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Video Program Distribution and Cable Television: Current Policy Issues and Recommendations

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VIDEO PROGRAM DISTRIBUTION AND CABLE TELEVISION

Current Policy Issues and Recommendations

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Executive Summary

Important changes in the video market, particularly with respect to cable television over the last ten years, have raised several policy issues. The expanded technological capabilities of optical fibers and computers create new ways to transport and access video programming in cable systems and telephone networks. Meanwhile, growing market concentration and structural changes in the cable television industry have placed the potential for expanding consumer video choices at risk. In addition, some courts are effectively limiting the ability of municipalities and other government entities to carry out the intent of the Cable Act to be the primary source of regulation over cable television.

Today, over 80 percent of all U.S. homes have access to cable television and about 50 percent subscribe to basic cable service. Important segments of the population, however, do not yet have access to cable television. Generally, cable television has been a great success, with rapid growth in the number of systems, number of subscribers, asset values, and gross revenues. Cable has shifted from its early role as a broadcast antenna service focused on facilities, to an original programming service, due largely to the advent of satellite technology. The number of cable networks has steadily grown, attracting more subscribers, which in turn has lead to greater support from advertisers and the creation of additional cable networks.

Success has been accompanied by an accelerating amount of criticism of the cable industry. There is evidence that rates of basic cable service have greatly increased in some communities. These increases may simply be adjustments to rates kept artificially low prior to deregulation; it is too soon to reach an informed judgment.

The common occurrence of exclusive cable franchises does not serve the public interest. The franchising process has seriously impeded entry by competitors and imposes substantial costs on franchisees, cable subscribers, and the public. Municipalities could, instead, encourage competitive cable operators to service a franchise area which would result in greater choice, better service, and lower prices to consumers. In fact, many of the "market power" problems and issues we face today are direct outgrowths of a franchising process that has, and continues to, erect large entry barriers.

Telephone companies should be encouraged to provide video transport facilities on a common carrier basis, leasing channels to all video programmers (for example, current cable operators, broadcasters, sports organizations, producers, and others.) At least two steps might encourage the provision of facilities by telephone companies: removing the requirement that common carriers lease channels only to franchised cable operators or franchising authorities, and permitting telephone companies to

provide some services ancillary to the provision of video transport facilities (or channel capacity), such as billing, order taking, and maintenance.

Instead of permitting telephone companies to provide both video transport and programming services in their service areas, such "video common carriage" will, we believe, insure the greatest possible diversity of viewer choice and will increase the competitiveness of the video market. Such video common carriage would also reduce concerns arising from ownership trends in the cable industry, such as the ability of cable firms to limit the availability of programming to competitive media.

Television broadcast networks and local broadcast licensees are prohibited from operating cable systems. The national television market has changed substantially since the network exclusion was created so its repeal is appropriate. The more difficult question of local broadcast cross ownership is best addressed by the Federal Communications Commission on a waiver basis.

Two important trends in the nationwide growth of cable television, increased ownership concentration of system operators and vertical integration of those operators into programming supply, pose potential diversity problems. In terms of vertical integration, there are not substantial differences in the number or type of programming carried by cable operators whether affiliated with a programming network or not. At this time, limits on vertical integration are undesirable. Government policies should not impair the ability of cable to develop new programming and advertising alternatives in the form of cable networks. However, the trend towards increased concentration of ownership among cable operators may increase the ability of those firms to reduce diversity of programming. There is increasing evidence that one or only a few firms have the ability to create a program distribution "bottleneck." Therefore, we recommend the FCC initiate an inquiry to evaluate the effects of cable ownership concentration on diversity.

Program exclusivity can benefit buyers, sellers, and the public because it is an important component of the copyright system which ensures creators have adequate incentives to produce more programming. The Copyright Act generally strikes an appropriate balance between the rights of owners and the needs of users. The compulsory license for cable television, however, should be phased out over time because it unnecessarily distorts the market for video programming. Until that license is repealed, however, broadcasters should be able to enforce programming contracts in which they have negotiated exclusive rights, and it would be reasonable to condition exercise of the cable compulsory license on carriage of all local broadcast signals.

Throughout this study, we have sought policy options which will result in consumers having a choice of multi-channel video program services. That choice can be accomplished by more direct competition from multiple cable systems serving more communities. Alternative multi-channel program services such as DBS and MMDS could provide non-wire based competition. In addition, telephone companies and other firms providing video transport facilities over wire-based networks will create more opportunities for competitive program service providers. The problems which are foreshadowed by the trends towards vertical integration and ownership concentration could be largely diminished by greater competition in the local market.

Introduction

In a generation, the video programming marketplace has been transformed. Where once there was only network television broadcasting, there are now such options as multiple independent television stations, videocassette recorders (VCRs), home satellite dishes (HSD), and cable television. In the future, video programs may also be widely distributed via high-powered, direct broadcast satellites, multi-channel multipoint distribution services (MMDS), and fiber optic cables. Policy issues affecting cable television and other video distribution systems will profoundly affect the video programming choices available to consumers, the firms offering those choices, and the prices of those choices.

Over the last thirty years, the American cable television industry has gone from a relatively minor commercial adjunct to the over-the-air television broadcasting business to the dominant video distribution medium in the country, with over 80 percent of all U.S. television households passed by cable and projected 1988 revenues of about $12 billion derived from serving about 52 percent of 90 million homes.

Entrepreneurial initiative has accomplished much of this industry growth. But it is also attributable to Government policies aimed at fostering the emergence of an alternative to the broadcast distribution system long dominated by the national networks and the telephone distribution system long controlled by AT&T.

Perhaps the hand of Government has been most evident in the local franchising process which has insulated the vast majority of cable systems from direct competition. At the Federal level, special tax treatment of limited partnerships -- heavily employed in the early years by cable television companies -- as well as legislative measures accorded cable firms guaranteed access to telephone and electric utility poles at regulated prices. For many years, cable television systems were not subject to ordinary copyright laws, and when they were brought under that regime, cable was granted extraordinarily preferential terms. The cable television business was also a primary beneficiary of the rapid growth of the domestic communications satellite business, itself in large part the result of Federal policies which made technology as well as launch services available at concessionary prices.

Demand for cable television services remains strong; at the height of recessionary conditions prevailing earlier this

decade, for instance, the cable industry continued to add new subscribers at the rate of some 300,000 monthly. This strong demand for a service which still functions in significant part as a redistribution system for conventional television is all the more extraordinary in view of the fact some 88 percent of U.S. households already enjoy access to seven or more "free" broadcast television channels.

