1. Customers Are Getting More Program Choices

The increased investment in programming (and anticipated gains in system capacity) has spurred not only more diverse and better programming on existing cable networks but the development of new cable networks. In 1996, 23 new national basic cable networks were launched.[58] Three more cable networks have launched in 1997, bringing the total of national cable networks to 165, an increase of more than 19% over the 1995 figure. New regional sports and news networks have been announced or began operation since last year. And two cable programmers, Home Box Office and the Discovery Channel, recently announced plans to offer the picture clarity and sound quality of HDTV beginning in 1998.[59]

The number of different types of networks is also growing dramatically as entrepreneurs go after increasingly targeted components of the viewing audience. Cable operators are investing in these services by carrying them and those investment decisions are reflected in rates. Gone are the days when auto racing fans could view only major auto races such as the Indianapolis 500 and selected weekly editions of ABC's Wide World of Sports. ESPN made auto racing a regular feature of its programming fare. Recently, an entire network devoted to racing, Speedvision, commenced service.

This model is being followed in many other cases. For example:

- Extensive schedules of cartoons, once a regular feature only of the broadcast schedule, are available on Nickelodeon, The Disney Channel and The Cartoon Network;

---

[58] See Cable TV Developments, Spring 1997, National Cable Television Association.

[59] "Discovery Planning to Launch HDTV Service," Multichannel News, July 14, 1997, at 12.

- Until recently, golf programming has usually been available only in selected time periods on weekends. The Golf Channel now offers golf enthusiasts 24-hour a day programming;

- Broadcast television rarely devotes significant programming time to expert presentations on gardening, home building, crafts and interior decorating. Home & Garden Television is exclusively devoted to offering programming "to help people make the most of their lives at home."

- Until recently, history buffs did not have their own channel. Other multichannel services offered history-related programming, but no channel was devoted exclusively to history, as The History Channel is today.

Cable programmers are demonstrating their commitment to programming by investing in original programming as well as established fare. In the summer months, subscribers are offered far more original programming on cable than on broadcast television.[60]

As evidenced by the most important measure, percentage of viewing audience, multichannel video programming is offering more, and more viewers watch. Collectively, multichannel cable networks have continued their steady rise, tripling their share of the viewing audience from 1985 to 1995.[61] In cable households, which represent two-thirds of the nation's households, basic cable networks overtook the big three network share in 1995 and since then have increased their margin.[62]

Cable operators have expanded channel capacity, offered new programming services, and more original choices. Cable customers demonstrate their support for this strategy by watching

---

60 "Disney Rolls with Originals, Off-Net Fare," Multichannel News, July 14, 1997, at 39; see also Cable World July 21, 997 at 20-21, 105; see also "Cable Stands Out", Times Picayune, June 24, 1997; see also "Cable Again Goes Where Networks Won't Dare," see also Charlotte Observer, July 15, 1997.

61 A.C. Nielsen Company, Nielsen Television Index; Cable States Report Data, published by the CAB in Cable TV Facts, 1985-1996.

62 Cabletelevision Advertising Bureau, Cable TV Facts, 1996-1997 at 16,17

cable programming and continuing to make cable their MVPD of choice. New facilities and higher quality programming cost more money, but create increasing value for consumers at the same time.

2. Many Cable Customers Enjoy Cost Savings From Repositioning of Premium Services

Increasingly, in response to popular demand, some cable systems are now including in their basic programming packages services that had been offered as premium channels. The repositioning of cable services in response to competition also has brought consumers added benefit for their monthly fee. This type of product repositioning to create a superior package is a frequent response to entry by a competitor and is often accompanied by an increase in prices.

And it has brought a direct benefit to cable customers. For customers who had previously paid an additional $8 - $10 per month for these services as premium offerings, their monthly cable bill has been reduced. For those who did not previously pay for these premium services, moving these services to lower priced, optional tiers offers more value.

As the Economists Inc. Report notes, "where a cable operator had added a former pay service such as The Disney Channel or a regional sports channel to a regulated package of services, the combined price of the former regulated package plus the added service has declined substantially."[63] As explained by Economists Inc.:

> Cable operators have increased the quality of their regulated service packages by moving previously pay channels to basic service. This has increased their costs, and hence prices for regulated services have increased. When there is an increase in the quality and quantity of services in a package, subscribers may be better off even when the new package has a higher price than the old one.

[63] Report at 3.

> [F]or customers that are willing to pay for both the full set of regulated programming services and the formerly pay channels that are added to the regulated package, there has been a clear price reduction. The combined price for these services has fallen.[64]

The Disney Channel, a commercial-free service known for its award-winning family programming, is now carried as a basic service on cable systems serving 22.1 million customers, or one-third of all cable homes.[65] In 1994, its carriage was 7.8 million on basic.[66] In response to increased competition, MediaOne, for example, repositioned the Disney Channel from the premium tier to an expanded basic tier in its California systems (Los Angeles, Stockton, Palm Springs and Fresno). And the service was retiered from premium to basic in suburban Chicago. Throughout all of its six regions, MediaOne has nearly 2.5 million subscribers -- or almost half of its total subscriber base -- receiving Disney on an expanded basic tier today.

