

63. *Foreign-licensed Satellites Operators Seeking Access to the U.S. Market for DBS and DTH* On May 7, 2003, the International Bureau granted the application of Digital Broadband Applications Corp. ("DBAC") to provide two-way broadband video and data services from two Canadian DBS satellites and one American fixed satellite service ("FSS") satellite.²⁷² The Commission's approval of this application is the first authorization for DBS service in the United States from Canadian satellites. The Commission declared that it hoped to stimulate competition in the U.S. DBS and FSS markets, reduce prices and further technological innovation.²⁷³ As a condition of its authorization, DBAC may not provide DBS programming to U.S. customers that it obtains through exclusive agreements entered into with Canadian space station operators, program suppliers, and/or program distributors.²⁷⁴ WNet Holdings, Inc. also proposes to uplink programming from an earth station in New York to two Canadian DBS satellites to provide services to approximately one million subscribers in the United States.²⁷⁵ This application remains pending

64. On August 14, 2003, the International Bureau authorized SES Americom to provide DTH service using its existing FSS satellites.²⁷⁶ SES Americom also has pending a Petition for Declaratory Ruling, filed April 25, 2002, to provide DBS services in the U.S. market from a satellite at 105.5° W.L. licensed by Gibraltar.²⁷⁷ SES Americom seeks to offer satellite capacity for third party direct-to-home services to consumers in the United States. The petition is pending.

65. *Subscribership.* As of June 30, 2003, approximately 20.4 million households in the U.S. subscribed to DBS services²⁷⁸ This represents an increase of 12% over the 18.2 million DBS subscribers

²⁷² See *Digital Broadband Applications Corp Consolidated Application for Authority to Operate US Earth Stations with a U.S.-Licensed Ku-Band FSS Satellite and Canadian-Licensed Nimiq and Nimiq 2 Satellites to Offer Integrated Two-Way Broadband Video and Data Services Throughout the United States (Call Sign E020010)*, File No. SES-LIC-20020109-00023, 18 FCC Rcd 9455 (2003) DBAC network is expected to consist of one hub earth station and one million satellite home terminals that will access the Canadian Nimiq and Nimiq 2 satellites and the U.S. FSS satellite Galaxy XI.

²⁷³ *Id.* at 18 FCC Rcd 9463-64 ¶ 18.

²⁷⁴ *Id.* at 9464 ¶ 19 The Commission prohibits exclusive service arrangements made by both U.S. and non-U S satellite operators providing any services in the United States. See *Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Satellites Providing Domestic and International Services in the United States*, 12 FCC Rcd 24094 (1997).

²⁷⁵ WNet Holdings, Inc., Application for a Fixed Transmit/Receive Earth Station, File No. SES-LIC-20011121-02186 and Call Sign E010320 (Nov. 21, 2001), and Amendment, File No. SES-AMD-20020102-00029 (Jan. 2, 2002); Application for Receive Only Earth Stations, File No. SES-LIC-20020111-00075 and Call Sign E020022, and One Request for Waiver, File No. SES-MS-20020111-00074 (Jan. 11, 2002).

²⁷⁶ See *SES AMERICOM, Inc Applications for Modification of Fixed-Satellite Service Space Station Licenses and Columbia Communications Corporation Applications for Modifications of Fixed-Satellite Service Space Station Licenses*, Order and Authorization, 18 FCC Rcd 16589 (2003)

²⁷⁷ *Satellite Space Applications Accepted for Filing*, Public Notice, Report No. SAT-00100 (rel. May 17, 2002).

²⁷⁸ SBCA Comments at 4

we reported last year.²⁷⁹ DBS comprises approximately 20% of all MVPD subscribers.²⁸⁰ These rates of growth are attributed to competitive pricing, wide programming selection, higher levels of customer service, expansion of local-into-local service, and the introduction of new products such as personal video recorders.²⁸¹ As a relatively new service, DBS continues to attract consumers who never subscribed to MVPD services, as well as consumers switching from cable service. DirecTV states that according to its internal subscriber data, approximately 70% of its customers were cable subscribers at the time that they first subscribed to DirecTV.²⁸²

66. Historically, DBS has experienced very strong growth. At the end of its first calendar year of service, DBS service had approximately 600,000 subscribers.²⁸³ One year later, there were more than 2.2 million subscribers.²⁸⁴ In 1996, EchoStar attracted over 350,000 subscribers within its first year of operation.²⁸⁵ In 1998, there were 8.7 million DBS subscribers.²⁸⁶

67. Presently, DirecTV is the leading DBS operator and the second largest MVPD provider with 11.6 million subscribers as of June 2003, an increase of 8% from the 10.7 million subscribers as of June 2002.²⁸⁷ EchoStar is the second largest DBS operator and fourth largest MVPD, with 8.8 million

²⁷⁹ See 2002 Report, 17 FCC Rcd at 26930 ¶ 58.

²⁸⁰ SBCA Comments at 4

²⁸¹ See, e.g., Richard Bilotti, Benjamin Swinburne, and Megan Lynch, *The Shifting Winds of Pay-TV Market Share*, Morgan Stanley, Oct. 5, 2003, *New Selling Season, New Products*, SKY RESEARCH, June 2003; Seth Schiesel, *Cable or Satellite? Please Stay Tuned*, THE NEW YORK TIMES, July 31, 2003.

²⁸² DirecTV Comments at 11. With respect to former digital cable subscribers, DirecTV claims that much of its subscriber growth over the last year was from customers who had tried digital cable but were dissatisfied with it. According to DirecTV, its subscriber research finds that approximately 45% of its new customers have subscribed to digital cable. See *Despite Loss, DirecTV, Hughes Play Up Third Quarter Results*, SATELLITE BUSINESS NEWS, Oct. 15, 2003.

²⁸³ *Kagan State of DBS 2002* at 34. At the end of 1994, DirecTV had 350,000 subscribers and PrimeStar had 231,000. Of DirecTV's subscriber count, approximately 118,000 also subscribed to USSB's service. *Id.*

²⁸⁴ *Id.*

²⁸⁵ *Id.*

²⁸⁶ *Id.*

²⁸⁷ DirecTV has entered into an exclusive distribution relationship in certain areas of the United States with the National Rural Telecommunications Cooperative ("NRTC"), which acquires and supports its own subscribers. The NRTC, its partner Pegasus, and several smaller resellers are reported to account for approximately 1.6 million rural households out of DirecTV's reported 10.7 million subscribers. See *Hughes Electronics Corp., SEC Quarterly Report Form 10-Q Pursuant to Section 13 of 15(d) of the Securities Act of 1934 for the Quarterly Period Ended June 30, 2003*, at 37 ("*Hughes 2nd Quarter 2003 10-Q*"); NRTC Comments at 2.

subscribers as of June 30, 2003, an increase of almost 16% over last year's 7.6 million.²⁸⁸ Sky Angel does not report its subscriber numbers on an annualized basis.²⁸⁹

68. Equipment Pricing: To receive DBS service, subscribers require a satellite dish and a set-top box. In 1994, we reported that DirecTV sold its home receiving equipment for \$699 and subscribers paid either \$150-\$200 for professional installation or they could purchase the installation equipment for \$69.95.²⁹⁰ Following EchoStar's entry into the marketplace in 1996, DBS equipment pricing dropped to as low as \$199 plus installation costs.²⁹¹ In 1998, equipment and installation costs had dropped to \$49.²⁹² Today, standard equipment and installation are generally offered free of charge, but usually with the requirement that the subscriber commit to a one year programming package contract.²⁹³ DBS equipment has also incorporated more functionality, such as digital video recorders and HDTV, but this equipment is generally not offered for free.²⁹⁴

69. Availability of Local Broadcast Stations. Since 2000, DBS operators have been authorized to deliver local broadcast television stations in their local markets ("local-into-local service")²⁹⁵

²⁸⁸ EchoStar Communications Corp., *SEC Quarterly Report Form 10-Q Pursuant to Section 13 of 15(d) of the Securities Act of 1934 for the Quarterly Period Ended June 30, 2003*, at 20.

²⁸⁹ Last year we reported one analyst estimate that Sky Angel had approximately one million subscribers. *See 2002 Report*, 17 FCC Rcd at 26930 ¶59.

²⁹⁰ *1994 Report*, 9 FCC Rcd at 7475 ¶65. The \$699 DirecTV subscriber unit allowed a subscribing household to watch one channel at a time. In order to view two different channels on different television sets, a subscriber had to purchase an \$899 unit and purchase a \$649 decoder for the second television set. *Id.*

²⁹¹ *See 1997 Report*, 13 FCC Rcd at 1073-74 ¶60. EchoStar offered equipment for \$199 to customers who signed up for a full year's programming at \$300. In response to EchoStar's offer, DirecTV offered a \$200 rebate to subscribers that purchased any brand of its equipment and a one-year subscription to its "Total Choice" programming package. *Id.*

²⁹² *See 1998 Report*, 13 FCC Rcd at 24330 ¶73.

²⁹³ For example, as of October 15, 2003, DirecTV was running a promotion to provide a two or three room standard equipment installation and four months free of a programming package beginning at \$39.99 or above for a new customer subscribing to DirecTV's NFL Sunday Ticket and a one year contract. DirecTV valued the promotion at \$350. Similarly, EchoStar's Dish Network offers several promotions that center around free equipment

²⁹⁴ Dish Network offers its DISH 721 set-top box with two tuners, integrated digital video recorder and 120 GB hard drive for \$600. It also offers a \$700 high-definition television receiver. *See* Dish Network, at <http://www.dishnetwork.com/content/products/receivers/dishpvr721/index.shtml> (visited Oct. 15, 2003). DirecTV offers a \$400 high definition television system and a \$99 personal video recorder set-top box. *See* DirecTV, at <http://www.directv.com/DTVAPP/imagine/Landing.dsp> (visited Oct. 15, 2003).

²⁹⁵ As required by the Satellite Home Viewer Improvement Act of 1999 ("SHVIA"), the Commission established rules to implement carriage of broadcast signals, retransmission consent, and program exclusivity with respect to satellite carriage of broadcast stations. SHVIA provides DBS carriers with the opportunity to carry local stations in a Designated Market Area ("DMA") pursuant to a statutory copyright license similar to the one provided cable operators. If a DBS operator selects this option in a DMA, however, it must carry all the local stations in the DMA, effective January 1, 2002. *See Implementation of the Satellite Home Viewer Improvement Act 1999 Broadcast Signal Carriage Issues, Retransmission Consent Issues*, 16 FCC Rcd 1918 (2000); *Implementation of* (continued. ...)

According to SBCA, in 2000, approximately 19% of DBS subscribers received local signals via DBS.²⁹⁶ As of December 2003, local-into-local service is offered by at least one DBS operator in 106 of 210 television markets (*i.e.*, designated market areas, or DMAs), which cover 86% of all U.S. television households. This represents an increase of 65% from last year's reported 64 markets. SBCA estimates that approximately 58% of DBS subscribers elect to receive broadcast signals from their DBS provider, either through local-into-local service or via distant network signals.²⁹⁷ As of December 2003, EchoStar offered subscribers in 101 DMAs a package of local broadcast stations including commercial and non-commercial stations.²⁹⁸ DirecTV offers local-into-local service in 64 DMAs.²⁹⁹

70. *News Corp.-Hughes Transaction.* On May 2, 2003, General Motors Corporation ("GM"), Hughes Electronics Corporation ("Hughes") and The News Corporation Limited ("News Corp.") submitted a joint application to the Commission seeking consent to transfer control of various Commission licenses and authorizations, including its DBS and fixed satellite space station, earth station, and terrestrial wireless authorizations held by Hughes and its wholly- or majority-owned subsidiaries to News Corp.³⁰⁰

71. On December 19, 2003, the Commission adopted a Memorandum Opinion and Order ("Order") approving the joint application subject to several conditions designed to ensure the public interest benefits and remedy any potential public interest harms.³⁰¹ The transaction combines the News

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the Satellite Home Viewer Improvement Act of 1999 Broadcast Signal Carriage Issues, 16 FCC Rcd 16544 (2001); *Implementation of the Satellite Home Viewer Improvement Act of 1999 Retransmission Consent Issues Good Faith Negotiation and Exclusivity*, 16 FCC Rcd 15599 (2001).

²⁹⁶ SBCA Comments at 9.

²⁹⁷ *Id.* According to an SBCA DBS Subscriber Study completed in April 2003, approximately 54% of DBS subscribers obtain local broadcast stations, while seven percent receive distant network signals. According to SBCA, some subscribers receive both local-into-local and distant networks signals. *Id.* DirecTV states that, as of June 30, 2003, over 75% of its residential customers subscribe to the local programming packages in markets in which they are available. DirecTV Comments at 14

²⁹⁸ EchoStar Communications Corp., *Dish Network Satellite Television Brings Local TV Channels to Savannah, GA* (press release), Dec. 22, 2003. For a current list of markets where EchoStar offers local-into-local service, see <http://www.dishnetwork.com/content/programming/locals/index.shtml>. Where EchoStar delivers all available local channels offered by ABC, CBS, Fox, NBC, PBS, UPN, and WB, it charges \$5.99 per month in addition to other subscriber package charges, and \$4.99 in markets where one or more of the local stations is not available for retransmission. DirecTV prices its local broadcast packages similarly.

²⁹⁹ DirecTV Comments at 2.