Plainly successful commercially, the cable television business nevertheless is approaching a public policy crossroads; a crossroads where fundamental issues apart from those addressed by Congress in passing 1984 legislation will move to the forefront. Emerging are such difficult issues as (a) the matter of continuing preferential copyright treatment for the cable industry; (b) striking an appropriate balance between an industry structure and associated practices which may yield commercial efficiencies but may not necessarily be fully compatible with other values, such as the desirability of maximizing a diversity of competing news, information, and entertainment choices; and (c) ensuring a level of public accountability sufficient to sustain the general consensus in favor of procompetitive, marketplace solutions.

Over the course of cable television's development, studies have been undertaken by private and governmental organizations, for specific and more general purposes. NTIA undertakes this study and policy recommendation as directed by its agency charter.1/ The Executive branch last undertook a comprehensive study of cable television in 1974, when the predecessor agency to NTIA, the White House Office of Telecommunications Policy (OTP), issued its Report to the President made by a special Cabinet Committee on Cable Communications.2/ The Cabinet Committee Report made 12 major recommendations included in this report as Attachment 1.

In order to prepare this report, NTIA met with a wide range of individuals and groups in order to gain a better understanding of various points of view. We also researched extensively various reports, articles, books, cases, and other material on cable television and the video market. On this foundation, NTIA has developed the policy analyses and recommendations contained in this study.

1/ Executive Order 12046 (1978).

2/ Whitehead, Clay T., Chairman. Report to the President, The Cabinet Committee on Cable Communications, Office of Telecommunications Policy, 1974 (hereinafter "Cabinet Committee Report").

Competition:

For the last decade, Government has recognized that markets are changing and competition is occurring among video services, not just within a given service like broadcast or cable television. The result is that Government now seeks to develop policies to permit competition to flourish throughout the "video market," among potentially competitive services as well as within a given service. As the House Telecommunications Subcommittee staff stated:

> [a] compartmentalized view makes less and less sense. Regulatory regimes established to conform to that old view are rapidly approaching obsolescence, for regulation can never be a substitute for the competition and diversity of a fully competitive marketplace. It is clear that the future will require the application of new, broader market concepts -- such as audio and video markets.3/

Seeking to increase competition in the video market should yield important public benefits. We echo many in Government, academia, and industry alike when we cite the House Telecommunications Subcommittee staff that "in general, we believe that effective competition allocates society's resources in a manner preferable to the result arrived at under regulation."4/

There is, however, increasing concern regarding rapidly rising ownership concentration levels in the cable television business, concerns that are compounded when the growing vertical integration of cable television companies into the development and distribution of programs is taken into account. A special concern arises when a firm controls not only an increasing national market share but when the business has a monopoly in a specific transmission mode in virtually all local markets. Concentration levels, and the extent of vertical integration in cable, may not yet have transgressed the legal thresholds established under the antitrust laws for U.S. business and industry generally. Yet there are clearly circumstances and practices which, if they do not rise to the level of a full-fledged antitrust violation, nevertheless may not be compatible with the

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3/ Subcommittee on Telecommunications, Consumer Protection, and Finance, House Energy and Commerce Committee, Telecommunications in Transition, 1981, at 21.

4/ Id. at xii.

longstanding U.S. public policy goals of maximizing competition in Mr. Justice Holmes' "free market of ideas."

Diversity:

Competition and first amendment values are closely linked and, indeed, complementary or reinforcing. That is, an effectively competitive mass media marketplace is also most likely to deliver the range of choices that the American public wants and deserves.

Video program providers, especially broadcasters and cable operators, as important sources of information and entertainment today, have certain legal rights under the First Amendment.5/ The framers of the Constitution sought to allow an unfettered, freely available, and diverse press by establishing maximum independence for the press, stating explicitly, "Congress shall make no law abridging freedom...of the press."6/ One scholar has said, "the citizens of the United States will be fit to govern themselves under their own institutions only if they have faced squarely and fearlessly everything that can be said in favor of those institutions, everything that can be said against them."7/ As explained by Justice Black, "[The First] Amendment rests on the assumption that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public, that a free press is a condition of a free society."8/ In 1974, when the Cabinet Committee recommended policies for cable television, they began by noting that:

> Because we have a legal and social system that fosters, and is dependent upon, a free flow of information so that a well-informed citizenry can guide its own destiny, the question of the relationship between the private communications

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5/ It is the licensed use of spectrum by broadcasters, for example, which justifies the regulation of these video distributors, unlike motion picture theaters and VCR retailers, a practice criticized by, for example, Professor Lucas Powe, Jr. in American Broadcasting and the First Amendment, Univ. of California Press, 1987.

6/ U.S. Const. amend. I.

7/ Meiklejohn, A. Political Freedom, n. 3 at 77 (1960).

8/ Associated Press v. United States, 326 U.S. 1, 20 (1945).

media and the government is, in many ways, the ultimate issue in a free society.[9]

The likelihood that Government will seek to place content controls on cable television operations will rise commensurate with economic concentration levels, or the public perception of "unfairness." That was the conclusion of the 1974 Cabinet Committee Report which found that the actual or perceived economic control over "all" channels of communications would spur the imposition of public controls on program content.[10] Thus, increasing diversity has been viewed as a preferable alternative to Government control of content.

Localism:

In fully competitive markets, open entry and consumer demand may combine to meet the goal of localism, as variously defined. Certain Government policies already in place (e.g., broadcast television allocations table, integration licensing criterion) were intended to further the twin goals of diversity and localism. To the extent that local service might be inconsistent with achieving fully competitive markets, Government policies should take special care to see that localism will be furthered by policies affecting video markets. The President's 1968 Task Force on Communications Policy stated:

> No aspect of communications policy is more important than measures or arrangements which would permit or encourage the growth of communications of all kinds within localities: the discussion of local issues,; contact with local or regional political leaders; taping local talent; the use of local resources in education, technology, sports, and the expression of all kinds of local interests.[11]

More recently, the Congress, in enacting the Cable Act of

9/ Cabinet Committee Report, at 5.

10/ Recent First Amendment decisions may have limited the ability of Federal and non-federal governments to exercise authority over certain aspects of the cable industry. See discussion in Appendix C, at 10-14.

11/ President's Task Force on Communications Policy: Final report, Dec. 7, 1968, Chapter 7, "Future Opportunities for Television" at 5-6.