Cable One (formerly Post-Newsweek Cable) recently took steps in a systemwide marketing campaign to compete product-by-product with DBS services -- such as adding the Disney Channel to its standard basic service and lowering prices for pay-per-view movies from $3.95 to $2.99.[67] Cable One also will "offer five Home Box Office and four Showtime channels . . ., and it will market families of premium services, rather than the individual services" because "pay customers are most likely to be interested in DBS."[68]

---

64 Id. at 5.

65 Paul Kagan Associates, May 31, 1997, at 6.

66 Paul Kagan Associates, The Pay TV Newsletter, Dec. 31, 1996, at 3. In addition, Disney had 4.2 million premium subscribers in 1994.

67 "More MSOs Play Name Game," Multichannel News, June 9, 1997, at 3.

68 Id.

District Cablevision recently shifted the Disney Channel to expanded basic from pay service to enhance the value of the programming options and better serve its customers.[69] As of June 1, 1997, District Cablevision's Disney Channel subscribers benefited from an overall $4.56 net reduction in rates. (See Table 2 below.)

TABLE 2

DISNEY SUBSCRIBERS IN WASHINGTON, D.C.

	PRIOR TO JUNE 1997	JUNE 1, 1997	SAVINGS
EXPANDED BASIC + DISNEY	$36.75	$32.19	$4.56

Sports is another area of hot competition among MVPDs. In response to sports channels carried in the DBS basic package, virtually all regional sports networks, such as Home Team Sports, have been switched from premium to basic status.[70] Over the past six months, MediaOne, for example, moved SportsChannel New England from premium status to expanded basic in systems serving nearly 1 million customers. It plans to add this service to expanded basic on recently-acquired TCI and Cox properties by the end of the year. It also repositioned

---

69 System Notes, Multichannel News, July 14, 1997.

70 According to A.C. Nielsen data, regional sports networks appear to be carried as a basic or CPS service on 4,259 systems, as compared to carriage on only 41 systems which carry them as premium services. See "Basic Sports: Will Switch its Regional Sports Pay Services of Sports Channel Regional Network to Expanded Basic," Cable World; "Comcast Adds Home Team Sports to Full Standard Service", PR Newswire, December 1, 1995; "SportsChannel Reach 3 Million Mark", Broadcasting & Cable, April 15, 1996, at 71; "SportsChannel Back to Basics: More than a Million Subscribers Will Be Repositioned", Broadcasting & Cable, January 6, 1997, at 114; "TCI Cablevision Announces SportsChannel Pacific Repositioning,", PR Newswire, April 24, 1997; "Sports Nets Make Move to Basic", Broadcasting & Cable, April 15, 1996; "SportsChannel Networks Winning Battle to Basic", Multichannel News, January 13, 1997, at 28; see also "Comcast Scores Big With Sports Network," Philadelphia Inquirer, July 22, 1997.

Pro-Am Sports Service (PASS) in Michigan and Sports Channel Pacific in Stockton, CA from premium carriage to full-time expanded basic carriage.

Similarly, in Montgomery County, Maryland, cable customers who previously purchased Home Team Sports as a premium service have experienced a dramatic reduction in their cable rates. Prior to the July 1 migration of HTS to the "preferred" tier, customers paid $42.35 for preferred service and HTS. Effective July 1, 1997, those same customers realized a net rate reduction of $7.96 as HTS was rolled into the preferred tier. (See Table 3 below.)

TABLE 3

HOME TEAM SPORTS SUBSCRIBERS IN MONTGOMERY COUNTY, MD

	PRIOR TO JULY 1997	JULY 1, 1997	SAVINGS
PREFERRED BASIC + HTS	$42.35	$34.39	$7.96

These changes are a direct response to competition and to consumer demand.

B. Cable's Competitive Behavior Is Consistent With Economic Theory

1. Cable's Competitive Behavior Tracks Other Industries

The Economists Inc. Report identifies DBS's competitive advantages over cable service, principally more channels and digital transmission quality.[71] This has resulted in the defection of some cable customers, those who represent "the heaviest purchasers of programming services from their cable systems, and loss of these customers has an effect on cable system profits greater than simple subscriber numbers would suggest."[72]

---

71 Report at 4.

72 Id.

It is unsurprising that cable operators are taking all of the actions described herein to win these customers back. But these actions require expenditures to implement new technology, and to improve the quality of transmissions, programming and customer service. While for some customers repositioning may result in rate reductions, as where The Disney Channel or a regional sports network is transitioned from a pay to a basic service, in other cases customers will see increases in the cost of the overall programming they purchase.

The Report further shows that competitive repositioning by cable operators in response to competition is consistent with the experience in other industries. The Report describes, among other examples, the response of the U.S. auto industry in the 1970s to competition from Toyota and Honda as analogous to the situation faced by cable operators. By addressing the perceived deficiencies of their products as compared with Japanese cars, the U.S. auto companies saw defect and complaint rates decline significantly.[73] The actions by the cable industry to construct more sophisticated networks, assemble better product and improve customer service parallel the responses of the U.S. auto industry to foreign competition.

