Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)
Report to Congressional Committees Pursuant to the Rural Local Broadcast Signal Act)
)

REPORT

Adopted: December 28, 2000 **Released:** January 2, 2001

By the Commission:

INTRODUCTION

1. This Report is in response to the requirement of Section 2002(c) of the "Rural Local Broadcast Signal Act" (RLBSA) that the Commission report to the Congress on the extent to which licenses and other authorizations under that Section 2002(a) of the RLBSA have facilitated the delivery of local signals to satellite television subscribers in unserved and underserved local television markets. As described herein, the Commission, in compliance with the RLBSA, has made a major threshold determination to authorize a new service, the Multichannel Video Distribution and Data Service (MVDDS), that will be capable of delivering local broadcast television station signals to satellite television subscribers, as well as other viewers, in unserved and underserved local television markets.² In addition, the Commission has identified a spectrum band for this service, i.e., 12.2-12.7 GHz, and has determined that MVDDS can co-exist with the incumbent Broadcast Satellite Services and the newly authorized non-geostationary satellite orbit (NGSO) Fixed Satellite Service (FSS) operations in that frequency band. The Commission has also issued further rule making proposals for technical and service rules for MVDDS. The adoption of final rules is anticipated in 2001, with licensing assignment process to begin shortly thereafter. This Report also provides information on the provision of local signals by direct-to-home (DTH) satellite television providers and other multichannel video programming distributors (MVPDs) and the technical, economic, and other impediments each type of multichannel video program distributor has encountered. The Report discusses possible actions that could be taken to promote the provision of local signals to MVPD subscribers in unserved and underserved markets, but does not make specific recommendations in this area at this time. In this regard, the Commission believes it would be premature, prior to licensing and operation of MVDDS facilities, to make such recommendations. The Report indicates that the Commission will continue to monitor this area and make such recommendations in the context of its annual reports to Congress on the status of competition in the markets for the delivery of video programming.

¹ The Rural Local Broadcast Signal Act was enacted as Title II of the Intellectual Property and Communications Omnibus Reform Act of 1999. *See* Intellectual Property and Communications Omnibus Reform Act of 1999, Pub.L. 106-113 Stat. 1501.

 $^{^2}$ See First Report and Order and Further Notice of Proposed Rule Making in ET Docket No. 98-206, FCC 00-418, adopted November 29, 2000, at ¶ 18.

BACKGROUND

- 2. On November 29, 1999, the Intellectual Property and Communications Omnibus Reform Act of 1999 (1999 IPACORA) was enacted. Title I of this legislation, the Satellite Home Viewer Improvement Act (SHVIA), generally seeks to place satellite carriers on equal footing with local cable operators concerning the availability of broadcast programming, and thus is intended to give consumers more and better choices in selecting a Multichannel Video Program Distributor (MVPD). Title II of the 1999 IPACORA legislation contains the Rural Local Broadcast Signal Act. Sections 2002(a) and (b) of the RLBSA require the Commission to make a determination by November 29, 2000, regarding licenses or other authorizations for facilities that will utilize, for delivering local broadcast television signals to satellite television subscribers in unserved and underserved local television markets, spectrum otherwise allocated to commercial use.³ The RLBSA also mandates that the Commission ensure that no facility licensed or authorized to deliver such local broadcast television signals "causes harmful interference to the primary users of that spectrum or to public safety spectrum use."
- 3. Section 2000(c) of this legislation further requires that, not later than January 1, 2001, the Commission shall report to the Congress "on the extent to which licenses and other authorizations under subsection (a) have facilitated the delivery of local signals to satellite television subscribers in unserved and underserved local television markets.⁵ This report is to include:
 - 1) an analysis of the extent to which local signals are being provided by DTH satellite television providers and by other multichannel video program distributors;
 - 2) an enumeration of the technical, economic, and other impediments each type of multichannel video program distributor has encountered; and
 - 3) recommendations for specific measures to facilitate the provision of local signals to subscribers in unserved and underserved markets by DTH satellite television providers and by other distributors of multichannel video programming service.

AUTHORIZATION OF MVDDS

4. The First Report and Order and Further Notice of Proposed Rule Making (First Report and Order and Further Notice) in ET Docket No. 98-206 (12 GHz proceeding) that culminated in the Commission's decision to authorize MVDDS in the 12.2-12.7 GHz band was the result of a proceeding that involved numerous petitions, pleadings, complex technical and sharing issues, and matters requiring international agreement and coordination. The 12.2-12.7 GHz band that was sought by prospective MVDDS operators is currently used by incumbent Broadcast Satellite Service operations, e.g., DirecTV and EchoStar. In addition, this spectrum was also sought for use by a number of parties for nongeostationary satellite orbit (NGSO) Fixed Satellite Service (FSS). Accordingly, the authorization of MVDDS use of this spectrum needed to consider and accommodate sharing with the existing BSS

³ See RLBSA, Section 2002(a).

⁴ *Id.*, Section 2002 (b)(2).

⁵ *Id.*, Section 2002 (c).

operations and potential new NGSO FSS operations.

- 5. In November 1998, the Commission issued a Notice of Proposed Rule Making in ET Docket No. 98-206 (*Notice*) proposing to permit NGSO FSS operations in certain segments of the Ku-band.⁶ NGSO FSS can provide a variety of new services to the public, including delivery of local television programming to DTH consumers, as well as providing multi-channel video programming, high-speed Internet access, plus other types of high-speed data, video and telephony services. In the *Notice*, the Commission proposed to allow NGSO FSS operations to use the 10.7-12.7 GHz band for NGSO downlinks on a co-primary basis and to use the 12.75-13.25 GHz and 13.8-14.5 GHz bands for NGSO uplinks on a co-primary basis. The Commission took this action in response to a Petition for Rule Making filed by SkyBridge L.L.C. (SkyBridge). The proposals advanced in the *Notice* were also prompted by actions taken at the 1997 World Radiocommunication Conference (WRC-97), which modified the International Telecommunication Union's Radio Regulations (ITU RR) to permit NGSO FSS operations in various segments of the Ku-band. WRC-97 also outlined provisional criteria for NGSO FSS operations to protect existing services in these band segments from unacceptable interference. The Notice also asked for comments on a Petition for Rule Making filed by Northpoint Technology, Ltd. (Northpoint) that proposed to provide terrestrial retransmission of local television signals and data services on a secondary basis to the incumbent BSS in the 12.2-12.7 GHz band, which is one of the bands in which the Commission proposed to authorize NGSO FSS operations. 10
- 6. Subsequently, on January 8, 1999, Northpoint, through its subsidiary Broadwave Albany, L.L.C., *et al.*, ("Broadwave USA"), ¹¹ filed waiver requests and applications for licenses for terrestrial use of the 12.2-12.7 GHz band, in response to the *Ku Band Cut-Off Notice*. ¹² Northpoint requested waivers of

⁶ Notice of Proposed Rule Making in ET Docket No. 98-206, 14 FCC Rcd 1131 (1998).