1984 intended that "cable systems [be] responsive to the needs and interests of the local communities they serve."[12/]

"Universal Service":

There are significant population centers and low density geographical areas that have no access to cable television service. For people living in these areas, the video abundance that cable can provide remains illusory. At all levels, Government policies may have combined with economic factors to cause this failure. Cable television may not fully qualify as an "essential service" according to traditional public utility regulatory criteria. Indeed, the fact that a substantial percentage of households with cable television service available choose not to subscribe indicates that cable remains in many locales an optional offering. On the other hand, cable installation practices, for all intents and purposes, have eliminated off-air reception for the principal television receiver in the home. Because cable operators rarely encounter direct competition, subscribers may complain about service and signal quality but have no recourse if they wish to receive cable television. In addition, rapid increases in some basic cable rates, coupled with, in some cases, seemingly arbitrary changes in the character of cable service choices, have prompted some significant concerns.

Advances in technology, particularly in the area of lightwave or optical fiber cables, are being applied by cable operators and telephone companies to their networks. It may be time for Government to develop policies which encourage the provision of a "video dial tone," a concept which could permit access on demand by video programmers, packagers, individuals, at nondiscriminatory rates.[13/]

12/ H.Rep. No. 934, 98th Cong., 2d Sess. at 19, reprinted in 1984 U.S. Code Cong. & Admin. News 4655, 4656 ("Cable Act Legislative History"). See also 47 U.S.C. § 521(2), [the legislation is intended to "establish franchise procedures and standards which encourage the growth and development of cable systems and which assure that cable systems are responsive to the needs and interests of the local community."]

13/ This issue is explored at length in Chapter 3, infra.

Incentives to Create Programming:

Government policies to promote increasing outlets, channels, and capacity must be coupled with insuring adequate incentives exist for creators to produce new works to fill those channels. "Diversity" of viewer choices means little unless there is a continuing stream of new works, new program choices, and an expanding pool of creators.

At present, the cable television business continues to benefit substantially from outmoded copyright treatment that provides it a compulsory license to retransmit any broadcast signal in return for payment of a nominal, statutorily set royalty fee. Strengthening incentives to produce news, information, and entertainment program choices is a major public policy goal and objective. Yet it is increasingly clear that the prevailing cable copyright regime is incompatible with accomplishing that strong public policy purpose.

Chapter 1

Growth, Trends, and Issues in the Cable Industry

Today, cable television systems deliver video programming from local and distant broadcast stations, local cable-originated commercial and public, educational, and government noncommercial programming, as well as non-broadcast cable program networks to residential and business subscribers. Over 80 percent of all U.S. households have access to cable television and about 50 percent of all homes with television subscribe to cable service.[14/] The cable industry provides a highly valued service to 45 million customers.[15/]

In its early role as a broadcast relay service, construction and maintenance of the cable facility was the main function of a cable service operator and the expertise of the cable operator was mainly technical. Over time, the nature of cable service has changed so that cable operators have increasingly developed additional expertise in selecting, packaging, and marketing program services. Although many cable customers still subscribe to cable for better broadcast signal quality, and although broadcast signals are still the most viewed programming on cable systems, even the operator of a small cable system in an unserved broadcast area performs program functions, deciding how many nonbroadcast services to carry and which of the pay and basic cable networks[16/] will attract the most subscribers (or will generate the most revenue). In an effort to attract new subscribers from those whose homes are already passed by

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14/ Broadcasting, April 18, 1988, at 14.

15/ The average per subscriber monthly revenue of over $24.00 for all cable service and related charges may reflect an approximate value subscribers place on the service. (Estimate by Paul Kagan Associates, Inc., Copyright 1987 Cable TV Investor.)

16/ "Cable networks" have developed over the last fifteen years which obtain programming from producers and syndicators, assemble the programming into schedules, sell advertising, and provide the programming to cable systems in exchange for a monthly payment per subscriber. Examples of "basic" cable networks are ESPN, CNN, USA, and C-SPAN. "Pay" or "premium" cable networks generally offer theatrical films and special programs with little or no advertising, at higher prices. Examples include HBO, The Movie Channel, Showtime, Cinemax.

cable, new services are being added to cable offerings and marketed in new ways.

The transformation of cable television from an antenna service to a programming service has occurred at different rates in different markets, for a variety of reasons. As more areas became cabled, a "critical mass" of homes developed nationwide, creating sufficient potential revenues to inspire cable networks to emerge. The single greatest factor in the cable operator's movement into programming, however, was the use of satellites to deliver programming to cable headends.17/

As subscribership has grown, more satellite-delivered programming services have been established; as more programming choices are made available, more people subscribe to cable services. As viewership for cable networks has grown, so has the interest of advertisers in buying time on cable networks. The two areas forecast for greatest revenue growth are cable advertising and subscription revenues from basic service.18/

By almost any measure, as cable has been transformed from a relay facility to a multi-channel programming service, it has been highly successful. At the same time cable has enabled an increase in the number of voices and choices available to those who have cable, there are many communities still unserved by any cable service. The following table illustrates growth in subscribers, systems, and cable penetration (the percentage of cable subscribers out of the number of homes with television):

See Regulation of Domestic Receive-only Satellite Earth Stations, 74 FCC 2d 205 (1979); American Broadcasting Companies, Inc., 62 FCC 2d 901 (1977); Southern Satellite Systems, Inc., 62 FCC 2d 153 (1976); Resale and Shared Use, 60 FCC 2d 261 (1976), recon., 62 FCC 2d 8 (1977), aff'd sub nom. AT&T v. FCC, 572 F.2d 17 (D.C. Cir.), cert. denied, 439 U.S. 895 (1978); Domestic Communications -- Satellite Facilities, 35 FCC 2d 844 (1972), recon., 38 FCC 2d 665 (1972).

Pay-per-view revenues may also grow rapidly. Growth in premium service subscribers, however, appears to have leveled off and, according to estimates by Paul Kagan Associates, Inc., pay revenues will grow only modestly the next decade.