There are equally compelling examples in consumer retailing. Nordstrom, the Seattle-based upscale fashion specialty store, caused incumbent retailers with lower service and product standards to modify their business strategies. Economists Inc. notes "that incumbent department stores responded by upgrading customer service."[74]

---

73 Report at 18.

74 Id. at 22. It was reported that "Since West Coast retailer Nordstrom brought its renowned customer service to Washington two summers ago [in 1988], area retailers have quietly moved to improve their own service.... Area retailers are paying more attention to their service, from pushing sales personnel to be more service-oriented to offering sales commissions to hiring piano players." Id. See also pp. 20-21 [response of supermarket chains to arrival of Fresh Fields in a community].

The reaction of Kodak, an incumbent provider of film in the U.S., to the arrival of Fuji film may be particularly instructive. The Report observes that Fuji began serious marketing of film to the U.S. market in 1978. Its market share grew from 2% in 1978 to 5% in 1982.

> Once Fuji's share exceeded 5%, Kodak reacted in a number of ways to competition from Fuji. Kodak quickly matched Fuji's products, including new films and single-use cameras. In 1984, it was reported that "when Fuji, last year, proudly unveiled its high resolution film, which produces a finer grain at higher speeds of shooting, Kodak immediately snapped back with similar technology." Also, Fuji has tried to price its film 10% to 15% less than Kodak's, but has found the aroused giant has quickly matched its offering.[75] After Fuji introduced cents-off coupons, Kodak did the same. When Fuji became an official sponsor of the 1994 Olympic Games, Kodak became ABC's television sponsor for the Games.[76]

The Report further notes that "[l]ater in the 1980's ... Fuji introduced a whole new line of 35mm films, claiming numerous technical improvements to its Gold line of 35 mm films."[77] In short, despite Fuji's small market share of only 5% in 1984, Kodak was prompted to compete with gusto.

Like Kodak, cable operators are responding with vigorous competition to DBS; repositioning and expanding their program offerings. Like Kodak, cable companies are improving the technical quality of their products in response to competition. Like Kodak, cable companies are moving to match the innovations of the competition.

---

75 Some may argue that unlike Kodak and Fuji, cable operators do not uniformly lower prices in response to competition. There are a number of responses. First, cable operators are reducing certain prices -- e.g., The Disney Channel and certain regional sports channels are transitioning from pay to expanded basic service with lower bills for previously pay homes. See Tables 2, 3 supra. Second, unlike film products, the inputs -- products added to expanded basic -- are generally not internally manufactured but are purchased from programming suppliers, which trigger external costs. The rate increases precipitated by the new programming are limited to costs under FCC regulation. Finally, DBS has not lowered its price as a form of competition to cable but remains at or above cable prices generally. See supra.

76 Report at 3 (citations omitted).

77 Report at 24.

In sum, as the Report notes, an incumbent's truly competitive response can be associated with rate increases as well as rate decreases and its response can be triggered by competitors with a relatively small market share.

2. Cable Behavior Fits the Theory of Response to Competition

Cable operators are doing in practice what the foregoing economic theory would predict. In response to competition, cable companies are offering subscribers more and more varied and higher quality viewing choices; are expanding channel capacity; are investing in and deploying new technology; and have dramatically improved customer service. Competitive forces best explain the pricing and service behavior of today's cable operators.

Channel Capacity: The steady expansion of channel capacity by cable systems nationwide is one sure indicator these companies are facing strong competition. If competitive forces were not present, cable companies could preserve capital and limit channel expansion. Cable companies are doing just the opposite.

The cable industry spent almost $5.1 billion in capital expenditures on revenues of $28 billion in the last year, largely to construct facilities to enhance traditional services and to provide the full array of services in an increasingly competitive and cutting-edge multichannel entertainment and information market.[78] As noted, some cable operators have undertaken aggressive rebuilds and upgrades of their systems, often ahead of or in the absence of contractual

---

[78] Morgan Stanley Report, "4Q96/1Q97 Preview: Spending for Future Growth in New Services," January 1997 at 4.

commitments with the government. Others are pursuing an accelerated roll-out of digital compression against competition from fast-growing satellite services, as noted above.[79]

As we have seen, DBS providers enjoy capacity for upwards of 130 to 200-channel offerings.[80] The additional programming choices the DBS service is able to offer as a result of its comparative advantage in channel capacity explains in part the phenomenal growth of DBS in recent years.

Cable companies have responded to DBS channel capacity advantage by increasing their own. In November 1992, only 10.4% of systems, serving 34.6% of all cable customers, offered 54 or more channels.[81] Four years later, in October 1996, 15.8% of systems, serving 54.4% of all cable customers offer 54 or more channels.[82]

This trend is accelerating. Upgrades being undertaken over the next several years, including digital deployment by adding channel capacity or redeploying analog capacity, will redefine cable service.