⁷ Except for the 12.2-12.7 GHz band, all of the bands proposed for NGSO FSS use were already allocated to the FSS on a primary or co-primary basis. The *Notice* proposed a co-primary allocation for NGSO FSS in the 12.2-12.7 GHz band.

⁸ SkyBridge Petition, RM-9147, filed July 3, 1997.

⁹ A given frequency band may be allocated to one or more terrestrial or space radiocommunication services or the radio astronomy service on either a primary or secondary basis. "Stations of a secondary service: a) shall not cause harmful interference to stations of primary services to which frequencies are already assigned or to which frequencies may be assigned at a later date; b) cannot claim protection from harmful interference from stations of a primary service to which frequencies are already assigned or may be assigned at a later date; c) can claim protection, however, from harmful interference from stations of the same or other secondary service(s) to which frequencies may be assigned at a later date." *See* International Telecommunication Union Radio Regulations, Edition of 1998, Article S5, Section II --Categories of services and allocations, S5.28 through S5.31.

¹⁰ Northpoint Petition, RM-9245, filed March 6, 1998.

¹¹ Northpoint states that through its subsidiary BroadwaveUSA, Inc., it has an affiliate relationship with the 68 entities that have applied for licenses to deploy the Northpoint technology nationwide. The applicants refer to themselves as Broadwave, followed by their city of proposed service (*i.e.*, Broadwave Albany, L.L.C.). Broadwave proposed to use the technology developed by Northpoint to enable sharing of this spectrum with existing DBS, geostationary satellite, and fixed microwave services.

¹² *Public Notice*, Wireless Telecommunications Bureau Seeks Comment on Broadwave Albany, L.L.C., *et al.* Requests for Waiver of Part 101 Rules, DA 99-494, 14 FCC Rcd 3937 (1999) (Northpoint Waiver Request).

multiple provisions in Part 101 of our Rules, as well as any other rules necessary to process its applications, and asserted that its proposed service would be on a secondary, non-interfering basis to DTH services and on a co-primary basis with any new FSS, such as that proposed by SkyBridge. Thus, in applying for licenses as a non-DTH affiliate, Northpoint shifted its stance from its earlier petition for rule making and also expanded the scope of the suggested video offerings beyond local service to supplement DTH. 14

- 7. On April 18, 2000, PDC Broadband Corporation ("Pegasus") filed an application for authority to provide terrestrial service in the 12.2-12.7 GHz band to deliver data transmission, Internet services, and MVPD services. Pegasus asserts that its application is mutually exclusive with those filed by Northpoint. On August 23, 2000, Satellite Receivers, Ltd. ("SRL") filed an application for authority to provide terrestrial television broadcast, Internet and data services in the 12.2-12.7 GHz band in Illinois, Indiana, Iowa, Michigan, Minnesota and Wisconsin.
- 8. In its November 29, 2000, First Report and Order and Further Notice of Proposed Rule Making in ET Docket No. 98-206, the Commission, among other things, stated that it had determined to authorize a new service, MVDDS, that will be capable of delivering local broadcast television station signals to satellite television subscribers in unserved and underserved local television markets. 16 It noted that this determination was made after an exhaustive analysis and a time-consuming effort on the international front to reach a consensus regarding certain critical technical issues. The sharing issues involved in this proceeding were among the most complex addressed by the Commission. Extensive analysis on the ability to share and the risk of interference was required to develop sharing rules. This analysis was essential to meeting the Commission's obligation under SHVIA to avoid interference to incumbent services. As noted above, several of the key technical issues were only resolved at WRC-2000, which concluded in June of this year. Following the completion of WRC, the parties to the proceeding undertook a series of tests, the results of which were not available until this past summer. Because of the Commission's obligations under SHVIA regarding interference protection, the Commission wanted to take full advantage of the technical data resulting from these tests. The Commission found that MVDDS operations will deliver competition to other video distribution and data services and offer localized service that may not be possible through other services. It also concluded that a new terrestrial fixed Multichannel Video Distribution and Data Service (MVDDS) can operate in the 12.2-12.7 GHz band on a non-harmful interference basis with incumbent Broadcast Satellite Services (BSS), and on a co-primary basis with the non-geostationary satellite orbit (NGSO) Fixed Satellite Service (FSS). The Commission further found

¹³ *Id*.

¹⁴ *Id*.

¹⁵ *Id.* Northpoint filed a Motion to Dismiss the Pegasus applications on May 23, 2000. *See* In the Matter of PDC Broadband Corporation Application to Provide Terrestrial Services in the 12.2-12.7 GHz Band, Motion to Dismiss (May 23, 2000). On August 21, 2000, Pegasus Broadband Corporation filed a Petition to Dismiss or Deny against the Northpoint applications. *See* In the Matter of Broadwave Albany, L.L.C., *et al.*, Application for License to Provide New Terrestrial Transport Service in the 12.2-12.7 GHz Band, Petition to Dismiss or Deny (Aug. 21, 2000). On September 6, 2000, Northpoint filed an Opposition to the Pegasus Petition to Dismiss or Deny. *See* In the Matter of Broadwave Albany, L.L.C., *et. al.* - Applications for Licenses to Provide Terrestrial Services in the 12.2-12.7 GHz Band, Opposition of Northpoint Technology, Ltd. And BroadwaveUSA to Petition to Dismiss or Deny (Sept. 6, 2000).

 $^{^{16}}$ See First Report and Order and Further Notice, at \P 18.

that it can define MVDDS technical requirements that would avoid harmful interference to BSS and establish power flux density (PFD) limits for MVDDS/NGSO FSS sharing. It therefore stated that it will permit MVDDS operations in the 12.2-12.7 GHz band. However, the Commission also concluded that it needed further information to establish technical sharing criteria between MVDDS and BSS and NGSO FSS operations and to develop appropriate MVDDS service, technical, and assignment rules under Part 101 of the Commission's Rules. These additional rules need to be completed before actual licensing can begin.