Growth in Cable Television[19/]

Year	Subscribers	Number of Systems	Penetration
1955	150,000	400	.5%
1960	650,000	640	1.4
1965	1.2 million	1,325	2.3
1970	3.9 million	2,500	6.6
1975	8.5 million	3,681	12.4
1977	11.3 million	3,832	15.8
1980	15.2 million	4,225	19.8
1982	23.7 million	4,825	25.3
1985	38.0 million	6,600	44.6
1988	45 million	8,000	51.1

Programming has also become more important as the channel capacity of systems has increased and operators strive for the most profitable use of channel capacity. Today, although about 20 percent of all systems are limited to six to twelve channels, those systems serve less than 6 percent of all subscribers. Over 90 percent of all subscribers are served by systems with at least 20 channels and about 60 percent of cable subscribers are served by systems with 30 to 53 channels.[20/] The following data shows the growth in channel capacity over time:[21/]

1971 — 95% of systems had 12 channels or less (98 percent of all systems served less than 5,000 subscribers)

1976 — 77% of systems had 12 channels or less (but only 12% of systems had more than 20 channels and 84 percent of all systems still served less than 5,000 subscribers)

19/ Data for 1955-1965 from Don L. LeDuc, Cable Television and the FCC, Appendix A, A Cable Chronology (1973) (Penetration calculations by NTIA). Data for 1970-1985 from A.C. Nielsen, in Cable Television Developments, National Cable Television Association, September, 1987. Data for 1988 is from Broadcasting, Apr. 11, 1988.

20/ 1987 Television & Cable Factbook (Services Volume), at A-41. Data as of April 1, 1987.

21/ Data are from TV and Cable Factbook, 1971-72 Edition, 1977 Edition, 1983 Edition, and 1987 Edition.

1983 45% of systems had 12 channels or less, serving 22 percent of subscribers; 43% of systems had 20 - 53 channels, serving 68% of subscribers.

1987 65% of systems had more than 20 channels, serving over 90% of subscribers.

The number of cable networks has grown, although not every network launched has proven successful. The following table shows net growth in the number of cable networks available:

Growth in Cable Networks[22/]

Year	Basic	Pay	Total Networks
1981	25	9	34
1982	35	11	46
1983	27	10	37
1984	26	9	35
1985	32	10	42
1986	44	8 + 3 PPV	55
1987	52	9 + 4 PPV	65

The increased cable focus on programming may be due to two factors: (1) improved financial status of cable networks and operators and (2) a growing belief that cable's future success depends on its ability to differentiate programming from broadcast and other video services.[23/] Recently, large program purchases have been made by cable programming networks and direct financial investments by MSOs

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22/ Source: Broadcasting, Nov. 23, 1987, at 41; Dec. 1, 1986, at 66; Dec. 2, 1985, at 38; Jun. 4, 1984, at 64; Dec. 12, 1983, at 31; May 3, 1982, at 52; Nov. 30, 1981, at 36.

23/ View, Jan. 4, 1988, at 90; Broadcasting, Dec. 7, 1987, at 39; Communications Daily, Dec. 5, 1986, at 4; Cablevision, Oct. 13, 1986, at 26; Communications Daily, Apr. 17, 1986, at 5-6; Broadcasting, Dec. 9, 1985, at 46; Broadcasting, Nov. 18, 1985, at 48.

in these programming networks have become more common.[24/] MSOs currently have ownership interests in seven of the nine national pay cable networks and 20 of the 52 national basic networks, including 12 of the Top 20.[25/] This trend towards vertical integration is explored more fully in Chapter 6.

With increasing competition among cable networks, home video tape distributors, broadcast networks, syndicators, and international buyers all vying for programming, firms must consider whether to attempt to acquire the exclusive rights to programming.[26/] Typically, exclusivity commands a premium payment and the buyer must determine whether sufficient additional viewers will be attracted to the program because of its exclusivity. Showtime and HBO engaged in a bidding war to acquire exclusive rights to certain theatrical programming about two years ago. ESPN's payment of $153 million for three seasons of 13 National Football League games included an exclusivity premium of some size.[27/] While these amounts are large for cable television and evidence its newfound emphasis on programming, broadcast stations and networks have spent a good deal more on programming for many years.

Program buyers in other media are increasingly concerned about their ability to compete for programming with cable

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24/ In 1986, a group of MSOs paid $550 million for a 37 percent interest in Turner Broadcasting, owner of WTBS, Cable News Network ("CNN"), and CNN Headline News. See also, "Discovery's New Sugar Daddies: Cable Service Gets $30-Mil Windfall From 4 MSOs, Group W Satellite Communications", Variety, July 2, 1986, at 43.

25/ Broadcasting, Nov. 23, 1987, at 40. Notably, NBC owns 33 percent of the Lifetime network and Capital Cities/ABC owns 80 percent of ESPN and 33 percent each of Lifetime and the Arts & Entertainment networks. See discussion of network cross-ownership restrictions at Chapter 4, infra.

26/ United States v. Columbia Pictures Industries, 507 F. Supp. 412, 414-419 (S.D.N.Y. 1980).

27/ These prices made ESPN a competitive bidder with ABC and Fox Television each of which reportedly bid $7 million for each of 16 Monday night NFL games (where the ESPN package included eight Sunday games in the regular season, four preseason games and the Pro Bowl.)

television.[28] Moreover, current copyright provisions make it virtually impossible for broadcasters to enforce any exclusive rights for which they might hold contracts.[29] The degree to which government should limit the ability of parties to enforce exclusive rights to programming is explored in Chapter 7.

Today, the cable industry annually spends about $2 billion -- about one-third what NBC, CBS, and Capital Cities/ABC spend -- on programming, a figure some expect to rise to $6 billion by 1990.[30] Diversity, in terms of the number of viewer choices, has increased through the growth of cable networks. Although viewers still select broadcast network programming most of the time,[31] there are ratings successes among the cable networks, particularly TBS, ESPN, and USA Network.[32] Clearly, cable specific programming is becoming more attractive to subscribers and advertisers.

The cable industry is able to support the substantial outlays for programming described above because of its spectacular growth in revenues and asset values. The following table shows revenue growth since 1980:

28/ See, e.g., Hearings before the Senate Comm. on Antitrust, Monopolies, and Business Rights, 100th Cong., 2d Sess. (Mar. 30, 1988) (statements of Mark Foster and James Theroux).

29/ A "compulsory license" in Sec. 111 of the Copyright Act of 1976 permits cable operators to retransmit copyrighted programs in broadcast signals without obtaining prior approval of the broadcaster or copyright owner for Government determined fees. See discussion at Chapter 7, infra.

30/ Electronic Media, Apr. 6, 1987, at 39, quoting Ralph Baruch, former Viacom Chairman.

31/ In cable households, combined network affiliate shares during prime time were 63 percent, in daytime, 56 percent, and over all 24 hour dayparts, 53 percent. Cable Television Advertising Bureau, Inc., Cable TV Facts '88, at 14.

32/ "CBN Loses Big in Cable Ratings," Electronic Media, May 2, 1988 at 3.