Advanced Technology: Cable companies are aggressively deploying advanced technology in response to video competition and to upgrade the cable product overall. The deployment of a hybrid fiber/coaxial cable architecture, and the transition from analog to digital are at the center of the cable industry's competitive strategy. The new hybrid fiber-coaxial

---

79 "TCI Plugs Back into Digital TV", Hollywood Reporter, May 1, 1997, at 1; "Hindrey Tweaks All TV Rollout", Multichannel News, April 7, 1997, at 1 (noting TCI executives declined to discuss launch locations in order not to tip off direct broadcast satellite competitors).

80 See DirecTV websites for comparison of channel capacity and offerings (http://www.directv.com/programming/compare.html).

81 Warren Publishing, Television & Cable Factbook, Services, Vol. 61, at I-69.

82 Warren Publishing, Television & Cable Factbook, Services, Vol. 65, at I-81.

(HFC) networks are often linked by fiber into regional hubs, which enable the industry to deliver a wide range of competitive telecommunications and information services.[83] Over the past year, the industry also has moved ahead in providing consumers with high-speed data delivery (cable modems), telephony and advanced navigation devices. And cable companies are pursuing the local phone market by providing facilities-based competition in several markets.

In 1996, the cable industry increased its spending on a faster, more reliable and cost-efficient technology by 28% over 1995. This year, cable operators are beginning to offer digital programming and will increase the offering of digital services in the next 12 months. Over the next five years, analysts estimate cable will invest $18 billion in its core video business alone and more than $28 billion in infrastructure to deliver new technologies.[84] According to one projection, cable companies are expected to undertake capital spending equal to approximately 20% of gross revenues in each of the next five years.[85]

As previously noted, a majority of subscribers have access to 54 or more channels. As cable operators upgrade to 550 MHz hybrid fiber/coaxial ("HFC") systems, they are able to deliver approximately 78 analog channels. It is estimated that more than half of all cable customers will be served by systems with a minimum of 550 MHz capacity in 1997.[86] If cable

---

83 For example, Synchronous Optical Network (SONET), an integrated technology, delivers voice, video, and data over a single fiber/coax network. The cable industry may use SONET as the backbone linking co-located cable plants.

84 Richard Bilotti, Marc E. Nabi, 4Q96/1Q97 Preview: Spending for Future Growth in New Services, Morgan Stanley, Jan. 30, 1997, at 4.

85 Id.

86 Paul Kagan Associates, Cable TV Technology, June 30, 1997, at 2.

companies were not subject to competitive forces, the impetus for deployment of digital service would be lessened.

The cable industry's deployment of HFC architecture and digital compression is based on a competitive, not a static, market. While a monopolist can afford to "sit on its lead," the cable industry in this decade has been deploying new technology to bring to its customers better pictures, and more and better services.

Customer Service: Cable companies understand that they operate in a competitive environment. If single family residential customers become dissatisfied with a cable operator's customer service, they can, and do, switch to DBS. If MDUs become dissatisfied with the cable operator's customer service, they can, and do, obtain multichannel video service from DBS, SMATV, or MMDS service providers.

Some years ago there were widespread consumer complaints about the quality of the service offered by cable operators. Among the complaints were that some cable companies did not respond promptly to service calls and that cable installers did not arrive on time.

In response, cable companies adopted the On-Time Customer Service Guarantee ("OTG") program. The OTG commits participating cable operators to two key pledges. First, installation appointments are made on-time or the installation is free. And second, service appointments are kept on-time or the customer receives $20 credit. Approximately 8,000 cable systems offer the on-time guarantee program. Many systems go beyond the industry standard by offering additional guarantees such as a free month of cable service to a customer if an appointment is missed.

Cable operators are also improving customer service by deploying regional call centers to handle customer needs. Regional call centers serve multiple franchise areas within a geographic region. The economies of scope realized through the regional call centers enable cable operators to provide service 24 hours a day, seven days a week. Sophisticated software enhancements enable employees to respond to customers with increased efficiency.[87]

There is strong evidence that the cable industry's commitment to improved customer service is working. A survey by the Yankee Group released late last year found "cable's efforts to improve its relationship with the customer are yielding positive results."[88] The Yankee Group also found "cable operators' service ratings showed improvement in most categories in 1996."[89] Separate independent research by Market Facts, Inc. reports the public, due in part to the On-Time Guarantee Program, gives cable operators "significantly higher marks for its service quality."[90]

Cable's superior customer service helps in part to explain why cable customer counts grow even as multichannel competitors expand their customer bases. While other distribution

---

87 The cable industry is working to make customers fully aware of its initiatives to improve customer service. On November 8, 1996, the NCTA Board of Directors, agreed to:

- A series of "Baseline Initiatives" which are being implemented to help increase awareness of the On-Time guarantee program. These initiatives include (1) industry-wide communications, such as teleconferences; (2) grassroots activities, including community events, bill stuffers, and outreach to customers; (3) an enhanced Customer Service Seal of Excellence, which will be awarded in part on the basis of a system's efforts to improve awareness of the On-Time Guarantee Program; and (4) a "best practices" playbook to explain the role of each cable employee in supporting the On-Time Guarantee;
- A commitment by cable operators to air advertising in their local markets to promote the On-Time Customer Service Guarantee Program; and
- A $3.5 million national cable advertising campaign intended to increase awareness of the guarantee program and to support local system activities.