³⁰⁰ See *General Motors Corporation and Hughes Electronics Corporation, Transferors, and The News Corporation Limited, Transferee, Consolidated Application For Authority to Transfer Control*, MB Docket No. 03-124 (May 2, 2003). The proposed transaction involved the split-off of Hughes from GM, with Hughes becoming a separate and independent company, followed by a series of transactions where News Corp., an Australian corporation, through its majority-held U.S. subsidiary, Fox Entertainment Group, would acquire a 34% interest in Hughes. The remaining 66% interest in Hughes would be held by three GM employee benefit trusts (managed by an independent trustee), which combined would hold an approximately 20% interest in Hughes, and by the general public, which would hold an approximately 46% interest in Hughes.

³⁰¹ The Commission approved the Application and imposed the conditions pursuant to Sections 4(i) and (j), 303(r), 309, and 310(d) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 303(r), 309, and 310(d). See *Subject to Conditions, Commission Approves Transaction Between General Motors Corporation*, (continued....)

Corp.'s programming assets with DirecTV's nationwide multichannel video programming distribution platform.³⁰² The Commission determined that the transaction would likely generate several public interests benefits, including the introduction of new services such as interactive television from DirecTV; that consumers should benefit from stronger competition in the MVPD market; and that the Commission's goals of promoting localism and competition would be furthered. Nevertheless, the Commission found that the transaction posed several potential public interest harms related to access to programming and discrimination against unaffiliated programmers and imposed the following conditions to mitigate those potential harms.

72. First, News Corp. is required to offer its existing and future cable programming services on a non-exclusive basis and non-discriminatory terms and conditions, for as long as the FCC's program access rules are in effect. Second, by the end of 2004, DirecTV must offer local broadcast television service packages in an additional 30 designated market areas beyond what had been previously funded, projected or planned.³⁰³ Third, News Corp. must extend its commitments regarding non-discriminatory MVPD access to cable programming to any broadcast television station that News Corp. owns and operates, or on whose behalf it negotiates retransmission consent. In addition, the good faith and exclusivity requirements of the 1999 Satellite Home Viewer Improvement Act, due to sunset at the of 2005, are extended for as long as the program access rules are in effect. Fourth, News Corp. and DirecTV must enter commercial arbitration to resolve disputes with other MVPDs over retransmission consent of News Corp.'s broadcast stations and carriage of its regional sports networks ("RSNs")³⁰⁴ Finally, the Commission established rules for MVPDs meeting the Commission's definition of "small cable company," allowing those entities to appoint an agent to bargain collectively on its behalf and that of other small MVPDs in negotiating for carriage of regional sports networks and retransmission consent for broadcast stations with News Corp.³⁰⁵

2. Home Satellite or Large Dish Service

73. The home satellite dish ("HSD") or large dish segment of the satellite industry is the original satellite-to-home service offered to consumers, and involves the home reception of signals transmitted by

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Hughes Electronics Corporation and The News Corporation Limited, Public Notice, FCC 03-328 (rel. Dec 19, 2003)

³⁰² Following approval of the transaction, on December 22, 2003, GM, Hughes, and News Corp. completed the split-off of Hughes from GM and the acquisition by News Corporation of 34 percent of the outstanding common stock of Hughes. See *Hughes Electronics, GM, Hughes, and News Corporation Complete Hughes Transactions* (press release), Dec. 22, 2003.

³⁰³ Under this condition, an aggrieved MVPD may file a program access complaint for any alleged violation of the program access conditions.

³⁰⁴ This condition applies to any RSN that News Corp. manages or in which it owns or holds a controlling interest. It also applies to retransmission consent agreements for any broadcast station in which News Corp. owns or holds an attributable interest, or independently-owned Fox network affiliates for which it negotiates retransmission consent. This condition will expire six years after the release of the final Order.

³⁰⁵ When dealing with small MVPDs with fewer than 5,000 total subscribers, News Corp. must either elect "must-carry" status or negotiate retransmission consent for its owned and operated stations without any requirements for cash compensation or carriage of programming other than the broadcast signal.

satellites operating generally in the C-Band frequency.³⁰⁶ Unlike DBS, which uses small dishes, HSD antennas are between four and eight feet in diameter and can receive a wide range of unscrambled (free) programming and scrambled programming purchased from program packagers that are licensed to facilitate subscribers' receipt of video programming.³⁰⁷ There are approximately 30 satellites operating in the C-band, which carry over 500 channels of programming combined; approximately 350 channels are available free of charge and 150 are scrambled and require a subscription.³⁰⁸

74. In 1994, there were an estimated 4.5 million active HSD users, roughly half of whom subscribed to one or more programming services.³⁰⁹ HSD subscribership peaked in 1995 at 2.4 million subscribers.³¹⁰ Over the past eight years, HSD has experienced a continued decline, with 502,191 households receiving C-band service as of June 30, 2003, a decrease of over 28% from the 700,641 we reported as of June 2002.³¹¹ Overall, C-band has experienced a decline from a high of 2.3 million in 1995 to approximately 590,000 at the end of 2002.³¹² In addition, approximately 3,500 hotels and 3,000 SMATV locations employ C-band dishes to receive programming.³¹³ The decline in subscribership is caused principally by HSD subscribers switching to DBS because of the smaller, less expensive and easier to use equipment,³¹⁴ and the advent of local-into-local programming following the enactment of the SHVIA. In addition, some popular programming is no longer offered to C-band subscribers. For example, in May 2003, the National Football League informed C-band subscribers that its NFL Sunday Ticket programming package would no longer be made available to them.³¹⁵

³⁰⁶ Satellites in the C-band frequency are primarily used to transmit programming to cable operators via C-band receiving dishes at the cable operator's central technical facility or "headend."

³⁰⁷ Subscribership is measured by the number of authorized VideoCipher modules, which provide subscribers with access to scrambled programming.

³⁰⁸ For an overview of the type of programming and packages made available by C-band programmers, see, e.g., National Programming Service, at <http://www.dsinsps.com>. Motorola, at <http://www.4dtv.com>

³⁰⁹ *How Many DTH Households Are Out There Anyway?*, SKYREPORT, Oct. 1994, at 1.

³¹⁰ SBCA Comments at 15.

³¹¹ *Id.* at 4.

³¹² Despite the significant decline, a small number of consumers newly subscribe to C-band service every month. In September, although 13,324 VideoCipher modules were "de-authorized," 144 were newly authorized. See *C-band Slips Faster in September*, SATELLITE BUSINESS NEWS, Oct. 6, 2003.

³¹³ See Letter from Benjamin J. Griffin, Counsel, Coalition of C-band Constituents, to Marlene Dortch, Secretary, FCC, Attachment at 8 (June 30, 2003).

³¹⁴ To receive one or more scrambled channels, an HSD owner must purchase an integrated receiver-decoder from an equipment dealer and then pay a monthly or annual subscription fee to a program packager. HSD systems are typically designed to receive programming from several different satellites at several different orbital locations. Most HSDs include motors that permit the receiving dishes to rotate and receive signals from these many satellites. Space considerations and zoning regulations restrict many viewers' ability to install the large antenna needed for HSD reception.

³¹⁵ See National Football League, at <http://www2.nfl.com/ticket/letter.html>. The NFL attributed its decision to the "substantial decline in the number of C-band dish owners overall, and that decline has been mirrored in a (continued....)

3. Satellite-Based Advanced Services

75. **Broadband Satellite Services:** Last year, we reported that DirecTV and EchoStar offered two-way Internet access services to their subscribers. DirecTV continues to do so, but Hughes reports that it does not intend to increase the subscriber base aggressively for the DirecWay consumer business.³¹⁶ As of June 30, 2003, DirecWay had approximately 166,000 consumer subscribers in North America, compared to 123,000 as of June 30, 2002.³¹⁷ DirecWay costs \$600 for the hardware (\$400 for the equipment and \$200 for installation) and \$60 per month subscription fee with a 15-month service contract commitment.³¹⁸ DirecTV and BellSouth have entered into a strategic marketing alliance, part of which will explore the integration of digital satellite and DSL technology.³¹⁹ EchoStar, which had offered satellite-based Internet access services through its investment in Starband, no longer provides a satellite-based broadband solution.³²⁰ It has entered into a co-marketing agreement with SBC, under which its video programming is sold in “bundled” packages with various SBC products and services, including its DSL services.³²¹ EchoStar is also pursuing satellite-based services via two separate initiatives. First, in March 2003, EchoStar entered into a satellite service agreement with SES Americom for all of the capacity on a FSS satellite to be located at the 105° W. orbital location.³²² Second, in August 2003, EchoStar launched its EchoStar IX satellite, which includes two Ka-band transponders, on

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substantial decline in the number of C-band NFL Sunday Ticket subscribers.” According to the NFL, at the time of its decision, C-band NFL Sunday Ticket subscribers had dropped to 10% of their original level. *Id*

³¹⁶ See *Hughes 2nd Quarter 2003 10-Q* at 34. Hughes cites operating losses occurring over the last several years and the high cash requirements for subscriber acquisition costs.

³¹⁷ *Id* at 38.

³¹⁸ See DirecWay, at http://www.getdway.com/htb_two.html. DirecWay also offers a \$100 per month plan under a 15-month service contract allowing subscribers to spread out the cost of the equipment. This plan requires a \$100 up front fee.

³¹⁹ BellSouth Corp., *BellSouth and DirecTV Announce Agreement to Sell Digital Satellite Television Service As Part of BellSouth Answers Bundle* (press release), Aug. 27, 2003. DirecTV and BellSouth plan to offer their joint services plans beginning in early 2004. See also *DirecTV, BellSouth Predict Good Things From Marketing Deal*, SATELLITE BUSINESS NEWS, Sept. 2, 2003.

³²⁰ See *2002 Report*, 17 FCC Rcd at 26934 ¶ 66. In 2002, EchoStar terminated its distribution agreement with StarBand. Starband has been in receivership since it declared bankruptcy in 2002, but on November 12, 2003, it received permission from the U.S. Bankruptcy Court in Delaware to emerge from Chapter 11 protection. It continues to support approximately 40,000 subscribers to its two-way, satellite delivered data services. See *Starband Moves Closer to Leaving Bankruptcy*, SATELLITE BUSINESS NEWS, Oct. 8, 2003. See also *Starband Communications, Inc., Starband Communications Inc Cleared to Exit Bankruptcy* (press release), Nov. 12, 2003.

³²¹ See *EchoStar Communications Corp., SBC Communications, EchoStar Forge Strategic Partnership, Will Offer SBC Dish Network Television Service* (press release), July 21, 2003. As part of the agreement, SBC invested \$500 million in EchoStar.

³²² See *EchoStar Communications Corp., SEC Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Act of 1934 for the Period Ended June 30, 2003*, at 19 (“*EchoStar 2nd Quarter 2003 SEC Report*”). SES Americom expects to launch this satellite during the second half of 2004. SES Americom, *SES Americom to Provide Satellite Capacity to EchoStar* (press release), Mar. 26, 2003. See also Peter Brown, *EchoStar Eases Back Into Broadband*, TV TECHNOLOGY, Sept. 3, 2003, at 24.

which EchoStar will test the commercial viability of broadband services.³²³ EchoStar also agreed to lease all of the capacity on an existing in-orbit FSS satellite at the 105° orbital location beginning August 1, 2003. EchoStar states that it intends to use the capacity on the satellites to offer a combination of video programming, including local broadcast television channels in additional markets and expanded high definition programming, together with satellite-delivered, high-speed Internet access services.³²⁴

76. *Advanced Services.* EchoStar and DirecTV continue to provide a range of advanced services and products to their subscribers, with continued attention paid this year to increasing their digital video recorder (“DVR”)³²⁵ and HDTV offerings.³²⁶ Although cable operators have introduced VOD in major markets, the spectrum capacity constraints and lack of two-way connectivity currently limit DBS operators’ ability to offer video-on-demand services. Instead, EchoStar and DirecTV market digital video recorders as a competing service, principally by building the capability into the satellite receiver. EchoStar introduced this dual use set-top box under the name “Dish Video On Demand.”³²⁷ EchoStar states that it has sold approximately one million DVR equipped satellite receivers.³²⁸ EchoStar plans to introduce a high definition DVR, capable of recording high definition programming.³²⁹ DirecTV also offers an integrated satellite receiver and DVR.³³⁰ DirecTV expects higher revenues from DVR customers, expecting them to generate \$10 to \$20 in additional revenue per unit and lower churn rates.³³¹

³²³ *EchoStar 2nd Quarter 2003 SEC Report* at 19

³²⁴ *Id.* at 31

³²⁵ Digital video recorder (“DVR”) and personal video recorder (“PVR”) generally refer to consumer electronics devices which allow the user to record video and audio programming on a hard drive and to control that programming using VCR-like controls such as rewind, fast forward and pause. DVRs offer a range of additional features and recording functionality is usually managed through an electronic program guide, which allows the viewer to choose programming to record, up to 14 days in advance. DVRs have hard drives ranging in size from 20 GB to 80 GB of storage capacity, allowing users to record up to 80 hours of programming. *See also* paras. 111, 192 *infra*

³²⁶ *See* Seth Shiesel, *Cable or Satellite? Pleased Stay Tuned*, THE NEW YORK TIMES, July 31, 2003.

³²⁷ *EchoStar to Offer New Dish Customers New 100-Hour DVR Free of Charge*, INTERACTIVE TV TODAY, Sept. 1, 2003. The set-top box is free of charge to new customers who commit to a one-year service contract with Dish Network and pay a \$50 activation fee. *Id.* *See also* EchoStar Communications Corp., *Dish Network Introduces Dish Player* (press release), Aug. 25, 2003.