HISTORY OF CABLE TELEVISION REVENUES

Year	Advertising Revenue (mil)	Basic and Expanded Basic (mil)	Pay Revenue (mil)	Install Revenue (mil)	Total Revenue[1/] (mil)
1980	$ 58	$ 1,649	$ 785	$ 39	$ 2,531
1981	122	2,124	1,336	67	3,649
1982	227	2,658	2,081	90	5,056
1983	353	3,266	2,787	107	6,513
1984	572	3,878	3,410	134	7,994
1985	751	4,672	3,787	207	9,417
1986	930	5,436	3,806	219	10,391
1987[2/]	1,142	6,243	3,795	-NA-	11,180

Source: Paul Kagan Associates, Inc. The Kagan Cable TV Financial Databook. June 1987, pp. 12-13, 70.

1/Does not include miscellaneous revenues (e.g., remote control units, second sets, home shopping)

2/Estimate projections of Paul Kagan Associates, Inc., rounded to nearest thousand

One key provision of the Cable Act limited the power of franchising authorities to regulate rates for basic service only to those systems not facing "effective competition" as subsequently defined by the FCC.[33/] As a result, perhaps 85 percent of all cable subscribers are served by deregulated cable systems.[34/]

Growing complaints about the size and prevalence of basic rate hikes have prompted greater scrutiny from Federal and state authorities. The National Association of Attorneys General Antitrust Committee recently formed a five-state task force to discuss basic rate increases, among other issues.[35/] Basic cable rates were also discussed in recent proceedings before the Senate Antitrust Subcommittee and the House Telecommunications Subcommittee. In the Senate hearings, Senator Howard Metzenbaum cited a list of 93 cable systems that had raised basic rates by 50 percent or more in 1987.[36/] During the House hearings, Congressman Tom Tauke mentioned a 44 percent increase in Dubuque, Iowa, and Congressman Dennis Eckart referred to four systems in Ohio that had increased basic rates between 46 and 80 percent.[37/] While there is ample evidence that some cable systems have substantially increased basic rates since deregulation, information on basic rate levels throughout the industry is limited. Three studies have attempted to track changes in basic rates since

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33/ 47 U.S.C. § 543 (Supp. III 1985). See also Implementation of the Provisions of the Cable Communications Policy Act of 1984, 50 Fed. Reg. 18637, 19648-51 (1985), amended, 51 Fed. Reg. 21770 (1986), aff'd in part and rev'd in part sub nom. American Civil Liberties Union v. FCC, 823 F.2d 1554 (D.C. Cir. 1987), cert. denied, 108 S.Ct. 1220 (1988).

34/ Steven Effros, President of Community Antenna Television Association, in Electronic Media, Mar. 28, 1988, at 35. In a 1985 report for the National Cable Television Association (NCTA), A.D. Little noted that "NCTA has estimated that over 90% of cable subscribers will be served by rate-deregulated systems." A.D. Little, Prosperity for Cable TV: Outlook 1980-1990, at 12 n.1 (1985).

35/ See Broadcasting, Mar. 21, 1988, at 45. The five states are Maryland, New Hampshire, Ohio, Texas, and West Virginia.

36/ Electronic Media, Mar. 21, 1988, at 31.

37/ Multichannel News, Apr. 4, 1988, at 44.

the provision became effective, December 29, 1986. These studies are evaluated in Appendix A.

It would be unwise to make judgments about the merits of cable rate deregulation on the basis of partial data from the first year after comprehensive deregulation. Moreover, there may have been factors keeping basic rates artificially low prior to deregulation. If so, basic rate increases since December, 1986 may merely indicate a necessary market adjustment, rather than the exercise of undesirable market power by cable system operators.

As major construction is completed on many systems[38/] and prospects improve for cable programming, cable systems have become attractive investments and trading prices have dramatically increased. In addition, the deregulatory effects of the Cable Act of 1984 have helped the cable industry prosper.[39/] It is not unusual for systems to be valued at $2,000 per subscriber (about 12 times cash flow) and some systems have commanded prices of $2,500 to $3,000 per subscriber.[40/] These prices have increased about 20 percent since 1984.[41/]

One of the most attractive investment aspects of cable firms has been the lack of directly competitive cable systems in almost all communities. For example, Bear, Stearns & Co. has referred to the cable franchise as a "monopolistic annuity."[42/] Notably, the 1985 A.D. Little forecast of the cable industry mentioned that "[c]ompetitors to cable services will include DBS, VCRs, Multichannel Multipoint Distribution Service (MMDS) and telephone company services," but apparently did not consider competitive cable operators

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38/ Paul Kagan forecasts that the peak financial outlay for new builds will occur in 1989, while dollars spent for rebuilds will become greater than new build investment in 1993 and thereafter. Paul Kagan Associates, Inc., Carmel, CA., Copyright 1986 Cable TV Technology.

39/ A.D. Little, Prosperity for Cable TV: Outlook 1985-1990, (report to National Cable Television Association) (May, 1985).

40/ Media Business News, Dec. 7, 1987, at 2.

41/ Id.

42/ Bear, Stearns & Co. Inc., New Purchase Recommendation at 10 (Oct. 1986).

to be a realistic possibility.[43] One industry analyst "termed cable a 'quasi-monopoly' with much price flexibility"[44] And one trade press report concluded, "despite the seemingly fertile ground for overbuilds in the future...the prospects for economic viability remain dim."[45]

Much of the cable system acquisition activity is by existing cable MSOs. The growth in size of some of the top MSOs has led some to make claims that the industry is becoming unduly concentrated, creating potential harms to subscribers and program suppliers. This issue of ownership concentration is the subject of Chapter 5.

Generally, cable television has experienced exceptional success over the last 20 years. These industry successes demonstrate that, by and large, it provides a service highly valued by consumers. Although service quality and choice remain common subscriber complaints, steps are being taken by the industry to improve their ability to respond to consumers.[46]

With success comes a natural increase in scrutiny from competitors, customers, and suppliers, and these interests have communicated their concerns to local, state, and federal policy makers, including NTIA. We have carefully studied these concerns and this report makes several key policy recommendations designed to further the public policy goals stated above.

43/ A.D. Little, Prosperity for Cable TV: Outlook 1985-1990, at 18.

44/ Gordon Crawford of Capital Guardian Research at the 1985 Western Cable Show, reported in Broadcasting, Dec. 9, 1985, at 43.

45/ Kahn, "How safe is cable's 'natural monopoly?'", Cablevision, Oct. 13, 1986, at 60, 70.