- 9. The Commission therefore issued further proposals for rules and requested additional comments concerning these areas in the *First Report and Order and Further Notice*. Specifically, the Commission sought comment on:
 - Technical sharing criteria between the MVDDS and BSS and NGSO FSS.
 - Whether to license MVDDS on the basis of geographic areas and requested comment on the most appropriate geographic area licensing scheme for this service. In particular, in light of the similarities between MVDDS services and cable television and other video services, the Commission sought comment on whether it should authorize MVDDS on the basis of Nielsen's designated market areas (DMAs), or whether some other geographic area might be a better choice.
 - Whether to license MVDDS on the basis of a single MVDDS operator for the entire 500 megahertz spectrum block per geographic area. Specifically, the Commission sought comment on whether licensing in this manner would facilitate competition between MVDDS, cable TV, DTH, and other broadband video and data providers. It also sought comment on other channel plans such as 250 megahertz spectrum blocks for each licensee.
 - The permitted services, eligibility requirements and regulatory status of MVDDS, including whether licensees should be required to meet must-carry obligations and provide all local TV channels to every subscriber.
 - The disposition of pending 12.2-12.7 GHz applications filed by Broadwave USA, PDC Broadband Corporation, and Satellite Receivers, Ltd.
 - A proposal to use the general competitive bidding rules set forth in Part 1, Subpart Q, of the Commission's rules if the Commission auctions MVDDS licenses.
- 10. In the *First Report and Order and Further Notice*, the Commission concluded that the above actions satisfied compliance with the RLBSA. In particular, it stated that it had made a major threshold determination to authorize a new MVDDS that will be capable of delivering local broadcast television station signals to satellite television subscribers in unserved and underserved local television markets. It further stated that it has identified a spectrum band for this service, *i.e.*, 12.2-12.7 GHz, and also determined that MVDDS can co-exist with the incumbent Broadcast Satellite Services and the newly authorized non-geostationary satellite orbit (NGSO) Fixed Satellite Service (FSS) operations. Finally, the Commission stated that with the further rule making proposals, it has set in motion the final regulatory process for licensing MVDDS.¹⁷ The Commission also stated that it believes that proposed service and assignment rules will promote Congress' mandate "to make a determination regarding licenses or other authorizations for facilities that will utilize, for delivering local broadcast television station signals to satellite television subscribers in unserved and underserved local television markets, spectrum otherwise

¹⁷ The recently enacted Omnibus Consolidated Appropriations Act H.R. 4942 (Public Law number not available as of adoption) contains a statutory requirement for further testing of MVDDS sharing issues which could impact anticipated timing of regulatory actions.

allocated to commercial use." For example, it proposed that DMA markets be used for service areas, which would facilitate the ability of each terrestrial licensee to provide all local television channels. In contrast, a DTH satellite system with one Continental United States footprint does not have the capacity to retransmit all of the local channels nationwide. The Commission stated that in finalizing these rules it intends to facilitate the introduction of service, most notably, the transmission of local broadcast signals into unserved and underserved markets.

PROVISION OF LOCAL SIGNALS

11. This section provides an analysis of the extent to which local signals are being provided by DTH satellite television providers and by other multichannel video program distributors.

A. Cable Television Service

12. Out of 100.8 million TV households nationwide, as of June 2000, 97.1 million households (96.6%) have franchise cable available ("homes passed") and 67.7 million households (67.2%) subscribe to franchised cable. Under the Commission's cable "must carry" rules implementing the provisions for carriage of local television signals in Sections 614 and 615 of the Communications Act, cable television systems are required to carry the signals of local commercial and non-commercial broadcast television stations, and in some cases local low power television stations. The Act states that systems with more than 12 usable activated channels must carry local commercial television stations, "up to one-third of the aggregate number of usable activated channels of such system[s]." Beyond this requirement, the carriage of additional television stations is at the discretion of the cable operator. In addition, cable systems are obliged to carry local noncommercial educational television stations ("NCE stations") according to a different formula and based upon a cable system's number of usable activated channels. Low power

²¹ 47 U.S.C. §534(b)(1)(B); 47 C.F.R. §76.56(b)(2). A cable operator of a cable system with 12 or fewer usable activated channels shall carry the signals of at least three local commercial television stations, except that if such a system has 300 or fewer subscribers, it shall not be subject to any requirements under this section so long as such system does not delete from carriage by that system any signal of a broadcast television station. 47 U.S.C. §534(b)(1)(A); 47 C.F.R. §76.56(b)(1).

¹⁸ Section 2002(a) of the Rural Local Broadcast Signal Act.

¹⁹ See U.S. Television Household Estimates September 1999, DMA Ranking, Nielsen Media Research; 10-Year Cable TV Industry Projections (1999-2010), Paul Kagan Associates, Inc., The Cable TV Financial Databook, August, 2000, at 10. This estimate is based on data from Paul Kagan Associates, Inc. The Warren Report, another source of data about the cable industry, estimates 91 million homes passed (90.3%). See Advanced Telecommunications in Rural America, NTIA and RUS (April, 2000). Another way of estimating cable availability is to consider the percentage based on the total number of U.S. households, both with or without television sets, or based upon the total number of housing units, including both occupied and unoccupied units. Using these bases the estimate ranges as low as 81% cable availability. Id. at n. 62.

²⁰ See 47 U.S.C. §§534 and 535.

²² Noncommercial television stations are considered qualified, and may request carriage if they: (1) are licensed to a community within fifty miles of the principal headend of the cable system; or (2) place a Grade B contour over the cable operator's principal headend. Cable systems with: (1) 12 or fewer usable activated channels are (continued....)

television stations may request carriage if they meet six statutory criteria.²³ Section 325 of the Act ²⁴ generally prohibits cable operators and other multichannel video programming distributors from retransmitting the signal of a commercial television station unless the station whose signal is being transmitted consents or chooses mandatory carriage.²⁵ Every three years, commercial television stations must elect to either grant retransmission consent or pursue their mandatory carriage rights.²⁶ The effect of these statutory provisions and the Commission's implementing rules is that all local broadcast signals are carried on cable systems almost everywhere.