88 The Yankee Group, "Survey Shows Consumer Perceptions of Cable Are Improving," Dec. 11, 1996, at 2.

89 Id. at 1.

90 Market Facts, Inc., "Public Opinion".

media have not committed to a national standard of customer service, the cable industry operates pursuant to voluntary standards above and beyond regulatory requirements, and, pursuant to Section 632 of the Communications Act, these standards may be incorporated in franchise agreements. By adopting and maintaining a superior standard of customer service, the cable industry is responding to the competitive multichannel video marketplace.

III. VERTICAL INTEGRATION HAS DECREASED SIGNIFICANTLY AND HORIZONTAL CONCENTRATION REMAINS UNCONCENTRATED

A. Vertical Integration

Over the past year, the cable industry has experienced a major drop in vertical integration with the sale of Viacom's cable systems to Tele-Communications, Inc. Viacom-owned cable networks, including MTV, VH-1, and Nickelodeon are no longer affiliated with a cable system operator. USA Network, also has left the list of vertically-integrated networks. (See Table 1.) In fact, ten of the top 20 cable networks in terms of subscribership have no ownership affiliation with a cable MSO, including ESPN, and the Weather Channel, A&E Television Network, TNN: The Nashville Network, Lifetime Television and CNBC. (See Table A-1.) Four of the top seven networks by primetime ratings are non-vertically integrated. (See Table A-2.)

NCTA has updated the following information from the 1996 Competition Report related to vertical integration, which are attached as tables in Appendix B to these comments:

Vertical Connection Between Major Cable Programming Networks and Cable System Operators (Table A-1); Vertical Integration: Top Fifteen Major Cable Programming Networks (by Prime Time Ratings) (Table A-2); National Programming Services With Cable Ownership (Table A-3); National Programming Services Without Cable Ownership (Table A-4).

B. Horizontal Concentration

Based on the Hirfindahl-Hirschman index ("HHI"), the national MVPD market share is "unconcentrated" at 772.29 in 1997. (See Table A-5.) In the past the HHI analysis was based on a cable subscriber universe. Given the defections back and forth between cable and its MVPD competitors, it is appropriate to base the HHI analysis on all MVPD subscribers.[91] An index below 1000 is generally considered to represent an unconcentrated industry.

According to Paul Kagan statistics, TCI Communications, Inc. and its consolidated subsidiaries serve 19.29% of the MVPD market. This data does not include customers of cable companies in which TCI has an interest accounted for by the equity (TCI investment of 20 to 50%) or cost (TCI investment of less than 20%) methods. If all of TCI's interests are included, TCI would have 15,781,000 subscribers, or 21.2%[92] The corresponding HHI would be 848.49, which would indicate the MVPD market is still "unconcentrated".

Time Warner Cable's MVPD share is 15.91%. MediaOne (formerly Continental Cablevision) now controls 6.54% of the MVPD market and Comcast garners a 5.75% share.

As the Commission noted in the 1996 Competition Report, consolidation in the industry is largely being driven by the desire of cable MSOs to develop "clusters" of contiguous systems to serve a region. Clustering, among other things, creates scale economies for deploying technical and system architecture, and more efficient customer service, administration, advertising and regional programming. Regional clustering is critical to cable company efforts to

---

91 In doing so, we recognize that some subscribers take service from more than one MVPD. But the limited instances of this should not lessen the general conclusion about concentration.

92 TCI recently announced a series of transactions which will reduce the number of subscribers it manages and controls by several million.

compete eventually with local exchange carriers to provide local telephone service and is a major factor in permitting the offering of advanced service such as cable Internet service. Clustering has already enhanced cable's ability to become a full provider of competing video programming, telecommunications and Internet access services. But the concomitant industry consolidation does not raise concerns about excessive concentration.

IV. ISSUES RELATING TO IMPLEMENTATION OF THE TELECOMMUNICATIONS ACT OF 1996

The Notice cites a number of provisions of the Telecommunications Act of 1996[93] that were intended to encourage competition in markets for the delivery of video programming and asks for comment on the impact of these regulatory changes as well as proposals for further changes in the law. Because many of these provisions have only recently been implemented (and, in some cases, have yet to be implemented), there is little in the way of new "developments" to report about most of them which would support conclusions about the impact of these provisions on the state of competition.

Nevertheless, below we briefly address the "navigation device" issue raised in the Notice and discuss in detail the issue of access to poles. The latter was the subject of a 1996 amendment to the then-current statutory regime and continues to present ongoing obstacles to the spread of video services and other new services because of the statutory exemption for cooperatives and municipalities.

---

[93] Pub. L. No. 104-104, 110 Stat. 56 (1996).