³²⁸ EchoStar Communications Corp., *Dish Network First to Reach TV Industry Milestone 1 Million Digital Video Recorders* (press release), Sept. 24, 2003. DISH customers may receive the unit free or by paying up to \$199 depending on the level of service and length of the subscriber’s service contract. *See EchoStar Launches “Free” Digital VCR Offer*, SATELLITE BUSINESS NEWS, Aug. 27, 2003, at 2.

³²⁹ Mike Smider, *Satellite TV Builds a Better Set-top Box, With High Definition*, USA TODAY, Sept. 30, 2003. The high definition DVR is expected to retail for \$999. DirecTV is expected to introduce a similar HD DVR set-top box in early 2004. *Id.*

³³⁰ DirecTV Comments at 18. DirecTV DVR equipment ranges in price from \$99 to \$399. *Id.* DirecTV charges \$4.95 per month for its DirecTV DVR service, except for subscribers to DirecTV’s Total Choice Premier package, which receive the service free of charge. *See also* DirecTV, at <http://www.directv.com/DTVAPP/Imagine/TIVO.dsp>.

³³¹ *DVRs. The Key to Customer Satisfaction*, SKY RESEARCH, June 2003, at 4

DirecTV has approximately 500,000 digital video recorder subscribers.³³² Similar to EchoStar, DirecTV markets a DVR service as VOD with its premium subscription service "Starz on Demand," which allows subscribers to download up to five movies per week onto their DVR hard drive.³³³

77. With respect to HDTV, DirecTV and EchoStar continue to provide high definition television services and packages.³³⁴ DirecTV offers seven national channels of HDTV programming and some HDTV special events and pay-per-view offerings.³³⁵ EchoStar offers a similar package of HD channels.³³⁶ EchoStar also introduced a new satellite dish capable of receiving signals from three EchoStar satellites at once, and providing EchoStar with the ability to offer subscribers using this dish up to 50 HD channels.³³⁷

C. Broadband Service Providers

78. In our first Report, we identified municipal and independent overbuilders. At that time, video distribution was the sole focus of overbuilding activity. In our 1998 Report, we noted that municipal and independent overbuilders were beginning to offer local and long distance telephone service and Internet access services in order to compete with incumbent cable operators. At that time, CLEC overbuilders, which were already providing local telephone service as their core business, were beginning to provide Internet access services as well. In our 2001 Report we addressed a new class of providers called BSPs.³³⁸

³³² *Despite Loss, DirecTV, Hughes Play Up Third Quarter Results*, SATELLITE BUSINESS NEWS, Oct. 15, 2003, at 2.

³³³ DirecTV Comments at 18.

³³⁴ See, e.g., Leichtman Research Group, *HDTV Attracting A Growing Audience* (press release), June 6, 2003; Barry Willis, *DBS Delivering More HDTV*, STEREOPHILE, Sept. 29, 2003.

³³⁵ DirecTV Comments at 18. DirecTV offers a package of HD programming that includes ESPN HD, Discovery HD Theater, HD Net, HD Net Movies, HBO HDTV, Showtime HDTV, and High Definition Pay-Per-View. See DirecTV, at http://www.directv.com/DTVAPP/Imagine/HDTV_pricing.dsp. See also Naina Chernoff, *DirecTV Kicks Off With HD, Interactive NFL*, TV TECHNOLOGY, Sept. 3, 2003.

³³⁶ EchoStar offers ESPN HD, Discovery HD Theater, HD Net, HD Net Movies, HBO HDTV, Showtime HDTV, and Dish On Demand Pay-Per-View movies. EchoStar Communications Corp., *Dish Network Expands High Def Offerings, HD Leader Packages Four Channels, Prepares Rollout of Receivers* (press release), Sept. 5, 2003. See also EchoStar Communications Corp., at <http://www.dishnetwork.com/content/programming/hdtv/index.asp>.

³³⁷ See EchoStar Communications Corp., *DISH Network to Add HDNet, HDNet Movies, DISH Network Unveils New SuperDish Technology Capable of Providing Consumers Up to 50 HDTV Channels* (press release), May 1, 2003. Dubbed the "SuperDish" by EchoStar, it is an elliptical 66-centimeter dish. Beginning in late 2003, EchoStar plans to offer a "SuperDish HD Bundle" for approximately \$1,500, which includes either a 34-inch-screen HDTV monitor or a 40-inch rear-projection HDTV monitor, plus a digital receiver and a satellite dish. HD monitors alone retail for between \$1000-\$2000. See Mark Koebrich, *EchoStar to Offer High Definition TVs in Satellite Package*, DENVERPOST.COM, Oct. 15, 2003, at <http://www.denverpost.com/Stories/0,1413,36%257E33%257E1698702,00.html>.

³³⁸ We define "broadband service providers" ("BSPs") here as, "newer firms that are building state-of-the-art facilities-based networks to provide video, voice and data services over a single network." The term BSP is not intended to imply anything with respect to Commission policy or proceedings that might involve broadband services. Usually, the services of a BSP can be purchased separately as well as in a bundle. 2001 Report, 17 FCC Rcd at 1296-7 ¶ 3. See also 2002 Report, 17 FCC Rcd at 26948-52 ¶¶ 102-111.

Today, we recognize overbuilders (municipal, independent, and CLEC overbuilders alike) as BSPs because most, if not all, operate state-of-the-art networks capable of providing bundles of services (i.e., voice, advanced video, and data services). As we reported last year, some BSPs are now offering subscribers VOD and ITV services in addition to telephone and Internet access services.³³⁹ In a recent study, GAO found that competition from wire-based technologies, such as BSPs, was the most effective means of reducing cable rates.³⁴⁰ Even with the multi-service strategy, however, BSPs continue to face considerable challenges, many of which are discussed below.³⁴¹ As a result, competition from a wire-based competitor such as a BSP is limited to a very few markets.³⁴²

79. At the time of the 1994 Report, overbuilders were still a limited phenomenon, distributing only multichannel video programming.³⁴³ Overbuilders at that time were either cable systems or LECs providing multichannel video services under the "video dialtone" framework.³⁴⁴ By 1998 there were many more overbuilders, most offering a bundle of voice, video, and data services, which allowed them to compete more effectively with incumbent cable operators. As of June 1998, competing franchises had been awarded covering as many as 149 communities in 21 states with the potential to pass 7.2 million homes, though not all the franchises awarded at this time were in operation at the time of the 1998 Report.³⁴⁵ Today, Broadband Service Providers Association ("BSPA") members serve over one million video subscribers, and they have franchises that authorize them to serve over 17.7 million homes with voice, video, and data.³⁴⁶ BSPA members have deployed over 32,000 miles of fiber in order to provide a multitude of state-of-the-art services to subscribers, including VOD and interactive television.³⁴⁷

80. *OVS*. In 1996, Congress abolished the VDT framework, and established the open video system ("OVS") framework, one of four statutorily-recognized options for provision of video programming services by LECs.³⁴⁸ Most firms currently receiving certification from the Commission as OVS operators, however,

³³⁹ 2002 Report, 17 FCC Rcd at 26950 ¶ 106. See also BSPA Comments at 27-30

³⁴⁰ 2003 GAO Report, fn 7 *supra*, at 3-4.

³⁴¹ BSPA Comments at iii-iv

³⁴² 2003 GAO Report at 3-4.

³⁴³ See BSPA Comments at 2

³⁴⁴ See 1994 Report, 9 FCC Rcd at 7495-7505 ¶¶ 103-120. See para. 112 *infra*

³⁴⁵ 1998 Report, 13 FCC Rcd at 24308-9 ¶ 43.

³⁴⁶ BSPA Comments at iii and 6. Not all overbuilders are members of BSPA

³⁴⁷ *Id.* at iii, 2, 8 and 10.

³⁴⁸ 47 U.S.C. § 571(a)(3)-(4); 1996 Report, 12 FCC Rcd at 4395-8 ¶ 68-71. Open video systems are subject to reduced regulation under Title VI. An open video system's carriage rates are entitled to a presumption that they are just and reasonable where one or more unaffiliated video programming providers occupy channel capacity on the system at least equal to that of the open video system operator and its affiliates. Open video systems are subject to the Commission's rules governing must carry, retransmission consent, program access, sports exclusivity, network nonduplication, syndicated exclusivity, and public, educational and governmental ("PEG") access channels. In addition, while open video systems are exempt from local cable franchise requirements, localities are permitted to assess a fee on an open video system's gross revenues at a rate not exceeding the (continued. . .)

are not LECs.³⁴⁹ BSPs, primarily RCN, are the only significant holders of OVS certifications or local OVS franchises. BSPA reports that "BSPA members typically provide service under traditional cable franchises, although several BSPA members are using the OVS framework for a relatively few systems, and others may explore doing so in the future."³⁵⁰ BSPA indicates that competitors and consumers have not been able to realize the full potential of OVS as a competitive alternative to the incumbent cable operators due in part to the *City of Dallas, Tex v. FCC* decision of the 5th Circuit Court of Appeals, in which the court held that municipalities can require OVS operators to obtain a local franchise.³⁵¹

81. **BSP Overbuilders.** RCN Corporation is the nation's first and largest broadband overbuilder supplying voice, video and high-speed Internet access services to residential subscribers over its own network.³⁵² RCN also offers such advanced offerings as VOD and HDTV.³⁵³ Currently, RCN is the 11th largest MVPD.³⁵⁴ RCN provides competitive cable, telephone, and high-speed Internet services in eight states to approximately half a million subscribers.³⁵⁵ At the end of June 30, 2003, RCN reported a total of 1.4 million homes passed and 462,953 video subscribers.³⁵⁶ WideOpenWest ("WOW") is the second largest overbuilder. WOW is the 15th largest MVPD and, as of June 2003, served 290,000 subscribers.³⁵⁷ WOW offers voice, video and high-speed Internet access services in over 100 communities in four states.³⁵⁸ In (Continued from previous page)

franchise fee imposed by that locality on the local cable operator. *Id.* Although OVS is one of four means for LEC entry into video, the OVS rules do not preclude other types of entities from using the OVS rules. BSPs continue to be the only significant holders of OVS certifications or local OVS franchises. See 1998 Report, 13 FCC Rcd at 24357-8 ¶ 117, 2001 Report, 17 FCC Rcd at 1296 ¶ 113, See also para.113 *infra*.

³⁴⁹ *Bell Atlantic-New Jersey, Inc (Certification to Operate an Open Video System)*, 11 FCC Rcd 13249 (CSB 1996).

³⁵⁰ BSPA Comments at 47. In those markets where local franchising authorities embrace the OVS concept as a means to facilitate market entry for competitors and introduce competition and its benefits to consumers, entities continue to consider OVS as a regulatory alternative to the traditional cable franchise and have employed the OVS model with some success. *Id.* at 48. For a complete list of OVS certifications, see <http://www.fcc.gov/mb/ovs/csovsccer.html>.

³⁵¹ BSPA Comments at 48. In *City of Dallas v FCC*, 165 F.3d 341 (5th Cir. 1999), the court decided that cities may require local franchises for OVS operators

³⁵² RCN Comments at i. See para. 120 *infra*

³⁵³ RCN Comments at 1. In September, RCN announced the launch of its HDTV service to subscribers in Philadelphia, Pennsylvania. RCN already offered HDTV service in Boston, Massachusetts; parts of New York City; Washington, D.C.; and Lehigh Valley, Pennsylvania. *Mass Media Notes*, COMMUNICATIONS DAILY, Sept. 19, 2003, at 7. RCN alleges that Comcast has entered into an exclusive arrangement with New England Sports Network ("NESN") to provide sports programming broadcasting using HDTV, but NESN has not provided this critical HDTV programming to RCN because of the exclusive agreement. RCN Reply Comments at 2-5.

³⁵⁴ Kagan World Media, Cable TV Investor, Oct. 31, 2003, at 12

³⁵⁵ RCN Corp., *RCN Announces Second Quarter 2003 Results* (press release), Aug 11, 2003

³⁵⁶ *Id.*

³⁵⁷ Kagan World Media, Cable TV Investor, Oct. 31, 2003, at 12.

³⁵⁸ For a full list of communities served, see http://www.wideopenwest.com/whatwedo_avail.html.

2003, the chairman and CEO of WOW resigned and formed another BSP, Champion Broadband.³⁵⁹ Champion began its operations by purchasing WOW's Denver, Colorado, overbuild system which serves approximately 2,000 subscribers.³⁶⁰ The third largest BSP is Knoxville, Tennessee-based Knology, which operates in the Southeast. As of June 2003, Knology was the 26th largest MVPD, and had 132,163 video subscribers.³⁶¹ Seren Innovations provides voice, video, and high-speed Internet access services through its subsidiary Astound in St. Cloud, Minnesota, and Concord, California.³⁶² As of September 2003, Astound had 40,000 customers.³⁶³ Other overbuilders include Everest, which provides service in Kansas City, Kansas; Altrio, which provides service in the Los Angeles, California metropolitan area; Surewest, which provides service in Sacramento, California; and Grande, which provides service in seven locales in Texas.³⁶⁴

82. Last year we reported that many overbuilders were experiencing financial difficulties. This year we note that after restructuring in 2002, Knology once again continues to expand its operations, most notably through its purchase of broadband assets from Verizon Media Ventures, Inc., adding approximately 290,000 homes passed and 64,000 subscribers to its coverage area.³⁶⁵ In addition, Knology experienced a 23% increase in revenues in the second quarter of 2003 over the second quarter of 2002.³⁶⁶ Similarly, RCN experienced a 17% percent increase in average residential revenues per customer in the second quarter of 2003, over the second quarter of 2002.³⁶⁷ Grande Communications secured an additional \$45 million in

³⁵⁹ *WOW CEO Forms New Cable Firm*, MULTICHANNELDAY NEWS, Apr. 11, 2003. *Champion Broadband, WideOpenWest to Sell Denver/Lakewood Cable System to Company Founders* (press release), Apr. 4, 2003.