13. In a development related to the growth of direct broadcast satellite (DBS) service (discussed below), several very small and rural cable systems have used a variety of schemes to add digital channels, expand their program offerings, and take preemptive action against aggressive DBS marketing without costly expenditures such as headend upgrades.²⁷ These actions range from abandoning their cable plant and becoming authorized DBS dealers to forming partnerships whereby cable subscribers receive both cable service and satellite service from DBS overlay vendors such as HITS and WSNet.²⁸

B. DTH Satellite Service: DBS and C-Band

²³See 47 U.S.C. §534(h)(2); 47 C.F.R. §76.55(d).

²⁴47 U.S.C. §325(b)(1).

²⁵47 U.S.C. §§325(b)(1)(A),(B).

²⁶47 U.S.C. §325(b)(3)(B).

²⁷ Ouray Cablevision in rural Colorado ceased cable service and provided each of its 1,000 customers satellite service through EchoStar. *See* John Higgins, *Switching to Satellite TV*, Broadcasting & Cable, July 17, 2000, at 26.

²⁸ See Linda Moss, Eking Out a Living, Multichannel News, August 7, 2000, at 54.

²⁹ See SkyReport.com at http://www.skyreport.com/dth_us.htm.; SBCA Comments in CS Docket No. 00-132 at 8, Table 3.

³⁰ DTH subscribership in Hawaii is approximately one percent. DBS service to Hawaii did not begin until April of 2000 when EchoStar introduced a 44-channel service offering to the islands.

continental United States with approximately 50 percent residing in urban counties and 50 percent living in smaller, rural counties.

- The Satellite Home Viewer Improvement Act amended the Communications Act and 15. Copyright Act to permit satellite carriers to provide the signals of local broadcast stations to subscribers residing in the broadcaster's market. 31 Commencing on January 1, 2002, satellite carriers that provide local-into-local retransmission of broadcast stations pursuant to the statutory copyright license³² must "carry upon request the signals of all television broadcast stations within that local market . . ."³³ Pursuant to the SHVIA, the Commission issued rules implementing this carriage requirement on November 29, 1999. Under the SHVIA, a television station, in a market with local-into-local service, must request carriage. The Commission's rules governing DBS mandatory carriage requires that for the first election cycle, commercial television stations must request carriage by July 1, 2001, for carriage to commence on January 1, 2002. For all cycles thereafter, commercial television stations must request carriage by October 1st of the year preceding the new election cycle. Noncommercial educational television stations must request carriage on the same dates as commercial television stations. The SHVIA requires that the Nielsen Research Company's Designated Market Areas be used as the "local" market for purposes of satellite local-into-local service.³⁴ The Commission's new rules provide that Nielsen's 1999-2000 publications determine market areas at the commencement of the first election cycle, and that satellite carriers may use future Nielsen publications to add counties to markets where it provides local-into-local service.
- As identified in the Commission's Report and Order in the DBS must carry proceeding, DirecTV and/or EchoStar are currently providing local signals to local viewers (local-into-local service) in a total of 40 Nielsen DMAs, as follows (as of November, 2000):³⁵

(DirecTV: 38 markets; Echostar: 34 markets)

Albuquerque-Santa Fe (Echostar only) Atlanta, GA Baltimore, MD (DirecTV only) Birmingham, AL (DirecTV only) Boston, MA Charlotte, NC Chicago, IL Cincinnati, OH Cleveland, OH Dallas/Ft. Worth, TX

Denver, CO Detroit, MI

³¹ Title I of the IPACORA, Pub. Law 106-113, 113 Stat. 1501, 1501A-526 to 1501A-545 (Nov. 29, 1999).

³² See 17 U.S.C. §122(a) (as amended by §1002 of the SHVIA). Section 122 of the Copyright Act is attached as Appendix I of the *Report and Order*.

³³ 47 U.S.C. §338(a)(1) (as amended by §1008 of the SHVIA).

³⁴ 17 U.S.C. § 122(j).

³⁵ Implementation of the Satellite Home Viewer Improvement Act of 1999: Broadcast Signal Carriage Issues, Docket No. 00-96 (adopted, Nov. 29, 2000), Appendices D and E.

Greensboro, NC (DirecTV only)

Greenville-Spartanburg (Echostar only)

Greenville, SC (DirecTV only)

Houston, TX

Indianapolis, IN

Kansas City, MO

Los Angeles, CA

Memphis, TN (DirecTV only)

Miami/Ft. Lauderdale, FL

Milwaukee, WI (DirecTV only)

Minneapolis/St. Paul, MN

Nashville, TN

New York, NY

Orlando/Daytona, FL

Philadelphia, PA

Phoenix, AZ

Pittsburgh, PA

Portland, OR

Raleigh-Durham, NC

Sacramento/Stockton, CA

St. Louis, MO

Salt Lake City, UT

San Antonio, TX

San Diego, CA

San Francisco/Oakland/San Jose, CA

Seattle/Tacoma, WA

Tampa/St. Petersburg/Sarasota FL

Washington, D.C.

C. Satellite Master Antenna Television (SMATV) Systems

17. Satellite Master Antenna Television (SMATV) systems, also known as private cable operators (PCOs), are video distribution facilities that use closed transmission paths without using any public right-of-way. MATV systems receive television signals from over-the-air local broadcast stations and from satellites and distribute them to households located in one or more adjacent buildings, primarily serving urban and suburban multiple dwelling units (MDUs). Because SMATVs do not use public

³⁶ Telecommunications Act of 1996, sec. 301(a)(2), 47 U.S.C. § 522(7). SMATV systems do not use public rights-of-way, and thus fall outside of the Communications Act's definition of a cable system.

³⁷ SMATV providers receive and process satellite signals directly at an MDU or other private property with an on-site headend facility consisting of receivers, processors and modulators, and distribute the programming to individual units through an internal hard-wire system in the building. Regulatory changes in 1991 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. Operators using this technology are known as enhanced SMATV operators, and because of efficiency savings, they are more competitive with cable operators than standard SMATV operators. *1997 Report*, 13 FCC Rcd at 1085 ¶ 82–83; *1998 Report*, 13 FCC Rcd at 24339-40, at ¶ 88.

rights-of-way, and they fall outside of the Communications Act's definition of a cable system. They provide, on average, 50-200 channels and often utilize DBS as well as local over-the-air broadcast stations. In general, SMATV operators are subject to less regulatory oversight than traditional cable systems. Some SMATV systems use microwave transmissions and wires to serve multiple buildings that are not commonly owned. Under the Telecommunications Act of 1996, SMATV operators may use wires to connect separately owned buildings, as long as the wires do not traverse public rights-of-way. There are hundreds of private and public, small and medium size SMATV operators throughout the nation. Currently there are approximately 1.5 million SMATV subscribers.