A. Navigation Devices

The Commission is in the midst of a rulemaking proceeding to implement section 629 of the Communications Act added by the 1996 Act. That provision calls for the commercial availability of "navigation devices" but requires that any rules adopted do not jeopardize the security of video programming services or impede the prevention of theft of service. In the Notice, the Commission seeks comment on developments in the equipment markets involved as they relate to Section 629.[94]

NCTA submitted extensive comments in the navigation device proceeding.[95] In those comments, which we incorporate by reference herein, we described the cable industry's efforts to pursue voluntary industry standards for a variety of navigation devices. For example, we discussed the digital video format recently approved by the Engineering Committee of the Society of Cable Television Engineers ("SCTE") for digital signal delivery over cable distribution systems.[96]

We also described industry efforts, through the Multimedia Cable Network System ("MCNS"), to develop a set of interface specifications that will facilitate interoperable high-speed cable modems.[97]

The activities of the National Renewable Security Standard ("NRSS") Subcommittee of the CEMA/NCTA Joint Engineering Committee leading to standards for devices providing

---

94 Notice at ¶20.

95 See Comments of the National Cable Television Association, CS Docket No. 97-80, filed May 16, 1997 ("NCTA Comments"); Reply Comments of the National Cable Television Association, filed June 23, 1997.

96 NCTA Comments at 32-33.

97 Id. at 33.

conditional access and renewable security systems for consumer electronics and cable television devices were also detailed in our comments in the navigation devices proceeding.[98]

Other commenters in the navigation devices rulemaking also provided extensive documentation regarding developments in equipment markets. In particular, General Instrument Corporation, Scientific-Atlanta, Inc., Motorola and Zenith Electronics Corporation described their product lines as they related to the goals of that rulemaking.

Because implementation of Section 629 is a work-in-progress, it is difficult to draw conclusions at this time about the impact of that provision on the state of competition in the video market. Nevertheless, we urge the Commission to refer to the filings in that docket, particularly by equipment manufacturers, for information regarding developments in the equipment markets discussed in the Notice in this proceeding.

B. Pole Attachments

Section 224(a)(1) of the Communications Act, as amended, exempts railroads, cooperatives, and federal or state entities from regulation under the pole attachment provisions of the Act.[99] As a general matter, the pole attachment provisions -- which were extended by the 1996 Act to apply to telecommunications carriers as well as cable systems -- provide a rate formula and requirements for access to poles, ducts, conduits and rights-of-way which the Commission enforces in the absence of state regulation. In rural areas in particular, access to utility poles at reasonable rates is a critical part of providing cable service and other new services for the many small cable operators that operate in such areas.

---

98 Id.

99 47 U.S.C. §224(a)(1).

In the Notice, the Commission seeks comment on the effect that this exemption has on the ability of other entities to offer telecommunications services, including video services. Specifically, the FCC has asked commenters to provide information showing that the rates charged for pole attachments by cooperatives or municipalities, especially in rural areas, may impede competition.[100] As demonstrated below, these exempted pole owners have charged rates, denied access to facilities, and imposed terms and conditions on cable operators that have hindered competition. For this reason, the Commission should recommend to Congress that it eliminate this outdated exemption.

As the Commission recognized in its Market Entry Barrier proceeding, circumstances have indeed changed since this exemption was adopted.[101] In 1978, Congress exempted cooperative utilities from pole attachment regulation because at the time, "cooperative utilities charge[d] the lowest pole rates to CATV [cable television] pole users," and Congress assumed that because most cooperative customers were in rural areas, the co-ops would have an added incentive to foster cable growth in their areas.[102]

Twenty years later, rural cooperatives often charge the highest rates. And the incentive of co-ops to foster cable growth may have turned to a disincentive, because many co-ops have become DBS retailers. For example, the National Rural Telecommunications Cooperative ("NRTC") -- a non-profit cooperative association comprised of nearly 800 rural utilities and

---

100 Notice at ¶20.

101 Section 257 Proceeding to Identify and Eliminate Market Entry Barriers for Small Businesses, GN Docket No. 96-113, Report, FCC 97-164, released May 8, 1997, at ¶175. ("Market Entry Report").

102 S. Rep. No. 93-580, 95th Cong. 1st Sess. 18 (1977) ("Senate Report").

affiliated organizations -- and its members distribute not only programming, including a package of 85 channels of television programming to C-Band satellite receiving dishes, but also DBS service throughout the country.[103]

Over recent years, cable systems have reported rate increases -- including increases ranging from a doubling to a quadrupling of rates -- for co-op pole attachments as well as substantial differentials between regulated and non-regulated pole rates. They also report difficulty in negotiating for all types of pole attachments and conditions. These developments significantly increase the costs of doing business and hobble the ability of these entities to expand further into the rural areas they serve.[104] As we detail below, these are not isolated phenomena, but rather occur across the country, although their effect is perhaps most pronounced in rural areas. For example:

- One small cable operator in Alabama, Bayside Cable TV, reported that an electric co-op raised its pole rates 59% when the co-op launched its DBS business. That same operator reported that it pays the co-op 155% more in rates than regulated pole owners ($12.75 vs. approximately $5.00).

- Sjoberg's Inc., a small Minnesota cable operator, reported that at the time its co-op pole owner joined the DBS program of the NRTC in 1990, the co-op unilaterally raised its pole rates from $3.50 to $9.91 per year. As a result of the greatly increased cost and the company's concern that the co-op might continue to raise pole rates until it drove the company out of business, the company placed all of its plant underground, at a significant cost to the operator.