³⁶⁰ *Id.*

³⁶¹ Kagan World Media, Cable TV Investor, Oct. 31, 2003, at 12. *Knology Inc., Knology Reports Strong Revenue and EBITDA in Second Quarter* (press release), Aug. 11, 2003. For a full list of communities served, see <http://www.knology.com/services/cities.cfm>.

³⁶² Seren Innovations, *Seren Innovations Reaches Another Milestone* (press release), Sept. 5, 2003. Seren Innovations is a wholly owned subsidiary of Xcel Energy Inc. *Id.*

³⁶³ *Id.*

³⁶⁴ BSPA Comments at 15-16, 50. Altrio Communications provides high-speed Internet access, local and long-distance telephone service, and video services (including VOD) via a fiber optic communications network in the Los Angeles metropolitan area. Altrio offers 80 channels of basic television programming, nearly 150 channels of premium programming, 600 hours of video-on-demand programming, 75 channels of pay-per-view programming, and 45 CD-quality channels of digital music. Altrio Communications, *Altrio Communications Rated Best Television Provider* (press release), July 10, 2003. Like RCN and Seren Innovations, Everest is affiliated with an electric utility company. Steve Everly, *Utilicorp United Forms Partnership to Offer Telephone, High-Speed Internet and Cable TV Services*, THE KANSAS CITY STAR, Apr. 18, 2000. See para. 120 *infra*.

³⁶⁵ Knology, Inc., *Knology Announces Agreement To Purchase Broadband Assets* (press release), July 18, 2003. Knology also took certain steps to reduce its debt, which according to Knology officials "significantly improves our balance sheet and liquidity position." Knology Inc., *Knology Completes \$39 Million Private Placement Transaction* (press release), Nov. 7, 2002.

³⁶⁶ Knology, Inc., *Knology Reports Strong Revenue And EBITDA In Second Quarter 2003* (press release), Aug. 11, 2003.

³⁶⁷ RCN Corp., *RCN Announces Second Quarter 2003 Results* (press release), Aug. 11, 2003.

financing, which will be used for expansion into additional markets.³⁶⁸ Other overbuilders, such as McLeod USA, continue to face financial challenges.³⁶⁹

83 *Competitive Responses*. In the *1994 Report*, the Commission stated that cable service rates in markets that were overbuilt were an average of 16% lower than the rates in markets that were not overbuilt.³⁷⁰ In the *1998 Report*, we noted that where incumbent cable operators faced head-to-head competition from overbuilders, lower prices were often the result, as were additional channels at the same monthly rate, and improved service.³⁷¹ Today, BSPA states that BSPs bring new competition to all incumbent providers of video, telephone and high-speed data Internet access services, including satellite competitors.³⁷² BSPA believes that the impact of BSP competition includes the moderation of cable rate increases, increased total penetration of high-speed Internet access, increased penetration of enhanced digital television, acceleration of next generation service deployment, incumbent upgrade investments, improved customer satisfaction rates, expanded PEG and other public service capabilities, and rural market entry.³⁷³

84. *Barriers to Competition* In addition to difficulties with the OVS regime,³⁷⁴ BSPs continue to report other barriers to competition in the MVPD market. BSPA alleges, among other things, that incumbent cable operators continue to leverage their vertical relationships to restrict competitive access to programming, and use their buying power to enforce exclusive agreements with unaffiliated programmers, especially sports programming.³⁷⁵ BSPA and RCN also claim that cable operators are engaging in discriminatory pricing strategies, which have increased in frequency and aggressiveness; pricing video services in some cases below any estimate of variable cost.³⁷⁶ Some cases of price discrimination, BSPA alleges, are only targeted at BSP existing and potential customers, allegedly violating various federal and local regulatory regulations.³⁷⁷ BSPA also asserts its continued concern over the inapplicability of the Commission's program access rules to terrestrially delivered programming, which prevents it access to vital

³⁶⁸ *Westward Expansion*, CABLEFAX DAILY, Oct. 9, 2003 at 2

³⁶⁹ *McLeod USA Board Shuffled*, COMMUNICATIONS DAILY, June 6, 2002

³⁷⁰ *1994 Report*, 9 FCC Rcd at 7470 ¶ 57.

³⁷¹ *1998 Report*, 13 FCC Rcd at 24311 ¶ 47.

³⁷² BSPA Comments at 9.

³⁷³ BSPA Comments at 9-11. *See also* RCN Comments at 5-6.

³⁷⁴ *See* para. 80 *supra*

³⁷⁵ BSPA Comments at iv, 12, and 14-19; RCN Comments at 2 and 6-11. *See* paras. 151, 160 *infra*. Comcast notes that it was Congress' decision to permit programmers to offer volume discounts to their largest customers, and that volume discounts are common throughout the country. Comcast Reply at 19.

³⁷⁶ BSPA Comments at iv and 34; RCN Comments at 2-3 and 11-14; *See* para. 124 *infra*

³⁷⁷ BSPA Comments at iv, 34, and 36-38. *See also* RCN Comments at 11-14. We have reported on similar complaints in several prior *Reports*. *See 2001 Report*, 17 FCC Rcd at 1297 ¶ 115; *2002 Report* 17 FCC Rcd at 26951 ¶ 110

local and regional content, including sports programming.³⁷⁸ BSPA contends that long-term exclusive MDU contracts not only block competitive entry by deterring BSP investment, but also serve to lock tenants and building owners into outdated networks and services.³⁷⁹ BSPA also charges that BSPs (as well as incumbent cable operators) are denied access to utility poles and public rights of way necessary to build out their networks, and claims that the adjudication process for gaining such access is onerous.³⁸⁰

D. Wireless Cable Systems

85. Multipoint distribution service ("MDS") and instructional television fixed service ("ITFS") are authorized to operate in the 2.5-2.69 GHz band. In addition, MDS entities have licenses in the 2.15-2.162 GHz band. Wireless cable systems combine multiple MDS (*i.e.*, multichannel MDS) frequencies and ITFS frequencies to transmit video programming and high-speed Internet access to residential subscribers in limited areas using line-of-sight technology.³⁸¹ This delivery technology also is known as multichannel multipoint distribution service ("MMDS").

86. In June 1994, the wireless industry served about 550,000 subscribers up from 300,000 subscribers in 1990.³⁸² The number of MMDS subscribers peaked at approximately 1.2 million subscribers in 1996 and has steadily decreased since then. As of June 2003, wireless cable systems served about 200,000 subscribers.³⁸³ Thus, MMDS provides competition to incumbent cable operators only in limited areas. In 1998, the Commission released the *Two-Way Order* permitting MDS/ITFS licensees to construct digital two-way systems that could provide high-speed, high-capacity broadband service, including two-way Internet service via cellularized communication systems.³⁸⁴ As a result, licensees of MDS and ITFS spectrum are turning to data delivery rather than video service. In 2001, the Commission adopted a *First Report and Order and Memorandum Opinion and Order* in the New

³⁷⁸ BSPA Comments at 2, 13, and 16-18; *see para. 149 infra*. Comcast notes that Congress deliberately chose not to extend the prohibition on exclusive contracts for vertically integrated programming to programming that is terrestrially delivered, and that there is no evidence that programming has been migrated for purposes of evading the program access rules. Comcast Reply Comments at 12-14. NCTA notes that Congress has rejected the policy of extending the program access rules to terrestrially delivered programming. NCTA Reply Comments at 8. BSPA notes that VOD/SVOD services will be a major part of future revenue streams, and urges that the Commission's program access rules should apply to VOD/SVOD services. *See* BSPA Comments at 27.

³⁷⁹ BSPA Comments at 39-41; RCN Comments at 2 and 16-17; *see para. 129 infra*. Comcast argues that if MDU exclusive agreements obtained by cable operators are objectionable, then they should be equally objectionable when obtained by BSPs. Comcast Reply Comments at 21.

³⁸⁰ BSPA Comments at 44-47; RCN Comments at 2-3 and 15-16. According to BSPA, these difficulties result from lengthy proceedings, excessive fees, and slow action on the part of pole owners and local governments. BSPA Comments at 44-47.

³⁸¹ MMDS must have a "line-of-sight" path between transmitter and receiver. Technical limitations include signal strength and blockage by terrain.

³⁸² *1994 Report*, 9 FCC Rcd at 7482 ¶ 79.

³⁸³ NCTA Comments at 8.

³⁸⁴ *Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions*, 13 FCC Rcd at 19112 (1998), *recon.*, 14 FCC Rcd at 12764 (1999), *further recon.*, 15 FCC Rcd at 14566 (2000).

Advanced Wireless Services proceeding, which made the spectrum used by MMDS services potentially available for advanced mobile and fixed terrestrial wireless services, including third-generation ("3G") and future generations of wireless systems.³⁸⁵

87. Last year, we reported on the top four companies holding MMDS/ITFS licenses, which hold more than half of the licenses - Worldcom, Nucentrix, Sprint and BellSouth.³⁸⁶ WorldCom's MDS and MMDS licenses have tentatively been acquired by Nextel.³⁸⁷ A U.S. bankruptcy court approved the sale to Nextel for \$144 million for the fixed wireless assets that WorldCom holds including an agreement that covers certain protection measures for ITFS licenses.³⁸⁸ The Commission is currently considering the proposed transfer. The Commission is also considering a transfer of NextWave PCS licenses in 34 markets to Cingular Wireless for \$1.4 billion, also a result of a bankruptcy court action.³⁸⁹ In another bankruptcy action, Leap Wireless has sold 15 MHz blocks of spectrum in Idaho to Edge Communications for \$3.25 million.³⁹⁰ McLeodUSA, a company based in Cedar Rapids, Iowa, has signed a multi-year wholesale agreement with AT&T Wireless to offer wireless service along with its local and long distance services to its customers.³⁹¹ BellSouth continues to provide video programming in the areas where it holds MMDS and ITFS licenses.³⁹²

88. On April 2, 2003, the Commission released a *Notice of Proposed Rule Making* ("MDS NPRM") initiating a comprehensive examination of the rules and policies governing the licensing of the ITFS, MDS, and MMDS services.³⁹³ The proposed rule changes would facilitate the provision of high-speed data and voice services accessible to mobile as well as fixed users in channels that today are used

³⁸⁵ See *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems*, 16 FCC Rcd at 17222 ¶ 2 (2001). The 3G advanced wireless services may include new data and broadband services such as Internet access, electronic mail, and short messaging services. *Id.* at 17223-4 ¶ 5.

³⁸⁶ *2002 Report*, 17 FCC Rcd at 26938 ¶ 74.

³⁸⁷ See *Commission Seeks Comment on Applications to Assign Wireless License from WorldCom Inc to Nextel Spectrum Acquisition Corp.*, 18 FCC Rcd 19313 (2003).

³⁸⁸ *Wireless*, COMM DAILY, Sept. 26, 2003, at 9.

³⁸⁹ *Id.*

³⁹⁰ *Wireless*, COMMUNICATIONS DAILY, Sept. 16, 2003, at 7.

³⁹¹ *Telecommunications*, THE NEW YORK TIMES, Sept. 4, 2003, at C-4.

³⁹² BellSouth Comments at 2.

³⁹³ See *Amendment of Parts 1, 21, 73, 74, and 101 of the Commission's Rules to Facilitate Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, 18 FCC Rcd 6722 (2003). The Commission incorporated the two ongoing dockets into this proceeding because they pertain to these services. See *Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico*, 17 FCC Rcd at 8446 (2002) (proposing to establish a Gulf of Mexico service area); see also *Amendment of Parts 1, 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions*, 15 FCC Rcd at 14566 (2000).

primarily for one-way video delivery to fixed locations.³⁹⁴ Specifically, the Commission: (1) sought comment on whether and how to reconfigure the 2500-2690 MHz band; (2) sought comment on the best means of ensuring the efficient utilization of unassigned ITFS spectrum, including geographic area licensing and unlicensed operation; (3) proposed to convert site-by-site licenses of MDS and ITFS incumbents to geographic service areas; (4) sought comment on how best to promote increased access to and efficient utilization of ITFS spectrum, (5) proposed technical rules to increase licensee flexibility and protect incumbent operations in the 2500-2690 MHz band; (6) proposed to simplify and streamline the licensing process for the services; (7) proposed application filing and processing procedures to facilitate implementation of the three services into the Universal Licensing System (ULS) administered by the Wireless Telecommunications Bureau; and (8) proposed to consolidate all service-specific rules for the ITFS, MDS, and MMDS services under Parts 27 and 101 but sought comment on alternatives. Pending resolution of the rulemaking proceeding, the Commission temporarily suspended acceptance of applications for new ITFS licenses and applications to amend or modify either ITFS or MDS stations in the 2500-2690 MHz band, subject to certain exceptions;³⁹⁵ and similarly temporarily suspended the current construction deadline for MDS and ITFS authorization holders.³⁹⁶ In this regard, W.A.T.C.H. TV,³⁹⁷ one of the first commercial MDS/ITFS systems in the country to deploy digital wireless cable service and high-speed Internet access service, states that the Commission should allow digital service providers like W.A.T.C.H. TV to continue to operate high-power, high-site facilities in the 2500-2690 MHz band. W.A.T.C.H. TV is concerned that a mandatory transition to a cellular architecture, as suggested in the *MDS NPRM*, will force W.A.T.C.H. TV to terminate its provision of video and audio programming to subscribers. W.A.T.C.H. TV claims that such services cannot be distributed economically over cellularized facilities.³⁹⁸

E. Private Cable Systems

89. Private cable operators (“PCOs”), also known as private communication operators or satellite master antenna television (“SMATV”) systems, are video distribution facilities that use closed transmission paths without using any public right-of-way.³⁹⁹ PCOs acquire video programming and distribute it via terrestrial wiring in urban and suburban multiple dwelling units (“MDUs”), such as apartments and condominiums, and commercial multiple tenant units (“MTUs”), including hotels and

³⁹⁴ See *Amendment of Parts 1, 21, 73, 74, and 101 of the Commission's Rules to Facilitate Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, 18 FCC Rcd at 6725 ¶ 2.