D. Multichannel Multipoint Distribution Systems (MMDS)

18. Multichannel Multipoint Distribution Systems, often referred to as "wireless cable," transmit video programming and other services to subscribers through 2 GHz microwave frequencies, using Multipoint Distribution Service (MDS) facilities and leased excess channel capacity on Instructional Television Fixed Service (ITFS) channels. ⁴⁴ An MMDS system must have a line-of-sight (LOS) path between the transmitter or signal booster and the receiving antenna, and subscribers need to use a special antenna and receiver to obtain service. When using analog signals, because of capacity limitations for the frequencies, MMDS operators have a maximum of 33 microwave channels available in each market, including 13 MDS channels and 20 ITFS channels. Digital technology significantly increases this channel capacity, improves picture and audio quality, and makes two-way services, such as high-speed Internet access and telephony, possible. Traditionally, MMDS operators have not carried local television stations; their subscribers have used traditional over-the-air television service antennas to receive these services in

³⁸ See Telecommunications Act of 1996 Act, Sec. 301(a)(2), 47 U.S.C. § 522(7).

³⁹ 1996 Act, sec. 301(a)(2), 47 U.S.C. § 522(7). For example, private cable and SMATV operators: (a) are not required to obtain cable television franchises; (b) do not face regulatory constraints on the geographic areas in which they may offer video services; (c) do not pay franchise and Federal Communications Commission subscriber fees; (d) are not obligated to pass every resident in a given area; (e) are not subject to rate regulation; and (f) are not subject to must carry and local government access obligations. *Fourth Annual Report on Competition in Video Markets* (1997 Annual MVPD Report), 13 FCC Rcd at 108, ¶ 82, fn. 296.

⁴⁰ See 1997 Annual MVPD Report at ¶ 82. The Commission held in 1991 that microwave transmissions do not "use" public rights-of-way. Amendment of Part 94 of the Commission's Rules to Permit Private Video Distribution Systems of Video Entertainment Access to the 18 GHz Band, PR Docket No. 90-5, Report and Order, 6 FCC Rcd. 1270, 1271, ¶ 10 (1991).

⁴¹ See Telecommunications Act of 1996, Sec. 301(a)(2), 47 U.S.C. § 522(7). Prior to the 1996 Act, to qualify for this exception the buildings had to be under common ownership, control, or management. 1997 Annual MVPD Report, at ¶ 82, fn 297.

 $^{^{42}}$ See 1997 Annual MVPD Report, at \P 84; and 1998 Annual Report, at \P 90.

 $^{^{\}rm 43}$ See NCTA Comments, CS Docket No. 00-132, at 9..

⁴⁴ See Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act - Competitive Bidding, MM Docket. No. 94-131 and PP Docket No. 93-253, Report and Order, 10 FCC Rcd at 9589, 9593 ¶ 7 (1995); 1996 Annual MVPD Report, 12 FCC Rcd at 4386. ¶ 51 n.152.

conjunction with the MMDS service, typically on one mast. More recently, MMDS systems implementing digital operation have generally carried the local broadcast television signals. Currently there are approximately 2,570 MDS providers and about 250 ITFS/MDS-based wireless cable systems in operation that provide service to about 1 million homes. With advances in digital technology, MMDS operators can now deliver as many as 200 channels of programming. In 1999, the number of homes with a serviceable line-of-sight to an MMDS operator's transmission facilities was reported to be 62,500,000, and the number of homes actually capable of receiving an MMDS operator's signal ("homes seen") was reported to be 35,750,000. According to the Wireless Communications Association ("WCA"), there are about one million MMDS video subscribers. These systems provide competition in smaller markets and rural areas where, WCA reports, cable overbuilds and/or DBS local-into-local service may not be available for the foreseeable future. Other estimates indicate, however, that the number of MMDS subscribers has dropped to approximately 700,000.

19. Significantly, the MMDS industry is currently transitioning from offering video programming to offering data services. Sprint Corporation and MCI WorldCom, Inc. have acquired most of the larger MMDS operators, with the intent of using the acquired frequencies to provide two-way non-video communication services, and have begun trials of this service. It appears that most MMDS spectrum will eventually be used to provide high-speed data services. Thus it is likely that most MMDS licenses will not be used in the future to compete in the MVPD market. These trends indicate that companies will continue to use MMDS spectrum to provide video services, but only in limited areas, which the Commission expects will include rural areas that are underserved by other providers. For example, MDS has become a vehicle for offering high-speed internet access and broadband services to residential and small office/home office (SOHO) customers. Since 1998, MCI WorldCom and Sprint Corporation have invested over \$2 billion in the acquisition (by purchase or lease) of MDS/ITFS channel rights covering 60 million households. Approximately 25 companies are currently using MDS/ITFS spectrum to offer high-speed internet access in 43 markets and have announced plans to expand their services to other markets.

E. Other Video Providers

20. In addition to cable, DTH satellite services, SMATV, MMDS, and the new MVDDS service described above, electric and gas utilities are teaming with MVPDs in some areas to offer video and

⁴⁵ See Interim Report: Spectrum Study of the 2500-2690 MHz Band, The Potential for Accommodating Third Generation Mobile Systems (Interim Spectrum Report), FCC Staff Report, November 15, 2000.

⁴⁶ Paul Kagan Assocs., Inc., *Wireless Cable Sub Count and Revenue Projections, 1998-2009*, Wireless/Private Cable Investor, July 13, 1999, at 4-5. (Paul Kagan Associates did not update this number for 2000.) The number of homes with a "serviceable line of sight" counts all homes which an MMDS operator is licensed to serve within a particular license area, regardless of technical limitations such as signal strength or blockage by terrain. The number of "homes seen," on the other hand, is the number of homes that MMDS operators have the technical ability to serve. For more discussion, *see 1997 Annual MVPD Report*, at ¶ 74, n. 272.

⁴⁷ Paul Kagan Assocs., Inc., *Basic Cable Network Economics*, *1995-2010*, Cable Program Investor, June 16, 2000, at 7. At least one company, Nucentrix, is combining its MMDS spectrum with DBS service to offer a broader array of video services. *See* http://www.nucentrix.com/site/television/products/index.html.