---

103 See NRTC web site (www.NRTC.org.). See also Letter to Donald H. Gips, Chief, International Bureau from Jack Richards, Counsel to the NRTC, In re Applications of TelQuest Ventures, L.L.C. and Western Tele-Communications, Inc., File Nos. 758-DSE-P/L-96, 759-DSE-L-06 and 844-DSE-L-96, filed May 29, 1996, at 2.

104 See, e.g., Comments of the Small Cable Business Association at 21-22 (filed May 16, 1996) and Comments of Cole Raywid & Braverman on Pole Attachment Issues at 7 (filed May 20, 1996), In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98.

- A small cable business tried to access poles of an REA co-op to run fiber to a small 375-subscriber town. The co-op owned a translator television service and distributed cable service. The small cable business was told that it could not get on the poles, purportedly because the poles were not strong enough. The co-op estimated that the operator would have to spend approximately $40,000 to replace all the poles if it wanted to attach. Even though the cable operator hired its own engineer, who said the poles could easily handle the load, the co-op continued to deny access, and the operator eventually had to trench its own route.

- North Carolina's Cape Hatteras Electric Membership Corporation in 1997 increased Falcon Video Communications, L.P.'s 1997 pole attachment rates by 565% (from $2.00 per pole to $13.31 per pole).

- In Northern New Mexico, the Kit Carson Electric Co-op has required a $100,000 bond for Fanch's Mark Twain Cablevision, L.P. system, even though the system occupies only about 250 poles. The premium cost of the bond amounts to $24.00 per pole, more than twice the amount of the annual pole attachment rent. In the Fanch of Colorado, Inc. cable systems, the Intermountain Rural Electric Association charges 351% more per pole than the neighboring investor-owned utility ($17.00 vs. $3.77).

- An operator in the Gainesville/Ocala, Florida area reported that one non-regulated pole owner has proposed to more than double its pole rent (from $6.00 to $13.93 per pole) at a time when the pole owner's subsidiary has begun offering competitive data and alternate access services. That operator also reported that unregulated pole owners in the Central Florida area on average charge 56% more per pole ($7.16) than the regulated pole owners, although the company attaches to the same location on the pole. Other West Central Florida operators have reported that the Withlacoochee River Electric Company (an unregulated co-op) charges rates that are 280% to 365% higher than the rates charged by neighboring regulated utilities. Withlacoochee is reportedly in the process of running a fiber network to at least three counties.

- In Hinesville, GA, Bresnan Communications reported that in 1996, the attachment rate of Canooche EMC jumped from $3.60 to $9.00 and the Coastal Electric rate doubled from $4.50 to $9.00 at a time when both businesses were advertising their DBS offerings.

- In South Carolina, InterMedia sued Aiken Electric Cooperative for breach of contract.[105] InterMedia alleged that Aiken, beginning in 1994, unreasonably

[105] Pretrial Brief of Robin Cable Systems, L.P., Robin Cable Systems, L.P. d/b/a InterMedia (f/k/a Palmetto Cablevision) vs. Aiken Electric Cooperative, Inc., Case No. 1-95-10-1043-6, filed April 14, 1997 (D.S.C.).

refused to grant pole attachments needed by InterMedia as part of its rebuild of the Aiken cable system -- a rebuild required by the franchise. InterMedia alleged that the acting manager of the co-op stated that a delay to InterMedia would benefit the start-up of the co-op's DBS system, by allowing the co-op time to solicit customers. This same manager, InterMedia alleged, indicated that the cost of providing cable would increase to the benefit of the co-op if the cable operator was forced to bury its plant underground. The operator was forced to bury its plant underground as a direct result of the denial -- costing an additional $75,000. Because of the $271,000 additional cost that would have been incurred to bury plant underground, the company also could not complete three projects designed to enhance customer service. This suit has since been settled.

- Clay Electric Co-Operative, Inc's., pole rates range from 246% to 346% higher than the rates paid by one cable operator for poles subject to regulation in the Gainesville, Florida area. That cable operator reported that the co-op in many cases has put in poles only high enough to support electric and telephone attachments. The cable operator must spend the dollars necessary to change out the poles if it wants to attach. By contract, the pole belongs to the co-op, giving it the benefit of the newer, higher pole.

- MediaOne is in head-to-head competition with the UtiliCom Networks, Inc. (UCN) - Clay Electric Cooperative, Inc. partnership, which was recently granted a cable franchise in Clay County, Florida. Clay, the limited partner, owns the poles in Clay County and MediaOne currently pays the co-op an annual $15.00 per pole rental fee. By comparison, UCN-Clay's franchise application indicates that the co-op plans to contribute the use of its poles to the partnership, effectively creating a zero annual pole rental fee.

- An electric and water utility in Arizona in September 1996 notified a number of cable companies that overlashing or otherwise adding new cable to existing attachments to 69kv lines would not be permitted, that new attachments on existing transmission lines would not be permitted, and that new attachments on new transmission lines would not be permitted. The utility also notified the companies that when its transmission lines were rebuilt or replaced, all non-transmission attachments would be removed. This occurred at a time when the electric and water utility had entered into the telecommunications business, including leasing use of its fiber optic network to telecommunications companies.