³⁹⁵ The Commission modified this temporary suspension in the *Amendment of Parts 1, 21, 73, 74, and 101 of the Commission's Rules to Facilitate Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, 18 FCC Rcd 16848 (2003).

³⁹⁶ The Commission clarified its action in the *Amendment of Parts 1, 21, 73, 74, and 101 of the Commission's Rules to Facilitate Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, 18 FCC Rcd 15087 (2003).

³⁹⁷ W.A.T.C.H. TV serves more than 12,500 households in the Lima, Ohio, television market. W.A.T.C.H. TV Comments at 2.

³⁹⁸ *Id.* at 3-5.

³⁹⁹ 47 U.S.C. § 522(7)

office buildings. Traditionally, PCOs received non-broadcast programming from resellers called aggregators using satellite master antenna systems atop the buildings they serve. Today, some PCOs obtain programming from DBS operators. PCOs usually combine this non-broadcast video programming with local broadcast television signals that they receive using analog master antennas. Thus, the packages PCOs provide their subscribers are comparable to those of cable systems, and they directly compete with franchised cable operators. In 1994, PCOs provided the same types of video programming that were offered by cable systems.⁴⁰⁰ By 1998, some PCOs were offering telephone service, closed-circuit security monitoring, interactive TV, Internet access services, voice mail, paging, and other services.⁴⁰¹ Some PCOs now offer broadband access, through DSL technology, to consumers in addition to video services.⁴⁰²

90. Currently there are approximately 250 PCOs operating in the United States.⁴⁰³ PCOs often serve approximately 3,000-4,000 subscribers, but the larger operations serve as many as 15,000-55,000 subscribers.⁴⁰⁴ The number of subscribers to private cable systems appears to have fluctuated over the past ten years. In August 1994, PCOs served one million subscribers.⁴⁰⁵ In June 1998, PCO subscribership dropped to 940,000, a decrease of six percent from 1994.⁴⁰⁶ As of June 2003, PCO subscribership reached 1.2 million, an increase of 260,000, or 27.7%, over 1998. This represents a decrease in PCO subscribership of 400,000 subscribers, or 25%, from the 1.6 million subscribers reported in 2002.⁴⁰⁷ To some extent, these fluctuations result from the lack of a standardized data source, and not necessarily from changes in the actual number of subscribers.

⁴⁰⁰ 1994 Report, 9 FCC Rcd at 7488 ¶ 91.

⁴⁰¹ 1998 Report, 13 FCC Rcd at 24342 ¶ 92.

⁴⁰² Amy Cravens, *Is The MTU Dead?*, BROADBAND PROPERTIES, March 2003, at 17

⁴⁰³ In 1994, we reported that there were 3,000 to 4,000 SMATV systems operating nationwide, and in 1998 we reported that there were hundreds of firms operating throughout the United States. See 1994 Report, 9 FCC Rcd at 7488 ¶ 92. See also 1998 Report, 13 FCC Rcd at 24341 ¶ 90. For a list of private communications operators, see Independent Multi-Family Communications Council's, at <http://www.umcc-online.org/membership> (visited Oct 6, 2003)

⁴⁰⁴ See 1999 Report, 15 FCC Rcd at 1023 ¶ 94. See also *Ten Largest Private Cable Operators/Multiple System Operators*, PRIVATE CABLE & WIRELESS CABLE, Dec. 1999, at 4.

⁴⁰⁵ 1994 Report, 9 FCC Rcd at 7540 ¶ 201, Table 5 1

⁴⁰⁶ 1998 Report, 13 FCC Rcd at Appendix C, Table C-1

⁴⁰⁷ NCTA Comments at 8. See also 2002 Report, 17 FCC Rcd at 26940 ¶ 77.

91. PCOs are not regulated in the same way as traditional cable operators.⁴⁰⁸ Some PCO systems use microwave transmissions and wires to serve multiple buildings that are not commonly owned.⁴⁰⁹ Where a PCO crosses public rights-of-way, that operator becomes a cable operator as defined by the Communications Act, including the franchising obligations of Section 621.⁴¹⁰ On May 16, 2002, the Commission adopted a Report and Order expanding eligibility for licenses in the Cable Television Relay Service (“CARS”) to include all MVPDs, including PCOs. The Order also increased the number of frequencies available to PCOs by permitting the use of 12.70-13.20 GHz band (“12 GHz CARS band”) by all MVPDs for delivering programming services to their subscribers.⁴¹¹ In that proceeding, several commenters contended that use of the lower CARS band of 12.70-13.20 will help PCOs compete with cable MSOs.⁴¹²

92. In January 2003, the Commission issued the *Second Report and Order* on inside wiring, which declined to restrict certain exclusive contracts for the provision of video services in MDUs because the record did not demonstrate a need for government intervention in the marketplace with privately negotiated contracts.⁴¹³ In that *Order*, the Commission also made four changes, or clarifications, to its cable inside wiring rules which could benefit property owners and PCOs in the long

⁴⁰⁸ 1996 Act, sec. 301(a)(2), 47 U.S.C. § 522(7). In addition, private cable and SMATV operators: (a) do not pay franchise and Federal Communications Commission subscriber fees; (b) are not obligated to pass every resident in a given area, (c) are not subject to rate regulation; and (d) are not subject to must carry and local government access obligations. *1997 Report*, 13 FCC Rcd at 1085 n.296.

⁴⁰⁹ *Id.* In 1991, the Commission held that microwave transmissions do not “use” public rights-of-way and made 18 GHz technology available for the point-to-point delivery of video programming services, allowing operators to free themselves from large networks of coaxial or fiber optic cable and amplifiers. *Amendment of Part 94 of the Commission’s Rules to Permit Private Video Distribution Systems of Video Entertainment Access to the 18 GHz Band*, 6 FCC Rcd 1270, 1271 ¶ 10 (1991). In 2000, the Commission adopted a *Report and Order* affirming the allocation of the 18 GHz band for SMATV providers, concluding that “private cable operators using the 18 GHz band, for both current and future operations, will not be able to compete effectively against franchised cable operators if we redesignate the 18.3-18.55 GHz band” *See Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.2-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use*, 15 FCC Rcd 13450 (2000). Subsequently, the Commission allowed PCOs to use CARS for programming services delivery, and gave the 18 GHz frequencies to Hughes Electronics Corporation. *See Second Order on Reconsideration*, 17 FCC Rcd 24248 (2002).

⁴¹⁰ *Entertainment Connections, Inc., Motion for Declaratory Ruling*, 13 FCC Rcd 14277 (1998).

⁴¹¹ *Amendment of Eligibility Requirements in Part 78 Regarding 12 GHz Cable Television Relay Service*, 17 FCC Rcd 9930 (2002).

⁴¹² *See, e.g.,* OpTel, Inc., Comments, CS Docket No. 99-250, at 2-3; RCN Telecom Services, Inc., Comments, CS Docket No. 99-250, at i, 3-4.

⁴¹³ *Telecommunications Services Inside Wiring, Customer Premises Equipment, Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Cable Home Wiring*, 18 FCC Rcd 1342 (2003). On May 20, 2003, NCTA filed a Petition for Review in the U. S. Court of Appeals for the D.C. Circuit. *National Cable & Telecommunications Association v FCC and USA*, No. 03-1140. *See also* Matthew C. Ames and Larry D. Kessler, *The FCC’s New Cable Inside Wiring Rules: Property Owners and Private Operators Benefit*, BROADBAND PROPERTIES, March 2003, at 24.

run. The changes are: (1) wiring located behind sheet rock is "physically inaccessible" for purposes of the home run wiring rules; (2) incumbent providers must allow access to their wiring before the termination of services; (3) incumbent operators must share space in molding with competitors; and (4) the rules apply to all programming providers, including both franchised cable operators and PCOs.

F. Broadcast Television Service

93. Broadcast networks and stations supply video programming directly over the air to consumers. Some consumers, who do not subscribe to an MVPD service, rely solely on over-the-air transmission of broadcast television signals. Other households receive broadcast television programming over-the-air on those television receivers that they have chosen not to connect to an MVPD service. In addition, many consumers receive broadcast signals via their cable, DBS, or other MVPD service. The number of commercial and noncommercial television stations increased from 1,518 as of November 30, 1993, to 1,726 as of June 30, 2003.⁴¹⁴ Total television broadcast advertising revenue averaged an annual six percent increase⁴¹⁵ after the 1991 recession but fell dramatically during the 2001 recession with a decline in revenue of about 12% from 2000.⁴¹⁶ Total television broadcast advertising revenues rebounded in 2002, with a 9.4% increase from the \$37.8 billion garnered in 2001 to \$41.4 billion in 2002.⁴¹⁷ Advertising revenues for the four networks (ABC, CBS, Fox, and NBC) was \$10.2 billion in 1993.⁴¹⁸ By 1998, the four networks' total advertising revenue had increased to \$13.7 billion.⁴¹⁹ In 2002, the four networks had \$15.3 billion in advertising revenue.⁴²⁰ In contrast, cable programming networks collected \$2.8 billion in advertising revenue in 1993. By 1998, cable programming networks' advertising revenue more than doubled to \$7.2 billion, and by 2002, these networks earned \$10.9 billion in advertising revenue.⁴²¹ Three new broadcast television networks have emerged since our *1994 Report*: UPN and WB in 1995; and PAXTV in 1997.⁴²² Advertising revenue for the seven most widely distributed broadcast networks (ABC, CBS, Fox, NBC, PAX, UPN, and WB) in 2002 was estimated at \$22 billion, an 8.8% increase over the \$20.3 billion earned in 2001.⁴²³ Broadcast stations, traditionally

⁴¹⁴ Compare Federal Communications Commission, *Broadcast Station Totals as of June 30, 2003*, FCC News Release (July 22, 2003) with Federal Communications Commission, *Broadcast Station Totals as of November 30, 1993*, FCC News Release (Dec. 10, 1993).

⁴¹⁵ Mark Fratrack, *State of the Television Industry. Television Revenues 2003: Is There Hope?* BIA Financial Network, Feb. 2003, at 9

⁴¹⁶ *2002 Report*, 17 Rcd at 26940 ¶ 79.

⁴¹⁷ Television Bureau of Advertising, *2002 TV Ad Revenue Figures*, at http://www.tvb.org/rcentral/adrevenue/track/revenue/2002/ad_figures (visited Sept. 24, 2003).

⁴¹⁸ Robert J. Coen, Universal McCann, *US Advertising Volume 1990-2001*, Jan. 1, 2001.

⁴¹⁹ *Id*

⁴²⁰ Robert J. Coen, Universal McCann, *US Advertising Volume 2000-2003*, Mar. 11, 2003

⁴²¹ NCTA, *Cable Advertising Revenue: 1984-2002 (In Millions)*, Cable Television Developments 2003, at 15.

⁴²² *The Rise of Mega-Media*, BROADCASTING & CABLE, Nov. 12, 2001, at 30.

⁴²³ Television Bureau of Advertising, *2002 TV Ad Revenue Figures*, at http://www.tvb.org/rcentral/adrevenue/track/revenue/2002/ad_figures (visited Sept. 24, 2003).

viewed as having only advertising and not direct viewers payments as a revenue source, were given the opportunity through the retransmission consent provisions of the 1992 Cable Act, to obtain direct compensation or other economic benefits from MVPDs making use of their signals. Although the value of the retransmission consent rights have not be reported, some broadcasters, including in particular those with more significant audience ratings, now have two potential sources of revenue

94. Broadcast television stations' audience shares have continued to fall as cable penetration, the number of cable channels, and the number of non-broadcast networks continue to grow. During the 1993-1994 television season, broadcast stations⁴²⁴ collectively attained a 74 share of primetime viewing.⁴²⁵ By the 1997-1998 television season, their share dropped to 60 and by the 2002-2003 television season, broadcast television stations accounted for a combined average 49 share of prime time viewing among all television households, compared to a 50 share in the previous season. Similarly, in the 1993-1994 television season, broadcast television stations accounted for a 71 share of all-day viewing. By the 1997-1998 season, the broadcast stations' share dropped to 58. This trend continues, with broadcast stations achieving a 45 share of all-day viewing during the 2002-2003 season, down from a 47 share the previous season. In contrast, non-broadcast channels' collective audience share has continued to grow. In the 1993-1994 television season, non-broadcast channels had a 26 share of primetime; by 1997-1998, that share had grown to 40. In the 2002-2003 television season, non-broadcast channels,⁴²⁶ accounted for a combined average 51 share of prime time viewing among all television households, up from the 50 share in the previous season. For all-day (24-hour) viewing, non-broadcast channels accounted for a combined 29 share in the 1993-1994 television season; by 1997-1998, that share had grown to 42. By the recent 2002-2003 television season, non-broadcast channels had a 55 share of all-day viewing, also up from a 53 share in the previous season.