⁴⁸ See Interim Spectrum Report, at p. 21.

non-video services. 49 Local exchange carriers and long distance telephone carriers also provide video services, most often using MMDS. 50 Open Video Systems are facilities similar to cable systems, except that they are not allowed to discriminate among video service providers with regard to carriage. The Commission has certified 23 Open Video System (OVS) operators to offer OVS service in 47 mostly urban and suburban areas. 51 The cable must carry rules also generally apply to OVS operators, so that local television signals are carried on these systems.

IMPEDIMENTS TO MVPD OPERATIONS

- 21. This section provides an enumeration of the technical, economic, and other impediments each type of multichanel video programming distributor has encountered. A summary of the general state of competition in multichannel video programming distribution is provided first followed by a brief summary of the challenges facing the major types of MVPD service providers.
 - A. General State of Competition in Multichannel Video Programming Distribution
- 22. Cable television remains the dominant technology for delivery of video programming to consumers in the MVPD marketplace, although its ⁵²market share continues to decline. As of June 2000, 80% of all MVPD subscribers received their video programming from a local franchised cable operator, compared to 82% a year earlier. The total number of subscribers to both cable and noncable MVPDs continues to increase. A total of 84.4 million households subscribed to multichannel video programming services as of June 2000, up 4.4% over the 80.4 million households subscribing to MVPDs in June 1999. This growth accompanied a 2.4 percentage point increase in MVPD's penetration of television households to 83.8% as of June 2000. Much of the increase in the growth of non-cable MVPD subscribers is attributable to the growth of DBS. DBS appears to attract former cable subscribers and consumers not previously subscribing to an MVPD. DBS subscribers now represent 15.4% of all MVPD subscribers.

2000); Paul Kagan Associates, Inc., Cable Industry 10-Year Projections, Cable TV Investor, June 19, 2000, at 6

(cable subscribers); NCTA Comments, CS Docket No. 00-132, at 9 (MMDS and SMATV subscribers); SkyReport.com at http://www.skyreport.com/dth_US.htm (DBS, HSD subscribers); FCC estimates (OVS

53 See 1999 Annual MVPD Report at Appendix C, Table C-1; Nielsen Media Research (television households for

subscribers).

⁴⁹ For example, RCN and PEPCO in the Washington, D.C. area operate as Starpower. Similar ventures are underway or planned in Minnesota, North Carolina, Indiana, California, Texas, and Massachusetts.

⁵⁰ For example, BellSouth's MMDS service areas cover approximately 3.5 million homes in Florida, Georgia, Louisiana, and Kentucky. U S West offers video, high-speed Internet access, and telephone service over existing copper telephone lines using very high speed digital subscriber line ("VDSL") in Omaha, Nebraska, and Phoenix, Arizona. U S West remains the only company in the country using VDSL for video distribution, and reportedly has 31,000 subscribers in Phoenix and 20,000 in Omaha.

⁵¹ RCN is by far the largest OVS operator in the country, operating in New York City, Washington, D.C., Gaithersburg, Maryland, South San Francisco, California, and some of the suburbs surrounding Boston. RCN has additionally been certified as an OVS operator in the city of Boston, Northern New Jersey, Philadelphia, Los Angeles, Chicago, Portland, Oregon, Seattle, Washington, and Phoenix, Arizona.

⁵² See 1999 Annual MVPD Report at \P 5.

23. Noncable MVPDs continue to report that regulatory and other barriers to entry limit their ability to compete with incumbent cable operators and to thereby provide consumers with additional choices. Noncable MVPDs also continue to experience some difficulties in obtaining programming from both vertically integrated cable programmers and unaffiliated programmers who continue to make exclusive agreements with cable operators. In multiple dwelling units ("MDUs"), potential entry may be discouraged or limited because an incumbent video programming distributor has a long-term and/or exclusive contract. Other issues also remain with respect to how, and under what circumstances, existing inside wiring in MDUs may be made available to alternative video service providers.

B. Cable Television Service

- 24. The cable television industry continues to grow in basic cable subscribership, homes passed, basic cable penetration, premium service subscriptions, basic cable viewership, and channel capacity.⁵⁷ However, in response to increasing competition, primarily from DBS, cable operators will need to continue to expand channel capacity to offer additional and advanced services and offer service at competitive rates.⁵⁸ Cable will also need to continue to incorporate digital compression techniques so that operators can also offer their customers improved receptions and resolution quality.⁵⁹
- 25. Technical issues facing the cable industry include the resolution of outstanding technical issues regarding compatibility with digital consumer television receiving equipment, the availability of component digital descramblers, known as "point of deployment," or "POD," modules for use with set-top digital cable receiving devices provided by retailers and cable ready consumer receivers. The introduction of cable digital services could also be delayed by on-going difficulties in developing agreements on copy protection technology and policy for digital video programming carried on cable systems. Similar difficulties with copy protection also affect other digital MVPDs.

C. Direct Broadcast Satellite Services

26. DBS remains cable's largest competitor and continues to show growth. According to surveys of DBS subscribers, the primary advantages of DBS are superior channel capacity (including the capacity for "Near Video On Demand" movies on pay-per-view), digital quality picture, CD-quality sound, and specialized programming such as exclusive sports packages. The DBS industry continues to face barriers to expansion, however. In its Annual Competition Report, the Commission identified several competitive challenges for DBS, including changes in ownership, reassignment of orbital slots, and signal interference. Access to vertically integrated programming remains an issue for DBS. EchoStar asserts

⁵⁶ *Id*.

⁵⁴ See 1999 Annual MVPD Report at \P 13.

⁵⁵ Id.

⁵⁷ *Id.*, at ¶ 18.

⁵⁸ *Id.*, at ¶ 21.

⁵⁹ *Id*.

⁶⁰ *Id.* at ¶ 72.

⁶¹ *Id.* at ¶ 78-80.

that large cable operators, because of their size and market share, have overwhelming buying power in the programming market that restricts access to independent programming as well as to vertically integrated programming. ⁶²

D. C-Band Home Satellite Dishes

27. In contrast to the growth of DBS subscribers, the large dish home satellite industry is experiencing a steady decline of customers. Many customers are migrating to DBS service, which uses smaller antenna dishes. Despite the steady decline, SBCA expects C-Band service to continue as a viable business for the foreseeable future as a niche distribution medium serving rural subscribers unserved by cable. The contract of the foreseeable future as a niche distribution medium serving rural subscribers unserved by cable.

