity in order to deliver local broadcast channels to all DMAs in the United States. During the time period between the approval of the merger and the transition to one service platform, the satellites will continue to serve the currently existing and planned markets. After the service rationalization and before the launch of NEW EHOSTAR 1, additional markets can begin to be rolled out taking best advantage of the redundant coverage of the existing satellites.

The NEW EHOSTAR 1 satellite will use QPSK modulation in either the DIRECTV or DVB format (see Rec. ITU-R B.O.1294 System A or System B). Receivers will use 45 cm antennas or 45 x 56 cm antennas, except as noted. Transmissions will consist of multiplexed video, audio, and data services in each transponder. All transponders will have a 24 MHz bandwidth.

NEW EHOSTAR 1 will be placed in the 110° W.L. orbital position collocated with other existing satellite assets of New EchoStar. The satellite design will meet its performance requirements for an operational lifetime of more than 15 years including 100% eclipse operation. The satellite will comply with all international laws and regulations pertaining to the operation of such a space system.

### COMMUNICATIONS PAYLOAD

The NEW EHOSTAR 1 payload uses 38 separate spot beams on eight frequencies (channels) to provide up to 54 RF transponders to selected geographic regions. Depending on the particular characteristics of the region, the power in the spot-beam transponders varies from approximately 46 watts to 65 watts. The 54 transponders reuse eight of the defined 32 channels in the BSS Region 2 Plan. The average reuse of frequencies is approximately seven.

Frequency reuse is also employed on the feeder link. Programming material to feed the spot beams is transmitted on up to 32 BSS feeder link channels. Programming is transmitted

simultaneously from two distinct feeder link sites located in Los Angeles, CA and Cheyenne, WY.

Thirty-eight distinct spot beams provide service to the US DMAs not previously covered by New EchoStar's other spot-beam satellites, Echostar 7 and Echostar 8, and DIRECTV 4S and DIRECTV 7S, while limiting interference into adjoining spot beams and maximizing the frequency reuse. Once all the New Echostar satellite assets are in place, there will exist some in-orbit capability to backup failures of the operational satellites.

The NEW ECHOSTAR 1 satellite will use the BSS Region 2 frequency plan. Tables 1 and 2 show the spot beam frequency reuse plan for the downlink and feeder link. Telemetry and command frequencies are provided in Table 3.

**Table 1. NEW ECHOSTAR 1 Downlink Frequency Plan**

<b>BSS Downlink Channel</b>	<b>Spot Beam No.</b>
18	Spots: 2, 5, 14, 16, 20, 23, 31, 33
20	Spots: 2, 3, 21, 26, 28, 34, 36
22	Spots: 11, 18, 21, 26, 29, 30, 38
24	Spots: 1, 8, 17, 25, 27, 30, 37
26	Spots: 7, 13, 15, 22, 27, 36
28	Spots: 4, 21, 24, 26, 32, 34, 35
30	Spots: 1, 9, 10, 22, 31, 33
32	Spots: 6, 12, 19, 22, 28, 31, 38

**Table 2. NEW ECHOSTAR 1 Feeder Link Frequency Plan**

<b>BSS Feeder Link Channel</b>	<b>Feed</b>
1 - 31 ODD	Spot Beam
2 - 32 EVEN	Spot Beam

**Table 3. NEW EHOSTAR 1 T&C Frequency and Polarization Plan**

	Frequency, MHz	Polarization
Command Transfer Orbit	17300.50	RHCP
Command On-Station	17300.50	RHCP
Command On-Station Back up	17797.50	RHCP
Telemetry 1 Transfer Orbit	12698.75	RHCP
Telemetry 1 On-Station	12698.75	LHCP
Telemetry 1 On-Station Back up	12698.75	RHCP
Telemetry 2 Transfer Orbit	12699.75	RHCP
Telemetry 2 On-Station	12699.75	RHCP
Telemetry 2 On-Station Back up	12699.75	RHCP

**ITU RADIO REGULATIONS ANNEXES**

Appendices to this Technical Annex will provide the necessary showings for compliance to Radio Regulations Annex 1 of Appendices S30 and S30A. This information will be delivered to the Commission within seven days from the date of this filing. Due to the complexity of the NEW EHOSTAR 1 satellite design, a detailed MSPACE analysis (Section 2 of Annex 1 to Appendix S30 and Section 4 of Annex 1 to Appendix S30A) will be provided at a later date.

Satellite and feeder link characteristics are provided in accordance with Annex 2 of Appendices S30 and S30A. This information will be delivered to the Commission within seven days from the date of this filing.