95. We previously reported on consolidation in the broadcast industry and on "repurposing," which continues to become more common. Programming is sometimes repurposed on commonly owned networks, although that is not always the case. For example, NBC has repurposed programming on its co-owned cable network Bravo, and vice versa, Fox has rerun its broadcast programming on its FX network; and ABC has repurposed its broadcast programming on commonly-owned Lifetime. Alternatively, NBC, ABC and Fox have repurposed programming on Viacom's networks, such as Comedy Central and VH-1. Repurposing deals between NBC and PaxTV, NBC with USA Network and Comedy Central, ABC with Lifetime, USA and VH-1, Fox with FX, and Fox and Warner Bros with VH-1, were reported in last year's report.⁴²⁷ This season, the Bravo cable network has replayed NBC's *Kingpin*, *The Restaurant* and *Fame*.⁴²⁸ UPN's sitcoms *The Parkers* and *Girlfriends* will appear on Black

⁴²⁴ Includes network affiliates, independent stations, and public broadcast stations

⁴²⁵ Nielsen Media Research, *Broadcast Calendar (TV Season) Share of Audience Report, Primetime and Total Day, 1984-85 to 2002-03*, September 2003. Nielsen reports audience shares that exceed 100% when totaled due to simultaneous multiple set viewing. We have normalized audience shares to equal 100%.

⁴²⁶ Includes basic (BST and CPST) networks, as well as premium and PPV networks, distributed by MVPDs.

⁴²⁷ *2002 Report*, 17 FCC Rcd at 26941 ¶ 81. "Repurposing" (virtually non-existent before 1999, *See 1999 Report* 15 FCC Rcd at 1027 ¶ 105) generally involves a re-run of broadcast content on a different network (cable or broadcast) shortly after it airs originally on network affiliate stations.

⁴²⁸ *Coupling on Bravo*, BROADCASTING & CABLE, Sept 29, 2003, at 8

Entertainment Television.⁴²⁹ Examples of reverse repurposing (*i.e.*, programming first distributed on non-broadcast networks and then shown on broadcast networks) include USA's *Monk* on ABC last season and Bravo's *Queer Eye for the Straight Guy*, a 2003 summer hit for NBC.⁴³⁰

96. As we previously reported, DTV could enhance the ability of broadcasters to compete in the video marketplace. DTV allows broadcasters to transmit an HDTV signal, several standard definition television ("SDTV") signals ("multicasting"), or ancillary services in addition to video programming.⁴³¹ Since the first DTV stations began operation in March 1998, the number has continued to grow. As of September 2003, all but two of the 40 stations that make up the top-four network affiliates in the top ten television markets were broadcasting DTV service.⁴³² In television markets ranked 11-30, 77 of 79 stations were broadcasting DTV service. Virtually all of the more than 1,300 commercial television stations have been granted a DTV construction permit or license, and 1,038 are on the air with DTV operation.⁴³³

97. Current use of DTV spectrum involves HDTV transmissions of programs that are also broadcast in standard NTSC analog format over paired analog facilities. For instance, ABC is broadcasting all of its prime time scripted comedies and dramas, theatrical movies, *Monday Night Football*, plus the NBA finals and NHL Stanley Cup finals in HDTV during the 2003-2004 TV season.⁴³⁴ CBS states that all scripted prime time dramas, comedies, many Sunday night movies, the daytime drama *The Young and Restless* and several sporting events including the February 2004 *Super Bowl* will be broadcast in HDTV this television season.⁴³⁵ NBC will provide a high-definition digital version for nearly two-thirds of its prime time schedule as well as *The Tonight Show with Jay Leno* and *Late Night with Conan O'Brien*.⁴³⁶ PBS occasionally offers programs in HD but is planning to create and begin making available to stations a 24-hour-per-day digital television service comprised of high-definition and

⁴²⁹ David Kronke, LOS ANGELES DAILY NEWS, *Sharing the Shows*, SOUTH FLORIDA SUN-SENTINEL, Sept 21, 2003, at 41.

⁴³⁰ *Id.*

⁴³¹ 2002 Report, 17 FCC Rcd at 26941 ¶ 82

⁴³² WABC-DT and WNBC-DT (New York) were on the air prior to September 11, 2001 but are now off the air due to the destruction of the World Trade Center. For an updated list on the status of DTV broadcasts, see *Summary of DTV Applications Filed and DTV Build Out Status*, at <http://www.fcc.gov/mb/video/files/dtvonairsum.html>

⁴³³ *Id.* While over 1,000 stations are providing a DTV signal, many consumers within those service areas are unable to view the DTV format either because they do not have DTV receivers or because they are subscribers to a MVPD that does not carry the DTV signal

⁴³⁴ Letter from Alex Wallau, President, ABC Television Network, to W. Kenneth Ferree, Chief, Media Bureau, FCC (June 25, 2003) at 2

⁴³⁵ Letter from Martin D. Franks, Executive Vice President, CBS, to W. Kenneth Ferree, Chief, Media Bureau, FCC (June 27, 2003) at 2-3.

⁴³⁶ Letter from F. William LeBeau, Senior Regulatory Counsel, National Broadcasting Co., to W. Kenneth Ferree, Chief, Media Bureau, FCC (June 27, 2003) at 1.

digital widescreen programming drawn from PBS's growing library of digital programming.⁴³⁷ The WB network is increasing its HDTV schedule from 5½ to 11½ hours of HDTV per week.⁴³⁸ Fox currently provides an all-digital, 480P feed to affiliates which includes 15 hours of prime time, one hour of late night, one hour of *Fox News Sunday* and all sports.⁴³⁹ Fox plans to transmit at least 50% of its prime time schedule in 720P by the 2004-2005 television season.⁴⁴⁰ UPN hopes to begin HD broadcasts in prime time during the 2003-2004 season.⁴⁴¹

98. On January 27, 2003, the Commission began the *Second Periodic Review* of the Commission's rules and policies affecting the conversion to Digital Television.⁴⁴² The *Second Periodic Review* seeks comment on issues essential to ensuring continued progress on the DTV transition. Among other things, the Commission is seeking comment on new channel election, replication, and maximization deadlines for broadcast television service. Questions regarding Section 309(j)(14) of the Communications Act are also raised.⁴⁴³ This section states that the broadcast licenses for analog television service expire on December 31, 2006, and requires the Commission to reclaim the spectrum unless one of three conditions set forth in section 309(j)(14)(B) is met. As part of this review, the Commission asked questions regarding how we should interpret the extension criteria.

99. In August 2003, the Commission initiated a rulemaking to establish rules for digital low power television ("LPTV") and television translator stations.⁴⁴⁴ LPTV stations bring television service, including local service, to viewers otherwise unserved or underserved by existing service providers. TV translator stations are intended to provide service to areas where direct reception of full-service broadcast stations is unsatisfactory because of distance or intervening terrain obstructions.

100. In *Digital Broadcast Copy Protection*, the Commission adopted rules to assure that DTV broadcast content will not be indiscriminately redistributed while protecting consumers' use and enjoyment of broadcast content.⁴⁴⁵ Specifically, content protection will be signaled via the

⁴³⁷ Letter from Wayne Godwin, Executive Vice President & CEO, PBS, to W. Kenneth Ferree, Chief, Media Bureau, FCC (June 23, 2003) at 2-3

⁴³⁸ *The WB Sees the Big Picture*, BROADCASTING & CABLE, Sept. 8, 2003, at 14.

⁴³⁹ Letter from Peter Chernin, President & COO, News Corporation, to W. Kenneth Ferree, Chief, Media Bureau, FCC (June 24, 2003) at 1

⁴⁴⁰ *Id*

⁴⁴¹ Letter from Martin D. Franks, Executive Vice President, CBS, to W. Kenneth Ferree, Chief, Media Bureau, FCC (June 27, 2003) at 2.

⁴⁴² See *Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, 18 FCC Rcd 1279 (2003)

⁴⁴³ 47 U.S.C. § 309(j)(14)

⁴⁴⁴ *Amendment of Parts 73 and 74 of the Commission's Rules to Establish Rules for Digital Low Power Television, Television Translator, and Television Booster Stations and to Amend Rules for Digital Class A Television Stations*, 18 FCC Rcd 18365 (2003).

⁴⁴⁵ *Digital Broadcast Copy Protection*, 18 FCC Rcd 23550 (2003)

Redistribution Control Descriptor, as set forth in ATSC Standard A/65B, Program and System Information Protocol for Terrestrial Broadcast and Cable. Content marked by the descriptor may only be output or recorded through analog outputs, protected digital outputs, and a small class of unprotected digital analog connectors, protected digital connectors, and a small class of unprotected digital connectors at a lower resolution. Implementing protection technology is intended to increase the availability of high-value content on digital broadcast television.

101. The Commission also adopted rules for digital “plug and play” cable compatibility.⁴⁴⁶ In a “plug and play” world, consumers can plug their cable directly into their digital television set without the need of a set-top box. This will ease the transition to digital television by promoting competition, convenience and simplicity for consumers. The new rules will permit television sets to be built with “plug and play” functionality for one-way digital cable services, which include typical cable programming services and premium channels such as HBO and Showtime. Consumers will have to obtain a security card from their local cable operator, to be inserted into the television set. Consumers will still need a set-top box to receive two-way services such as video on demand, impulse pay-per-view and cable operator-enhanced electronic program guides.⁴⁴⁷

102. In 2001, the Commission adopted rules resolving a number of technical and legal matters related to the cable carriage of digital broadcast signals. In its *Report and Order*, it noted that MSOs are currently undertaking significant cable system upgrades, including digital build-outs.⁴⁴⁸ It stated that a commercial or noncommercial digital-only television station can immediately assert its right to carriage on a cable system. The Commission also said that a television station that returns its analog spectrum and converts to digital operation must be carried by cable systems. The Commission stated that Section 614(b)(4)(A) of the Communications Act of 1934, as amended by the 1996 Act,⁴⁴⁹ requires that cable operators shall provide the same “quality of signal processing and carriage” for broadcasters’ signals as they provide for any other type of signal. A broadcast signal delivered in HDTV must be carried in HDTV.⁴⁵⁰ Petitions to reconsider this decision are currently before the Commission.

103. CEA reports the sale of DTV products is gaining momentum. From their introduction in August 1998⁴⁵¹ through the second quarter of 2003, over six million HDTV-capable sets have been sold, but only about 700,000 of these have been purchased with a built-in tuner or add-on decoder box required for receiving an HDTV broadcast.⁴⁵² CEA predicts that DTV sales will continue to increase, with sales of 4.3 million units in 2003, 5.8 million in 2004, 8.3 million in 2005, 11.9 million in 2006 and over 16 million in 2007.⁴⁵³ Manufacturers currently offer more than 500 models of digital monitors and

⁴⁴⁶ *FCC Eases Digital TV Transition for Consumers* (press release), Sept. 10, 2003.

⁴⁴⁷ See para. 184 *infra*

⁴⁴⁸ *Carriage of Digital Television Broadcast Signals*, 16 FCC Rcd 2598 (2001) (“*DTV Must Carry Order*”)

⁴⁴⁹ *Id.*; see also 47 U.S.C. § 534

⁴⁵⁰ See *DTV Must Carry Order*.

⁴⁵¹ *1998 Report*, 13 FCC Rcd at 24346 ¶ 99

⁴⁵² CEA Comments at 4.

⁴⁵³ *Id.*

integrated sets, up from about 100 models offered in 2000.⁴⁵⁴ As a result, broadcasters continue to engage in tests of various DTV products, such as HDTV, multiple SDTV services, ancillary services, or some combination.⁴⁵⁵ It is difficult to assess the competitive impact of DTV service on the MVPD market at this time, other than to continue to observe that the potential for a positive competitive impact remains.

G. Other Entrants

1. Internet Video

104. In 1994, Internet video was not yet in use. The World Wide Web was a nascent technology. By year-end 1994, there were only about 3,000 Web sites, and home-use modems were running at maximum data exchange speeds of 28.8 Kbps.⁴⁵⁶ Five years later, the Web had expanded significantly to include more than two and a half million Web sites, and access to the Internet was available via broadband, with approximately 300,000 cable modem subscribers and approximately 25,000 DSL subscribers achieving access speeds between one and ten Mbps.⁴⁵⁷ In our *1998 Report*, we noted the availability of software technologies that made real-time and downloadable audio and video from the Internet accessible through a personal computer.⁴⁵⁸ We also noted that there were technologies available for the provision of Internet video over a television using a set-top box and the WebTV and Worldgate Internet access service packages.⁴⁵⁹ Despite increasing interest in the medium, however, Internet video was still very poor quality in 1998, and the necessary hardware and software to enable Internet video was relatively hard to obtain. As a result, Internet video was still far from being a direct competitor to traditional video services.

105. For the last several years, streaming video has been marketed as an important new technology for the delivery of video, but near broadcast-quality streaming video requires a high-speed broadband connection.⁴⁶⁰ As of June 2003, there were about 20 million broadband subscribers out of a total

⁴⁵⁴ *Id.* at 5.

⁴⁵⁵ *2002 Report*, 17 FCC Rcd at 26943 ¶ 87.

⁴⁵⁶ *See Introduction and History of Modems*, at http://www.ianxxi.com.ar/computers/history_modem.htm (visited Sept. 26, 2003).