E. Mutichannel Mutipoint Distribution Systems

28. As indicated above, MMDS wireless cable systems transmit video programming and other services to subscribers through 2 GHz microwave frequencies, using Multipoint Distribution Service (MDS) facilities and leased excess channel capacity on Instructional Television Fixed Service (ITFS) channels. Since the 33-channel analog capacity of MMDS systems is generally not competitive with that of most cable systems, MMDS subscribership has declined. Over the past two years, MCI WorldCom and Sprint have purchased a significant number of MMDS operators. Sprint and MCI WorldCom intend to use this spectrum as a "last mile" connection to homes for the provision of high-speed Internet access. It remains unclear whether they will continue to provide analog video service, upgrade to digital video service, or discontinue multichannel video service. The Sixth Annual MVPD Report noted several barriers to competition identified by industry, including current program access law, lack of non-discrimination provisions for retransmission consent agreements, access to premises, and jurisdiction over

⁶² EchoStar Comments in CS Docket No. 00-132, at 6-7.

 $^{^{63}}$ See Satellite Broadcasting Communications Association (SBCA) Comments in CS Docket No. 00-132 at 7-8, Tables 1 and 3.

⁶⁴ See CableFAX Daily, November 3, 1999, at p. 1.

⁶⁵ 1999 Annual MVPD Report, 15 FCC Rcd at 1011; Art Durbano, 50 Reasons Why Bigger is Better, Satellite Orbit, March 2000, at 16.

⁶⁶ See 1999 Annual MVPD Report, Appendix C, Table C1; NCTA Comments in CS Docket No., 00-132, at 9.

⁶⁷ In addition, MCI WorldCom and Sprint have agreed to merge, but the merger is still under regulatory review. MCI WorldCom, Inc., *MCI WorldCom and Sprint Create Pre-Eminent Global Communications Company For 21st Century* (press release), Oct. 5, 1999.

⁶⁸ Jim Barthold, *Wireless Stepchildren Becoming Empowered*, CableWorld, Aug. 16, 1999, at 38, 41. Kevin Brauer, Sprint's President, National Integrated Services, indicated that digital video may be part of Sprint's plans. Brauer specifically mentioned People's Choice TV's digital MMDS and high-speed Internet access services in Phoenix as a possible model. The Phoenix system also competes with Cox cable and U S West's VDSL system. Alan Breznick, *In Phoenix, Everyone Wants a Piece of the Action*, CableWorld, July 19, 1999, at 16.

"home run" wiring.⁶⁹

F. Satellite Master Antenna Television Systems

Over the past several years, private cable operators offering service over SMATV systems have begun to offer many of the same services offered by franchised cable operators, including local and long distance residential telephone service and Internet access. Some SMATV operators have expressed concern over a Commission decision to allow franchised cable operators to offer "bulk" discounts to residents of MDUs on an individual basis. The Commission continues its review of comments submitted in the *Second Further Notice of Proposed Rulemaking* on the matter of inside wiring. Additionally, the relationship between SMATV providers and real estate investment trusts ("REITS"), national property management companies and ownership groups, has changed. Exclusive rights to a property in exchange for a revenue share are, according to one report, becoming increasingly rare. Property managers are increasingly aware of MVPD technology issues, and are investing in infrastructure in order to gain flexibility of choice over video providers. SMATV operators, on the other hand, are focusing on SMATV/DBS combination services and advanced services, such as telephony and Internet access, to attract property managers. Many SMATV operators are becoming CLEC licensees, while also aligning with third-party providers of high-speed Internet access.

G. Issues Affecting Unserved and Underserved Areas

30. As indicated by the recent report from the National Telecommunications and Information Administration ("NTIA") and Rural Utilities Service ("RUS") report, *Advanced Telecommunications in Rural America*, rural areas have less access to local broadcast stations delivered over cable than is found in cities and towns. It is more costly to deploy cable over large rural areas, and the subscriber base is smaller and more widely dispersed. This leads to a serious question of whether market forces alone can ensure

⁶⁹ See 1999 Annual MVPD Report at \P 91.

⁷⁰ See 1999 Annual MVPD Report at \P 96; Fourth Annual MVPD Report, at \P 84; Fifth Annual Report on Competition in Video Markets (Fifth Annual MVPD Report), 13 FCC Rcd at 24342, at \P 92.

⁷¹ See 1999 Annual MVPD Report at ¶ 99; Implementation of Cable Act Reform Provisions of the Telecommunication Act of 1996, CS Docket No. 96-85, Report and Order, 14 FCC Rcd 5296 (1999).

 $^{^{72}}$ A real estate investment trust ("REIT") is essentially a corporation or business trust that combines the capital of many investors to acquire or provide financing for all forms of real estate. 1996 *Annual MVPD Report*, at ¶ 9.

⁷³ See Fourth Annual MVPD Report, at \P 94; James Gomez, Business Trends Among MDUs: Looking for Creative Solutions, Private Cable & Wireless Cable, July 1999, at p. 24 (Gomez, July 1999).

⁷⁴ See Gomez, July 1999; see also http://www2.multihousing.com/consulting/techno.html.

⁷⁵ See Paul Kagan Assocs., Inc., ICTA Show: Echostar Gets Serious on MDU Alliances, Wireless-Private Cable Investor, Aug. 6, 1999, at p. 10.

⁷⁶ Gomez, July 1999.

rural households access to advanced services as well as to broadcast television.⁷⁷

- 31. In many areas, particularly smaller markets and rural areas, MMDS provides the only local non-DBS competition to cable operators. One problem for continued and improved video service in these areas is that the MMDS industry is currently transitioning from offering video programming to offering data services. This transition points out the economic challenges faced by MVPDs seeking to serve rural areas: there are often not enough people to make the service economically viable. New entrants tend to gravitate to areas of greater population density that can support the service. Unserved or underserved areas do not have sufficient density to provide that critical mass. Bell South, which is now an MMDS provider that delivers video programming, including local broadcast stations, contends that the consolidation and clustering of cable systems gives cable MSOs leverage vis-à-vis cable programming networks and broadcast networks, making them less willing to sell programming to cable's competitors. BellSouth suggests this problem can be remedied and MMDS thereby strengthened as a competing video provider -- by extending the existing program access rules beyond the year 2002 sunset. BellSouth also proposes that Congress eliminate the non-vertical integration and terrestrial delivery exceptions to the statute and either require strict justification of volume discounts or clarify the language in the statute.
- 32. In the DBS context, the National Rural Telecommunications Cooperative⁷⁹ contends that the mandatory carriage requirement in the SHVIA, as described above, has the unintended and undesirable effect of preventing satellite carriers from providing local-into-local service in the markets with smaller populations and lower profits. NRTC contends that the "carry-one-carry-all" carriage requirement discourages satellite carriers from providing any local-into-local service in these markets due to capacity limitations. Again, as with cable, the subscriber base in the predominantly rural markets is too small to support the service. NRTC notes that if the two DBS satellite carriers, DirecTV and Echostar, served the top 65 markets, this would still leave 25 million television households without local-into-local service. As noted above, these two DBS carriers currently serve only the top 40 markets and have not announced plans