46/ Hearings before the Subcomm. on Telecommunications, Consumer Protection, and Finance of the House Comm. on Energy and Commerce, 100th Cong., 2d Sess. 81-83 (Mar. 30, 1988) (statement of James P. Mooney).

Chapter 2

The Cable Franchise

The cornerstone of the cable television business is the franchise, the document that enables a firm to construct and operate a cable system. At its most basic, a cable franchise is simply a license issued by a municipality[47] which authorizes a firm to provide cable service.[48] In practice, however, the awarding of a franchise culminates a lengthy process during which a municipality not only selects the recipient of the franchise (generally from a number of competing bids), but also plays a major role in determining the area the franchisee will serve and the facilities and services it will provide.[49]

The franchising process has evoked considerable controversy and criticism over the years.[50] Some of the

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47/ Under the Cable Act, the authority to issue franchises rests with state authorities, subject to certain Federal standards and guidelines. See D. Brenner and M. Price, Cable Television and Other Nonbroadcast Video § 3.01[2], at 3-7 - 3-8 (1986) ("Brenner and Price"). For ease of discussion, the term "municipality" refers to any governmental entity authorized under state law to award cable television franchises.

48/

> the term "franchise" means an initial authorization, or renewal thereof . . . issued by a franchising authority, whether such authorization is designated as a franchise, permit, license, resolution, contract, certificate, agreement, or otherwise, which authorizes the construction or operation of a cable system.

47 U.S.C. § 522(8) (Supp. III 1985). The Cable Act states that no cable operator may provide cable service without a franchise, with the exception of firms lawfully operating without a franchise on July 1, 1984. Id. § 541(b).

49/ We speak of a single franchised cable provider throughout this report although we recognize that in at least 12 franchised areas (of over 8,000), two cable services directly compete with each other.

50/ See, e.g, Cable Act Legislative History at 21-22, 1984 U.S. Code Cong & Ad. News at 4658-49; Cable Franchise Investigation, Local Participation: Hearing Before the Subcomm. on Telecommunications, Consumer Protection, and Finance of the House Committee on Energy and Commerce,

worst abuses of that process prompted Congress, as a matter of public policy, to adopt the reforms set forth in the Cable Act.[51] In recent years, the franchising process has also come under attack on constitutional grounds. The Supreme Court[52] and several lower Federal courts[53] have indicated that the First Amendment may limit, if not eliminate, the discretion a municipality may exercise in awarding a cable franchise.

Although no one knows how the courts will finally resolve this conflict between the cable franchising process and the First Amendment, it seems likely that the decision will depend, at least in part, upon a public interest assessment of the franchising process, as currently structured.

At the outset it should be emphasized that this analysis does not address the licensing function performed by the franchising process. As with other businesses, municipalities have a legitimate interest in licensing cable systems to ensure compliance with appropriate, minimally intrusive standards of consumer protection. Where cable systems use public rights-of-way, municipalities have sufficient authority to ensure such use is consistent with public health and safety.

The fact that portions of the nation's largest cities do not have any cable service available is evidence of a regulatory failure. The franchising process is not wholly to blame for this lack of service to many Americans, but, indeed, has not expedited cable service to these areas.

97th Cong., 2d Sess. (1982); Hazlett, Private Monopoly and the Public Interest: An Economic Analysis of the Cable Television Franchise, 134 U. of Pa. L. Rev. 1335 (1986) ("Hazlett").

51/ See especially § 544, which limits a municipality's ability to require that a prospective franchisee offer specific program services or to provide facilities and equipment unrelated to cable service, and § 546, concerning franchise renewals.

52/ See City of Los Angeles v. Preferred Communications, Inc., 476 U.S. 488 (1986).

53/ See, e.g., Preferred Communications, Inc. v. City of Los Angeles, 754 F.2d 1396 (9th Cir. 1985), aff'd, 476 U.S. 488 (1986); Group W Cable, Inc. v. Santa Cruz, 669 F. Supp. 954 (N.D. Cal. 1987); Century Federal, Inc. v. City of Palo Alto, 648 F. Supp. 1465 (N.D. Cal. 1986).

The following analysis concentrates on the concessions regarding facilities and services that municipalities typically exact as preconditions for awarding cable franchises.[54] It focuses particularly upon the common practice of issuing a de facto, or in some cases, de jure, exclusive franchise[55] to a single firm. It is this offer of franchise exclusivity which gives municipalities the leverage to induce facilities and service concessions from franchise applicants.[56]

For the reasons set forth below, we believe that exclusive cable franchises do not promote the public interest. It is likely that multiple cable providers would have resulted in greater public benefits than have resulted from the concessions extracted by some municipalities in exchange for exclusive franchises. Municipalities will have the opportunity to increase competition in their areas at the time of franchise renewal. Improvements in the franchising process should be made because the heavy burdens some franchisees have borne have had at least two negative results: (1) it has been more difficult for competitive cable systems to develop and (2) subscribers have been burdened by extra costs.

A. Governmental Authority to Award Cable Franchises

Cable franchises are awarded under the color of state law, subject to compliance to certain Federal standards and

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54/ Of course, many municipalities and cable franchisees arrive at reasonable terms regarding facilities and services.

55/ Although franchises rarely are granted on an explicitly exclusive basis (and those may violate the first amendment rights of would-be competitors), there are very few instances where more than one cable system operate in a franchised area. This discussion is generally about exclusive franchises whether they result in law or in fact.

56/ See Century Federal, Inc. v. City of Palo Alto, 648 F. Supp. 1465, 1476 (N.D. Cal. 1986) (municipalities "use the offer of an exclusive franchise as a plum to bargain for certain concessions, e.g., access channels, that they might not be able to acquire if an operator knew that it would have to compete with other cable providers").

guidelines.[57] Where local governments award cable franchises, they act pursuant to an express or implied grant of authority from the state, since localities generally have no inherent powers of self-government.[58] Many states have expressly empowered their cities, towns and counties to issue cable franchises.[59] In other cases, the source of local governments' franchising authority is less explicit. State courts have upheld cable franchises issued pursuant to statutes authorizing local governments to award franchises generally or to franchise public utilities, without specifically mentioning cable television.[60] Courts have also ruled that state "home rule" laws conferring power to regulate use of streets and rights-of-way give local governments the power to issue cable franchises.[61]

57/ The extent of state and local authority over cable television makes it somewhat unique among the various video distribution media. For example, more than thirty years ago, the courts ruled that the Communications Act barred all state regulation of over-the-air broadcast television. Allen B. Dumont Laboratories, Inc. v. FCC, 184 F.2d 153 (3d Cir. 1950).