Circumstances have similarly changed with respect to municipally-owned systems. In 1978, Congress found that there were only a few documented instances where municipally owned utilities were charging "unsatisfactorily high pole rental fees."[106] These municipalities were deemed to be in the best position to determine the responsibilities of pole users for the costs of erecting and maintaining the facilities, in part because they also had the power to grant cable franchises.[107] Today, these municipalities are increasingly not just regulating cable franchises, but also competing with franchises. For example:

- The Board of Public Utilities, owned by Kansas City, Kansas, charges annual pole rents to at least one operator which are dramatically higher than those charged by other regulated pole owners. Capital Cable, which has 836 customers in the Kansas City area, reported that it rents 874 poles at a rate which is currently set at $25.00 per attachment (compared to the BPU's $10.09 rate in 1994), and is scheduled to increase to $35.00 per attachment, effective January 1999. This operator, serves an area with low home density and high operating cost. The current rate is in some cases more than eight times the rent paid to other companies. The BPU over the last several years has reportedly considered plans to compete in several facets of telecommunications, including cable, by building its own telecommunications network.

- The City of Seattle more than doubled (to $14.66) its already high pole rents. The increased rate is far above rates charged for identical poles which are made available by US West in Washington State ($3.75), and far above the national pole average rate among electric and telephone companies ($4.73).

- The City of Lebanon, Ohio in September 1996 increased its rental rate 45%. The new rate of $10.00 is 206% higher than Sprint's rate and 235% higher than the other electric utility, CG&E.

- A municipal utility in Central Florida charges $10.00 per pole, compared to the $2.30 to $2.40 rate charged by neighboring regulated utilities.

- One Wisconsin cable operator reported that in Northeast Wisconsin, its average municipally-owned pole rate per year for single attachments was nearly 800% higher than its average yearly rate for regulated attachments.

- A California municipally-owned utility's 1997 pole rate increased 300%, with the city providing no cost justification for the increases.

---

[106] Senate Report at 18.

[107] Id.

- A city in Northeast Ohio proposed to quadruple its pole rates at a time when it began plans to construct its own cable system. The city, which is the franchising authority, the owner of the power company, and a competitor in the cable business, is currently charging the cable operator 21% more than the neighboring regulated utility, and has included in the pole attachment agreement a formula that would escalate pole rates substantially upon renewal.
- InterMedia's rate for cable service attachments with the Nashville Electric Service (NES) increased 38% from 1996 to 1997 (from $6.52 to $9.00). The company's February, 1997 pole attachment agreement with NES requires the company to pay an additional 43% for attachments used to provide telecommunications service. The agreement also requires the company to pay NES 4% of annual gross revenue from the provision of telecommunications service. InterMedia negotiated this agreement at a time when it was attempting to complete a franchise-required upgrade of the system, which necessitated additional attachments to NES facilities.

Given these numerous examples demonstrating changed circumstances, the Commission should recommend to Congress that it repeal the exemption for municipally and cooperatively-owned poles. It is plain that the assumptions behind the exemption are no longer valid and that the exemption is subject to anticompetitive abuse. As the Commission has recognized, "a utility that itself is engaged in video programming or telecommunications services has the ability and incentive to use its control over distribution facilities to its own competitive advantage."[108] The Commission had it right when it acknowledged in its Market Entry Barrier proceeding that the evidence suggested that the pole attachment exemption may no longer make sense, observing that:

> The comments indicate that much has changed with respect to the conditions that gave rise to the exemption. Instead of charging the lowest rates, cooperative utilities now charge the highest rates, according to the comments. To the extent cooperatives offer DBS service, their incentive to foster the growth of cable television may have turned into a disincentive.[109]

---

108 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, FCC 96-325, released August 8, 1996 at ¶1150.

109 Market Entry Report at ¶175.

The Commission at that time found the record inadequate to recommend repeal of the exemption. We applaud the Commission for its inquiry into this matter, and suggest that the examples described above and by other commenters provide the necessary support to make the recommendation urged upon it by NCTA and others.

V. VIDEO DESCRIPTION ISSUES

The Notice seeks additional comment on issues relating to video description.[110] The cable television industry is continuing its efforts to provide enhanced services for its customers with visual disabilities. Several program networks have experimented with providing descriptive video services ("DVS") and have continued these efforts since the Commission's Report was completed last July.[111]

For example, Turner Classic Movies has continued to provide descriptive video services for several of its classic movies. Kaleidoscope also is continuing its efforts to provide DVS, offering weekly classic feature films and informative series targeted to the blind and visually impaired community. Other cable networks are actively exploring the use of DVS in conjunction with their programming.

While several cable networks are engaged in limited experiments with DVS, many obstacles remain to its widespread use. DVS is an expensive process, with estimates of costs that could approach $10,000 per full length feature film.[112] In addition to these significant costs faced

---

110 Notice at ¶23.

111 Report on Closed Captioning and Video Description of Video Programming, MM Docket No. 95-176 (rel. July 29, 1996) ("Closed Captioning").

112 Comments of the National Cable Television Association in MM Docket No. 95-176 at 16 (filed Mar. 15, 1996).