⁴⁵⁷ *The Web Contains 7 Million Sites in 2000*, Pandia Search, Oct. 2000, at <http://www.pandia.com/searchworld/2000-39-oclc-size.html> (visited Nov. 19, 2003). *See 1998 Report*, 13 FCC Rcd at 24313, 24316 ¶¶ 52, 55, *see also Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 14 FCC Rcd at 2398 (1999).

⁴⁵⁸ *1998 Report*, 13 FCC Rcd at 24348-50 ¶¶ 102-105.

⁴⁵⁹ *Id.*

⁴⁶⁰ Broadcast quality requires a broadband connection of about 300 Kbps or higher. *Streaming Video If It's Pictures You Want, Then It's Bandwidth You'll Need!*, Realtor.org, July 2000, at http://www.realtor.org/webintell.nsf/0/3_6a_eb06df63f6c0186256aa9006c1896?OpenDocument (visited Sept. 23, 2003), *see also 2000 Report*, 16 FCC Rcd at 6054-5, n.382. *See also Sports Score Big Online*, BUSINESS WEEK ONLINE, Apr. 15, 2003; Walter S. Mossberg, *RealNetworks Builds Fans for Video Service with Host of Programs*, THE WALL STREET JOURNAL, Mar. 20, 2003, at B1.

59 million Internet subscribers.⁴⁶¹ Internet video, however, is not yet viewed in the same manner as is broadcast video, despite increased quality with high-speed connections. Nevertheless, the overall number of homes with access to the Internet continues to grow, as does the number of Americans who access video content via the Internet. As of June 2003, an estimated 59 million Americans subscribed to either a dial-up or a broadband Internet access service, compared with 55 million as of June 2002.⁴⁶² In addition, as of July 2003, an average of 12% of all Americans watched some form of Internet video in the past month, up from an average 8% as of July 2002.⁴⁶³ As of July 2003, approximately 45% of all Americans and 57% of those with Internet access had accessed streaming audio or video at least once before, up from the approximately 51% who had accessed streaming audio or video at least once before as of July 2002.⁴⁶⁴

106. Today there is a significant amount of video available for downloading and for viewing in “real-time” (also known as “streaming video”),⁴⁶⁵ and an increasing amount of video content is available over the Internet each year. For example, Movielink, a joint venture of five movie studios, Metro-Goldwyn-Mayer Inc., Paramount Pictures, Warner Bros, Sony Pictures Entertainment, and Universal Pictures, provides an online movie download service.⁴⁶⁶ The service allows customers to download a movie for single-use viewing, though a new product allows a movie to be viewed multiple times without having to download it over again each time. Users are able to stop and restart a downloaded movie. In addition, as we have reported in the past, many traditional television programmers continue to offer Internet video versions of their programming as well as supplemental content.⁴⁶⁷ As of March 2003, approximately 22% of the affiliates of ABC, CBS, and NBC operated websites offering streaming media.⁴⁶⁸ ABC Network’s ABCNews.com, for example, recently added a subscription-only Internet broadcast news network called “PoliticsLIVE” to its online video service.⁴⁶⁹ Also, independent content producers (e.g., sports leagues, independent film producers) provide their content to viewers on a per-program basis or through subscription streaming video provider services, such as the kind of service

⁴⁶¹ Richard Bilotti, Benjamin Swinburne, Megan Lynch, *Broadband Update*, Morgan Stanley, July 7, 2003, at 16

⁴⁶² *Id*

⁴⁶³ Arbitron, Inc., *Internet and Multimedia 11. New Media Enters the Mainstream*, Sept. 3, 2003, at <http://www.arbitron.com> (visited Sept 23, 2003).

⁴⁶⁴ *Id*

⁴⁶⁵ Just as radio and television broadcasts are not downloaded and stored on radios and TVs, a streaming file is not actually stored on the local computer used to view it. Instead, the video player software on the viewer’s computer continually requests video data from the host server computer, so the viewer does not have to wait for the entire file to download before viewing. *Streaming Video: If It’s Pictures You Want, Then It’s Bandwidth You’ll Need!*, Realtor.org, July 2000, at <http://www.realtor.org/webintell.nsf/0/36aeb06df63f6c0186256aa9006c1896?OpenDocument> (visited Sept 23, 2003).

⁴⁶⁶ *Movielink Updates Service, Plans New Ad Campaign*, Yahoo News, Sept 3, 2003, at http://news.yahoo.com/news?tmpl+story2&cid=581&u=/nm/20030903/tc_nm/media_movielink_dc&printe... (visited Sept. 3, 2003).

⁴⁶⁷ *2002 Report*, 18 FCC Rcd at 26944 ¶ 90

⁴⁶⁸ Kagan World Media, *Streaming Media*, Media Trends, Dec. 2002, at 251-253.

⁴⁶⁹ *ABCNEWS.com’s 24-Hour Web Newscasts Concern Affiliates*, COMMUNICATIONS DAILY, Sept. 8, 2003, at 6

offered by Real Networks or Microsoft Media Player⁴⁷⁰ For example, Fox Sports Interactive Media and Real Networks are in partnership to provide out-of-market sporting events to Real Networks' SuperPass subscribers, Major League Baseball is in partnership with RealNetworks to provide Webcasts of Major League baseball games on a per-game basis, and AOL for Broadband has an alliance with the NFL, giving its subscribers access to NFL video content including game highlights, and clips from HBO's *Inside the NFL* Sports and news programming remain the most common categories of streaming video programming currently available over the Internet, but other genres of video programming are also available. In April, 2003, steaming media provider RealNetworks surpassed one million subscribers.⁴⁷¹ Analysts expect that over the next several years, video streaming subscription services will increase significantly, reaching an estimated \$4.7 billion in revenues by 2007.⁴⁷²

107. In our *Cable Modem NPRM*, we invited comment on several questions concerning Internet content, including whether the threat that subscriber access to Internet content or services could be blocked or impaired is sufficient to justify some form of regulatory intervention at this time,⁴⁷³ and whether a finding of such blocking or impairment in the future should trigger regulatory intervention.⁴⁷⁴ We are presently reviewing comments on these and other issues as part of that proceeding.⁴⁷⁵

2. Home Video Sales and Rentals

108. The sale and rental of home video, including videocassettes, DVDs, and laser discs, are part of the video marketplace because they provide services similar to the premium and pay-per-view offerings of MVPDs.⁴⁷⁶ As such, they offer some level of competition to broadcast television, cable television and DBS for the consumer's time and money. Cable video-on-demand also has emerged as a competitive service to home video.⁴⁷⁷

109. In 1994, VCR penetration was 84% of TV households.⁴⁷⁸ By 1998, that figure had increased to 88%.⁴⁷⁹ In 2003, Nielsen Media Research estimates VCR penetration at 91% of TV

⁴⁷⁰ *College Football Fanatics Can Pay to Watch Over the Internet*, COMMUNICATIONS DAILY, Sept. 19, 2003 at 3; *Major League Drops the Price of Webcasts*, THE WALL STREET JOURNAL, Sept. 18, 2003. *Deals*, CABLEFAX DAILY, Aug. 27, 2003, at 2; *America Online Inks NFL Internet Deal*, REUTERS, Aug. 26, 2003.

⁴⁷¹ Real Networks, *RealNetworks Reports First Quarter Results and Announces One Million Subscribers to Real Networks' Subscription Services* (press release), Apr. 29, 2003

⁴⁷² Stefanie Olsen, *Net Video Subscriptions To Go Prime Time*, CNET NEWS.COM, Sept. 23, 2003

⁴⁷³ *Cable Modem NPRM*, fn. 15 *supra*, 17 FCC Rcd at 4845 ¶ 87.

⁴⁷⁴ *Id.* at 4846 ¶ 92.

⁴⁷⁵ *See AT&T-Comcast Merger Order*, fn. 94 *supra*, 17 FCC Rcd 23246 ¶ 145.

⁴⁷⁶ *See, 2002 Report*, 17 FCC Rcd at 26944 ¶ 91.

⁴⁷⁷ *See paras. 44-45 supra*.

⁴⁷⁸ *See 1994 Report*, 9 FCC Rcd at 7510 ¶ 135

⁴⁷⁹ *See 1998 Report*, 13 FCC Rcd at 24351 ¶ 106.

households⁴⁸⁰ In our *1998 Report* we addressed laser discs as another means to view video programming, and stated that DVD technology introduced in 1997 would likely replace laser disc technology.⁴⁸¹ DVDs have since made significant impact on the home video market. For the first six months of 2003, DVD sales were 57% higher than during the same period a year earlier.⁴⁸² Moreover, equipment manufacturers have sold 10.3 million DVD players so far this year, outpacing the 7.3 million sold in the first half of 2002. DVD players sell for less than \$100 and can be found in close to 50% of all U.S. homes⁴⁸³ Rental spending on DVDs in 2002 doubled over the previous year to \$2.9 billion⁴⁸⁴ Consumer spending on home video programming is expected to reach \$23.3 billion in 2003, an increase of 11% over 2002. Of this amount, \$14 billion will be spent on DVD and video cassettes, most coming from DVD sales. For the first time in 2003, DVDs will pass VHS cassettes in rentals⁴⁸⁵

110. The influence of DVDs is growing For example, Netflix, the leading online movie rental service with over 15,000 DVD titles, experienced a 71% increase in its subscriber base from 670,000 in June 2002 to 1,147,000 in June 2003.⁴⁸⁶ Other companies have entered the online movie business, such as Wal-Mart; MovieLink, a joint Internet venture by five major studios, and CinemaNow⁴⁸⁷ Disney is now using the broadcast spectrum of ABC-owned stations and National Datacast's network of PBS stations to deliver movie rentals over the air and on demand. The service requires a MovieBeam receiver and a small antenna that is rented for \$6.99 a month.⁴⁸⁸

111. Another home video technology gaining popularity is the personal video recorder ("PVR").⁴⁸⁹ Introduced in 1999, this device is capable of pausing, recording and rewinding live TV in digital form on an internal hard drive instead of videotape.⁴⁹⁰ PVRs allow users watching recorded programs to fast forward through commercials. PVR penetration is currently at about 2% of television

⁴⁸⁰ Nielsen Media Research, *Television Audience 2002, 2003*, at 4.

⁴⁸¹ See *1998 Report*, 13 FCC Rcd at 24351 ¶¶ 107-108.

⁴⁸² NCTA Comments at 27.

⁴⁸³ *Id.*

⁴⁸⁴ *Id.* at 28.

⁴⁸⁵ *Id.*

⁴⁸⁶ *Id.* at 29.

⁴⁸⁷ Leslie Walker, *Web Watch*, THE WASHINGTON POST, Sept. 7, 2003, at F7.

⁴⁸⁸ *Disney Is On The Beam*, BROADCASTING & CABLE TV FAX, Sept. 30, 2003, at 1.

⁴⁸⁹ These devices also are referred to as digital video recorders ("DVRs").

⁴⁹⁰ See *1999 Report*, 15 FCC Rcd at 1035 ¶ 119.

households.⁴⁹¹ By 2007, about 20% of households are predicted to have PVRs.⁴⁹² Cable and DBS operators are beginning to incorporate PVR functionality into their set-top boxes.⁴⁹³ PVR maker TiVo claims that users "skip over" between 70% and 80% of the commercials in the recorded programming last year.⁴⁹⁴ Television and advertising executives are concerned about the long-term effects of this trend on the traditional 30-second commercials, and have started to consider alternative ways to promote products, such as product placement within programs.⁴⁹⁵

H. Local Exchange Carriers

112. Ten years ago, LEC entry into the MVPD industry was uncertain, but appeared promising. LECs were pursuing authorizations under a new regulatory regime that allowed them to enter as video dialtone ("VDT") operators, a commission regulatory framework that did not contravene the statutory prohibition on LEC entry into the MVPD market.⁴⁹⁶ LECs were operating numerous market and technical trials, and had filed 24 applications for permanent VDT authority to offer service to as many as 8.5 million homes.⁴⁹⁷ The VDT regime was abandoned, however, as were all pending and approved authorizations, with passage of the 1996 Act, which provided other means for LECs to enter the MVPD market.

113. The 1996 Act amended Section 651 of the Communications Act in order to permit telephone companies to provide video services in their telephone service areas. The statute permitted common carriers to: (1) provide video programming to subscribers through radio communications under Title III of the Communications Act;⁴⁹⁸ (2) provide transmission of video programming on a common carrier basis under Title II of the Communications Act;⁴⁹⁹ (3) provide video programming as a cable

⁴⁹¹ Steve McClellan, *And Another Thing About Those PVRs*, BROADCASTING & CABLE, Apr. 21, 2003, at 20. EchoStar Communications claims to have sold one million digital VCRs and TiVo claims 800,000 units sold. See *EchoStar Crosses 1 Million Digital VCR Mark*, SATELLITE BUSINESS NEWS, Sept. 26, 2003, at 2.

⁴⁹² *Mass Media Notes*, COMMUNICATIONS DAILY, Sept. 23, 2003, at 10.

⁴⁹³ See paras. 60, 76 *supra*.

⁴⁹⁴ Steve McClellan, *And Another Thing About Those PVRs*, BROADCASTING & CABLE, Apr. 21, 2003, at 20.