58/ See 3 Antieau, Municipal Corporation Law, §§ 29.01-.02 (1975); 11 J. Latta, McQuillin's Law of Municipal Corporations, §§ 34.03, 34.14-.15 (3d ed. 1970).

59/ See 1. C. Ferris, F. Lloyd and T. Casey, Cable Television Law, para. 13.10, n. 4, at 13-55 (1987) ("Ferris, Lloyd, and Casey"), listing 18 states which have authorized their cities and towns to award cable franchises.

60/ See, e.g., Community Tele-Communications Inc. v. Heather Corp. 677 P.2d 330 (Colo. 1984); City of Owensboro v. Top Vision Cable Co. of Ky., 487 S.W. 2d 283 (Ky. 1972); Community Antenna Television Inc. v. City of Wichita, 495 P.2d 939 (Kans. 1972).

61/ See, e.g., Omega Satellite Products, Inc. v. City of Indianapolis, 694 F.2d 119 (7th Cir. 1982); Borough of Munhall v. Dynamic Cablevision, Inc., 377 A.2d 853 (Pa. 1977); Illinois Broadcasting Co. v. City of Decatur, 283 N.E. 2d 261 (Ill. App. 1968).

B. Description of the Franchising Process

The franchising process generally proceeds in four stages.[62] First, a municipality assesses community needs, frequently with the assistance of consultants and public hearings. It then issues a request for proposals ("RFP") to commence the formal application process. Typically, the RFP specifies the length of the franchise, identifies the area to be served, and details the financial and background information to be submitted with each application. More controversially, the RFP usually establishes very specific facilities requirements, such as minimum channel capacity, two-way capability, provision of channels for local origination or public, educational, and governmental access, provision of production studios and equipment, or construction of a separate institutional network for carriage of information between governmental offices or schools.[63]

Third, after the applications have been submitted, they are evaluated and ranked. Because many municipalities lack expertise in this area, they frequently rely upon consultants to perform that task. In some cases, the applications are scrutinized in a public hearing. Fourth, when the review process is completed, the municipality generally selects and executes a formal agreement with a single franchisee. Construction may then begin.

C. Rationale for Cable Franchising

Over the years, municipalities have cited a number of reasons why they have franchised cable television systems. Of those rationales, the most frequently and most consistently invoked have been: cable's use of public

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62/ See Lee, Cable Franchising and the First Amendment, 36 Vand. L. Rev. 867 (1983) ("Lee"). For a more detailed discussion of the franchising process, see G. Webb, The Economics of Cable Television 159-165 (1983).

63/ Prior to the passage of the Cable Act, RFPs also contained standards concerning the rates to be charged or services to be carried. The Cable Act, however, forbids a municipality from requiring a prospective franchisee carry particular program services or even broad categories of programming and severely limits a municipality's power to regulate rates. See 47 U.S.C. §§ 543, 544 (Supp. III 1985).

streets and rights-of-way and cable's alleged status as a natural monopoly.[64]

1. Use of public rights-of-way

The first rationale for franchise regulation is simply stated. Because the provision of cable service typically involves a permanent, physical occupation of public streets and rights-of-way, municipalities have the power and duty to regulate that use. This feature of cable television justifies some degree of municipal control over the provision of cable service.[65] For example, municipalities may be justified in requiring cable companies comply with minimum safety standards to minimize potential harm to the public during construction. Similarly, they may require specific construction schedules to reduce disruption to others' use of public rights-of-way. Regulating the use of public rights-of-way may also justify imposing a reasonable fee as compensation for the company's use of public property in its private business.[66]

The fact that provision of cable service generally involves use of public rights-of-way does not, however, warrant municipal regulations unrelated to that use, such as the award of an exclusive franchise. If one cable operator's use of the streets does not preclude use by other potential entrants, as is frequently the case,[67] grant of authority to construct to one operator provides no basis for barring entry

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64/ For a critical discussion of three other proffered justifications for cable franchising, see Lee, 36 Vand. L. Rev. at 878 n.48.

65/ On the other hand, it does not explain why municipalities also franchise firms which provide video programming over facilities owned and controlled by a franchisee with existing rights-of-way, such as the local telephone company. See New York v. Comtel, Inc., 293 N.Y.S.2d 599 (Sup. Ct.), aff'd, 294 N.Y.S.2d 981 (App. Div. 1968), aff'd, 304 N.Y.S.2d 853 (1969); City of Waterville v. Bartell Telephone TV Sys., 233 A.2d 711 (Me. 1967).

66/ This could be done under existing municipal regulations and practices generally applicable to all businesses that use rights of way, and need not involve a "franchise" at all.

67/ See City of Los Angeles v. Preferred Communications, Inc., 476 U.S. 488 (1986); Century Federal, Inc. v. City of Palo Alto, 648 F. Supp. 1465 (N.D. Cal. 1986).

by others. While construction of multiple systems may be more disruptive to other users of public rights-of-way, potential problems can adequately be addressed short of mandating a single "franchisee", such as mandating joint construction, shared use, and the like. These and other approaches could also minimize government's intrusiveness.

2. Natural monopoly

The other principal rationale for cable franchising rests on the assumption that the provision of cable service within a particular community is a natural monopoly, i.e., that a single firm can satisfy total market demand at less cost than any collection of firms. As a result, competitive entry will, ultimately, result in the survival of but a single firm and substantial losses by its unsuccessful rivals. By selecting a single franchisee and protecting it from competitive entry via an exclusive franchise, a municipality in effect attempts to replicate the inevitable marketplace result while deterring "wasteful" investment by competitors who cannot prevail.

Available evidence suggests that cable service may display some of the essential characteristics associated with a natural monopoly.[68/] For several reasons, however, that conclusion does not warrant exclusive cable franchises. In the first place, the evidence for cable as a natural monopoly, although suggestive, is not conclusive. Moreover, because the natural monopoly analysis is static, it does not anticipate or account for future developments, such as changes in technology, product differentiation, market strategy, or economics of the business.