⁷⁷ By way of anecdotal information, the FCC Call Center receives 100-300 calls a month from satellite subscribers seeking delivery of distant network stations via satellite. While some of these callers are interested in distant network stations in addition to the local broadcast television programming they can receive, many of these callers claim that they have no way to receive broadcast television programming apart from satellite delivery of distant network signals.

⁷⁸ BellSouth further maintains that this consolidation and clustering increases the ability of vertically integrated MSOs to avoid program access obligations by delivering programming terrestrially and increases incumbent cable operators' leverage vis-à-vis non-vertically-integrated programming networks. BellSouth Comments in CS docket No. 00-132 at 3-7. WCA offers a similar argument noting cable operators' successes at denying regional sports programming from competitors. WCA Comments in CS Docket No. 00-132 at 8-9.

⁷⁹ NRTC is a non-profit cooperative association comprised of 550 rural electric cooperatives and 279 rural telephone systems. NRTC has an arrangement with DirecTV to market and distribute DirecTV programming services in large areas of the United States serving more than 1.5 million rural households. NRTC also distributes C-Band satellite programming to 50,000 rural subscribers.

 $^{^{80}}$ See 47 U.S.C. 338, as amended by the SHVIA.

⁸¹ See NRTC Comments filed for the 2000 Competition Report, CS Dkt. No. 00-132. NRTC also reports that the copyright limitations in the SHVIA limit the availability of distant network signals to subscribers in rural areas, thus preventing them from receiving either local or distant television network programming. *Id. See also* 17 U.S.C. §§119 and 122, as amended by the SHVIA.

to extend beyond the top 45 markets, which would leave one-third of the 100.8 million television households (roughly 33.6 million) without access to local-into-local service on satellite. 82

33. In contrast, the Association for America's Public Television Stations (AAPTS) states that digital compression, statistical multiplexing, and use of Ka-band satellites with spot beams, in addition to the Ku-band capacity currently used for DBS service, will eventually enable DBS providers to carry every local broadcast station in the United States and deliver them to their local markets. Thus far, the DBS satellite carriers have not agreed that spot beam technology and use of the Ka-band will achieve this desired result. The Commission notes that, at a minimum, current business plans for use of the Ka-band would have to be significantly revised and re-focused to accomplish what AAPTS describes. Heterothemarket place would welcome such a readjustment and reward it sufficiently is also open to serious question. Even if the technological possibilities are as forecast by AAPTS, the economic challenges of serving smaller markets or markets that have low population density are not resolved by the technological availability of satellite capacity.

RECOMMENDATIONS

34. Section 2002(c)(3) of the RLBSA requests recommendations on specific measures to facilitate the provision of local signals to subscribers in unserved and underserved markets by direct-to-home satellite television providers and by other distributors of multichannel video programming services. Because the licensing process required by section 2002(a) of that Act has not yet been completed, it would be premature to make such recommendations at this time. Once specific MVDDS assignments are made and services begin operation, the Commission can make appropriate recommendations. The Commission will address these issues in its annual MVPD competition reports. In this regard, Section 628(g) of the Communications Act of 1934, as amended (Communications Act), requires the Commission to report annually to Congress on the status of competition in markets for the delivery of video programming. Congress imposed this annual reporting requirement in the Cable Television Consumer Protection and Competition Act of 1992 ("1992 Cable Act") as a means of obtaining information on the competitive status of markets for the delivery of video programming. To date, the Commission has issued six such

⁸² Based on planned service by DirecTV and Echostar, NRTC expects that households in the following states would not receive local-into-local DBS service from stations originating within their states: Alaska, Delaware, Hawaii, Idaho, Iowa, Maine, Mississippi, Montana, Nebraska, New Hampshire, New Jersey, North Dakota, South Carolina, South Dakota, Vermont and Wyoming. The Commission notes that many households in some of these states will receive, or are currently receiving, local-into-local service from neighboring states; including many parts of Delaware, Nebraska, New Hampshire, New Jersey, South Carolina, and Vermont.

⁸³ See Channel-Carrying Capacity of DBS Systems, prepared by Strategic Policy Research, AAPTS ex parte filing of November 17, 2000 in CS Dkt. No. 00-96.

⁸⁴ DTH providers' current business plans do not incorporate operational spot beam technology.

⁸⁵ Communications Act of 1934, as amended, section 628(g), 47 U.S.C. §548(g).

⁸⁶ Pub.L. No. 102-385, 106 Stat. 1460 (1992).

⁸⁷ The 1992 Act imposed a regulatory scheme on the cable industry designed to serve as a transitional mechanism until competition develops and consumers have adequate multichannel video programming alternatives. One of the purposes of Title VI of the Communications Act, Cable Communications, is to "promote competition in cable (continued....)

reports, with the most recent being the *Sixth Annual Report on Competition in Video Markets Report* submitted pursuant to Section 628(g) of the Communications Act. 88

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas Secretary

Assessment of the Status of Competition in the Market for the Delivery of Video Programming), CS Docket No. 94-48, *First Annual Report (1994 Annual MVPD Report)*, 9 FCC Rcd 7442 (1994); Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, CS Docket No. 95-61, *Second Annual Report (1995 Annual Report)*, 11 FCC Rcd 2060 (1996); Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, CS Docket No. 96-133, *Third Annual Report (1996 Annual Report)*, 12 FCC Rcd 4358 (1997); Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, CS Docket No. 97-141, *Fourth Annual Report (1997 Annual MVPD Report)*, 13 FCC Rcd 1034 (1998); and Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, CS Docket No. 98-102, *Fifth Annual Report (1998 Annual MVPD Report)*, 13 FCC Rcd 24284 (1998). The seventh annual report will be submitted to the Congress shortly.