⁴⁹⁵ *Id.* See Paul J. Gough, *Yet Another Study Deems PVRs A Death Knell For TV Ads*, MEDIA POST'S MEDIADAILY NEWS, Oct. 3, 2003, at <http://mediapost.com/PrintFriend.cfm?articleId=221102> (visited Oct. 7, 2003); *Ad Experts Downplay Impact of Rapid PVR Rollout on Ads*, COMMUNICATIONS DAILY, Sept. 30, 2003, at 5; Anthony Crupi, *Will DVR Really Kill the 30-Second Ad?*, CABLE WORLD, Sept. 29, 2003, at <http://cableworld.com/microsites/magazinearticle.asp?mode=print&magazinearticleid=183520&releaseid> (visited Oct. 7, 2003).

⁴⁹⁶ Under the VDT regulatory framework adopted by the Commission in 1992, a LEC was allowed to make available, on a nondiscriminatory common carrier basis, a platform capable of providing access to multiple video programmers and of delivering video programming and other services to consumers in its local telephone service area. See *1994 Report*, 9 FCC Rcd at 7493-96 ¶¶ 106-108.

⁴⁹⁷ *1994 Report*, 9 FCC Rcd at 7493 ¶ 104.

⁴⁹⁸ 47 U.S.C. § 571(a)(1).

⁴⁹⁹ 47 U.S.C. § 571(a)(2).

system under Title VI of the Communications Act;⁵⁰⁰ or (4) provide video programming by means of an open video system ("OVS").⁵⁰¹

114. As a result, the presence of LECs in the MVPD market grew. By 1998 the Commission indicated that "LECs are already or are becoming significant regional competitors."⁵⁰² Ameritech (later acquired by SBC) was a significant overbuilder in the midwest, BellSouth was an overbuilder and MMDS operator in the southeast, RCN was an expanding OVS and cable overbuild operator, and Bell Atlantic (now Verizon) and SBC were selling, marketing and installing DirecTV DBS video service.⁵⁰³ Additionally, LECs briefly owned and operated two joint programming and packaging ventures, but by 1998 both of these efforts were ended or scaled back, and today no longer exist.⁵⁰⁴

115. Today, facilities-based cable franchise services provided by the large, former "baby bells" are much less prominent, continuing a trend from last year's *Report*, with only BellSouth and Qwest offering such services.⁵⁰⁵ Some LECs have come full circle, however, and are marketing DBS service as they did in 1998. As with last year, Qwest and a number of smaller incumbent LECs, however, are offering, or preparing to offer, MVPD service over existing telephone lines using very high-speed digital subscriber line ("VDSL") or asymmetric digital subscriber line ("ADSL") technologies.⁵⁰⁶

116. ***In-Region Cable Franchises*** BellSouth holds 20 cable franchises with the potential to pass 14 million homes and provides cable service in 14 of its franchise areas. It is the only remaining large LEC to offer video service over franchised cable systems using traditional cable architecture.⁵⁰⁷ This is unchanged from last year.⁵⁰⁸

⁵⁰⁰ 47 U.S.C. § 571(a)(3).

⁵⁰¹ 47 U.S.C. § 571(a)(3)-(4). See also para 80 *supra*.

⁵⁰² 1998 *Report*, 13 FCC Rcd at 24353-4 ¶ 111.

⁵⁰³ *Id*.

⁵⁰⁴ *Id* at 24359-60 ¶ 119.

⁵⁰⁵ 2002 *Report*, 17 FCC Rcd at 26946 ¶ 96.

⁵⁰⁶ *Id* at 26947 ¶ 98.

⁵⁰⁷ BellSouth Comments at 1-2. The active franchises are located in: Vestavia Hills, Alabama; St. John's County, Miami-Dade County, Davie, and Pembroke Pines, Florida; Counties of Cherokee, Cobb, DeKalb, and Gwinnett and Cities of Chamblee, Duluth, Lawrenceville, Roswell, and Woodstock, Georgia. BellSouth also states that it is restructuring its wireless video service, but that it continues to provide analog multichannel video service in areas where it holds licenses.

⁵⁰⁸ We reported last year that Verizon, which inherited franchised cable systems in California and Florida when it purchased GTE, entered into purchase contracts with Adelphia to sell its video properties. Because of Adelphia's financial difficulties, however, some of those agreements were cancelled and subject to litigation. 2002 *Report*, 17 FCC Rcd at 26946 ¶ 96 n.338. Subsequently, Verizon sold these systems to Knology, Inc., a broadband service provider. See Knology, Inc., *Knology Announces Agreement To Purchase Broadband Assets* (press release), July 18, 2003.

117. **VDSL.** Qwest offers video, high-speed Internet access and telephone service over existing copper telephone lines using VDSL in the Phoenix, Arizona, metropolitan area and in Denver and Boulder, Colorado, and over a hybrid fiber-coaxial system in Omaha, Nebraska.⁵⁰⁹ Qwest serves 40,000 subscribers in Phoenix; 2,000 in Denver and Boulder; and 14,000 in Omaha.⁵¹⁰ Although Qwest indicates that its broadband services have been "well received," it states that regulatory uncertainty regarding which type of regulation will apply to its VDSL high-speed Internet access and asymmetric regulation vis-à-vis cable broadband services raises its costs of deployment and threatens facilities-based competition in these markets.⁵¹¹ Small LECs continue to deploy VDSL for the purpose of video service delivery, but indicate that discriminatory practices, such as exclusive programming contracts, higher prices for programming, and discriminatory pricing, by incumbent cable operators and programmers impede competition in small, rural markets.⁵¹²

118. **Joint Ventures with DBS.** BellSouth, SBC, and Qwest have all recently announced agreements to sell DBS service as part of a telecommunications bundle. BellSouth announced an agreement with DirecTV that will allow its customers to receive a bundle of high-speed Internet, local and long distance telephone, wireless telephone, and DirecTV video service on one bill with one order early next year,⁵¹³ and that will allow BellSouth to continue restructuring its MMDS video services.⁵¹⁴ SBC Communications, Inc. announced a similar service that will be co-branded with EchoStar as "SBC DISH Network," and includes a \$500 million investment by SBC in EchoStar convertible debt.⁵¹⁵ Finally, Qwest announced agreements with both DirecTV,⁵¹⁶ and with EchoStar,⁵¹⁷ to offer bundled services in separate markets. While these agreements do not represent new, facilities-based competition, they may allow both LECs and DBS operators to become more competitive with cable operators' bundled offerings.

⁵⁰⁹ Qwest Comments at 3-4.

⁵¹⁰ *Id.* at 4.

⁵¹¹ *Id.* at 1-2 and 5-8. Qwest also states that it pays higher prices for programming than incumbent cable operators due to its comparably small scale of video operations. *Id.* at 8-10.

⁵¹² *See, generally*, RICA Comments. *See also* OPASTCO Reply Comments at 2-4.

⁵¹³ BellSouth Corp. and DirecTV, Inc., *BellSouth and DirecTV Announce Agreement To Sell Digital Satellite Television Service as Part of BellSouth Answers Bundle* (press release), Aug. 27, 2003.

⁵¹⁴ BellSouth Comments at 1.

⁵¹⁵ SBC Communications Inc. and EchoStar Communications Corporation, *SBC Communications, EchoStar Forge Strategic Partnership, Will Offer "SBC Dish Network" Television Service* (press release), July 21, 2003.

⁵¹⁶ The agreement with DirecTV covers single-family homes in Phoenix and Tucson, Arizona, and Seattle, Washington. Qwest expects to rollout these services to more markets throughout the remainder of 2003 and into 2004. *See* Qwest Communications International, Inc., *Qwest Forges Agreement with DirecTV to Offer Satellite Services as Part of Communications Bundle* (press release), July 21, 2003.

⁵¹⁷ The agreement with EchoStar covers single-family homes in Colorado and Nebraska. The company expects to rollout these services to more markets throughout the remainder of 2003 and into 2004. *See* Qwest Communications International, Inc., *Qwest Forges Agreement with EchoStar to Offer Satellite Services as Part of Communications Bundle* (press release), July 21, 2003.

I. Electric and Gas Utilities

119. Electric and gas utilities possess certain assets that have long made them good candidates as entrants into the MVPD market. Such assets include their access to public rights of way, ownership and operation of various infrastructures amenable to the provision of network services, and well-established relationships with customers. In 1994, some utilities were actively engaged in the provision of video services through overbuilding incumbent cable systems with fiber-optic infrastructure, though such activity was very limited.⁵¹⁸ Section 103 of the Communications Act, enacted as part of the 1996 Act, removed a significant regulatory barrier that had deterred registered public utility holding companies' entry into video markets.⁵¹⁹ By our *1998 Report*, many of these utility companies remained involved in the provision of video services, joined by a few additional entrants, though still, they were not considered significant or nation-wide competitors in the market for video distribution. Today, many utilities continue to move forward with ventures involving multichannel video programming distribution, though their services are still not widespread in either the telecommunications or video distribution markets. Utilities do, however, continue to provide competition in scattered localities, most beneficially in rural areas where cable operators and telephone companies may not be willing or able to provide the full range of advanced telecommunications services.⁵²⁰

120. As previously reported, utilities provide voice, video, and data services by overbuilding incumbent cable systems with fiber optic networks. Some utilities have built systems on their own, but the most prominent utilities involved in the video distribution market are engaged in joint ventures with other companies.⁵²¹ Starpower, for example, is a joint venture between RCN and Potomac Electric and Power Company ("PEPCO") operating in the Washington, D.C., area.⁵²² Municipalities, in many cases, provide broadband services on their own when others are unwilling to provide such services. Kurtztown, Pennsylvania, for example, built a fiber loop in 1999, hoping the private sector would step in and provide voice, video and data services, but when no providers expressed interest, the utility department established service for its residents.⁵²³

⁵¹⁸ See *1994 Report*, 9 FCC Rcd at 7508-09 ¶ 131-133

⁵¹⁹ See *1996 Report*, 12 FCC Rcd at 4410-11 ¶ 95-96. Specifically, prior to enactment of the 1996 Act, the Public Utility Holding Company Act of 1935 ("PUHCA") imposed strict "line of business" restrictions on registered public utility holding companies which sought to diversify into telecommunications or information services markets. Section 103 of the 1996 Act, which added a new Section 34 to PUHCA, now permits registered public utility holding companies to enter telecommunications industries without prior SEC permission through the acquisition or maintenance of an interest in an "exempt telecommunications company" or "ETC." Congress essentially eliminated disparate regulatory treatment among different types of utility companies by this action. *Id.*

⁵²⁰ See para. 81 *supra*.

⁵²¹ See *2002 Report*, 17 FCC Rcd at 26947-8 ¶ 100.

⁵²² See para. 81 *supra*.

⁵²³ *Officials. Broadband Investments Pay Off For Localities*, TR DAILY, Sept. 26, 2003

121 The American Public Power Association ("APPA") surveyed its members at the end of 2002, finding that 511 public power entities offer some kind of broadband services. Of those, 105 offered video service, 71 offered cable modem service, and 37 offered local telephone service.⁵²⁴

122. Several utility companies have been experimenting with a technology called broadband-over-power line ("BPL") service which uses power lines to carry high-speed data signals the "last mile" to the home.⁵²⁵ BPL must use fiber optic lines or another traditional medium to deliver data to the power line. While the primary objective of this technology is to provide high-speed Internet access services, some companies have expressed plans to offer video streaming services, but not traditional video services.⁵²⁶ In September 2003, a few utility companies announced their timelines for the commercial rollout of BPL services, including video streaming.⁵²⁷

III. MARKET STRUCTURE AND CONDITIONS AFFECTING COMPETITION

A. Horizontal Issues

123. As we explained in earlier reports, the video programming market is comprised of a downstream market for the distribution of multichannel video programming to households, and an upstream market for the purchase of video programming by MVPDs. In this section, we review changes in the market for the distribution of video programming, including changes in the level of competition in that market between June 2002 and June 2003, and over the past five and ten years. In our discussion of competition in the distribution of video programming to households, we also examine developments unique to MDUs, a significant sub-set of the market. We then review the market for the purchase of video programming by MVPDs, and examine the effects that changes in concentration among MVPDs at the regional and national levels have had on this market in the last year, five years, and ten years.

1. Competitive Issues in the Market for the Distribution of Video Programming

124. The market for the delivery of video programming to households continues to be highly concentrated in many local markets, with the majority of households in most franchise areas subscribing to cable. While this is still true, most consumers today have at least two additional MVPD service choices (EchoStar and DirecTV) than they did ten years ago, and others have even more MVPD choice from overbuilders and MMDS service. Additionally, the percentage of MVPD subscribers served by

⁵²⁴ APPA, *Public Power: Powering the 21st Century with Community Broadband Services* (fact sheet), May 2003, at 2.

⁵²⁵ John Markoff and Matt Richtel, *Internet via the Power Grid: New Interest in Obvious Idea*, THE NEW YORK TIMES, Apr. 10, 2003. On April 23, 2003, the Commission initiated a Notice of Inquiry to obtain information on a variety of issues related to BPL. Use of BPL for video services was not anticipated or discussed. *Inquiry Regarding Carrier Current Systems, Including Broadband Over Power Line Systems*, 18 FCC Rcd at 8498 (2003)

⁵²⁶ In September 2003, Ambient Corp. and IDACOMM announced that they jointly would conduct a test of BPL to include such offerings as video streaming. *New Technologies*, COMMUNICATIONS DAILY, Sept. 5, 2003, at 13. See also paras. 104-106 *supra*

⁵²⁷ *Utilities Unveil Time Lines For Commercial Broadband Deployment*, COMMUNICATIONS DAILY, Sept. 23, 2003, at 4-5. The City of Manassas Virginia, plans to commercially deploy BPL, as do Cinergy in Cincinnati, Ohio, and PEPCO in Potomac, Maryland.