68/ Demsetz has suggested that awarding an exclusive franchise may be a useful tool for controlling a natural monopoly. Demsetz, Why Regulate Utilities?, 11 J. Pol. Science 57 (1968). He submits that, if conditions are such that a single firm will survive competitive entry, the firm should be selected through a competitive bidding process. If the number of bidders is large enough and if collusion does not occur, Demsetz argues, the bidding process will produce rates and services close tho those that would have prevailed in a competitive environment. Demsetz's approach has been criticized on a number of grounds, however. See e.g., R. Schmalensee, The Control of Natural Monopolies (1979); Williamson, Franchise Bidding for Natural Monopolies in General and with Respect to CATV, 7 Bell J. Econ. 130 (1976); Telser, On the Regulation of Industry: A Note, 77 J. of Pol. Econ. 130 (1969).

As a result, although cable service may exhibit certain natural monopoly characteristics today, these developments may produce a different result in the near future. It is instructive, for example, that economists long believed that the long distance telephone business, which now appears to be workably competitive, was a natural monopoly. Yet, the economic evidence for the natural monopoly nature of long distance service "was probably stronger than the evidence suggesting that cable is a natural monopoly."[69] In short, even if cable service may be a natural monopoly today, there are sound reasons for doubting it will remain so in the future. Under the circumstances, exclusive franchises are an unwise policy because they eliminate or seriously impede the potential entry that can provide a continuous check on the validity of the natural monopoly assumption for cable service.

In addition, exclusive franchises are undesirable even if provision of cable service is and will remain a natural monopoly. As noted above, in awarding an exclusive franchise, a municipality attempts to replicate the marketplace by selecting the single firm that would have emerged from the competitive process. This will occur, however, only if one makes the assumption that the municipality is equally adept at making that choice as the interaction of market forces. Instead, as one commentator has put it, the franchising process:

> vests politicians with the incredibly complex task of foreseeing consumer demand and new technologies, and of evaluating alternative suppliers, efficient production methods, and an infinity of abstruse data, while giving them no financial incentive to choose well.[70]

There is no guarantee that a municipality will select as its exclusive franchisee the firm that the marketplace would have identified as the most efficient provider of those services most desired by consumers. At the same time, by foreclosing competitive entry, award of an exclusive franchise would prevent market forces from correcting an erroneous choice by the municipality.

69/ Owen, Recent Developments in Cable Television Regulation, Regulatory Reform: Indus. Reg. Comm. Newsl., Dec. 1985, at 5 (published by the Industry Regulation Committee of the ABA Section of Antitrust Law).

70/ Hazlett, 134 U. of Pa. L. Rev. at 1354.

City	Franchisee	RFP Date	Franchise Awarded	Homes in Franchise Area	# Homes Passed	Subs	% Homes Passed to Homes in Area
1) New York City							
Brooklyn	Cablevision Systems of NYC	9/80	7/83	716,000	0	0	0
Brooklyn	BQ Cable Television	9/80	7/83	165,000	34,200	7,600	20.7
Bronx	Cablevision Systems of NYC	9/80	7/83	426,000	0	0	0
Bronx	CATV Enterprises	None	N/A	25,000	25,000	4,753	100.0
Manhattan	Manhattan Cable	2/64	12/65	400,000	400,000	210,000	100.0
	Paragon Communications	12/65	10/64	355,000	270,000	120,000	76.1
Queens	American Cablevision of Queens	9/80	7/83	270,000	85,600	26,275	31.7
	Queens Inner Unity Cable Systems	9/80	7/83	185,000	0	0	0
	BQ Cable Television	9/80	7/83	285,000	166,100	56,700	58.3
Staten Is.	Staten Island Cable	9/80	7/83	119,000	107,000	25,000	89.9

Sources: Telephone conversations with city cable administrators, Television & Cable Factbook (1987 Edition) & Broadcasting Yearbook (1988 Edition)

N/A - Not Available

City	Franchisee	RFP Date	Franchise Awarded	Homes in Franchise Area	# Homes Passed	Subs	% Homes Passed to Homes in Area
2) Los Angeles	Cablevision (Area A)	N/A	6/80	178,170	178,170	67,615	100.0
	King (Area B)	N/A	12/64	10,603	10,400	6,948	98.0
	United (Area C)	N/A	12/83	185,000	89,203	29,984	48.0
	King (Area D)	N/A	5/61	27,768	26,900	17,853	96.9
	Falcon (Area E)	N/A	11/76	93	93	91	100.0
	Century (Area F,G & H)	N/A	1/67	236,398	235,558	103,905	99.6
	American (Area I)	N/A	7/79	310,357	310,357	55,545	100.0
	American (Area J)	N/A	7/78	19,800	19,166	9,498	96.8
	American (Area K)	N/A	9/83	176,605	13,728	0	7.8
	Buenavision (Area L)	N/A	10/82	21,000	5,400	1,068	25.7
	Colony (Area M)	N/A	9/82	36,136	33,214	10,129	91.9
	Times Mirror (Area N)	N/A	5/61	16,750	16,750	5,930	100.0

City	Franchisee	RFP Date	Franchise Awarded	Homes in Franchise Area	# Homes Passed	Subs	% Homes Passed to Homes in Area
3) Chicago	Chicago Cable TV (Areas 1,4,5)	5/82	3/84	683,113	571,805	112,059	83.7
	Group W Cable of Chicago (Areas 2,3)	5/82	3/84	410,000	385,000	87,682	93.9
4) Houston	Warner Cable Communications	6/72	2/78	525,000	525,000	187,500	100.0
	Houston Community Cablevision	6/72	2/78	208,000	208,000	49,006	100.0
5) Philadelphia	Greater Philadelphia[1/] Cablevision (Area 1)	1979[2/]	11/84	156,000	51,000	25,000	32.7
	Wade Communications (Area 2)	1979	11/84	156,000	N/A	4,000	N/A
	Comcast Cablevision[3/] (Area 3,4)	1979	11/84	315,000	110,323	58,000	35.0

1/ Franchise was originally awarded to Telesystems for this area in 1970. System was purchased by Times Mirror in 1974. Greater Philadelphia Cablevision was awarded franchise in 1984.

2/ No franchises were awarded as a result of 1979 or 1982 RFPs. Third RFP was issued in 1984 from which franchises were awarded.

3/ Comcast purchased franchise owned by Heritage (Area 3) in November, 1987.

City	Franchisee	RFP Date	Franchise Awarded	Homes in Franchise Area	# Homes Passed	Subs	% Homes Passed to Homes in Area
6) Detroit	Barden Cablevision	8/82	8/83	450,000	96,156	36,635	21.4
7) Dallas	Heritage Cablevision[4/]	3/81	4/82	392,000	380,000	87,000	96.9
8) San Diego	ATC	None	3/80	163,700	153,100	112,002	93.5
	Cox Cable	None	1/79	217,447	207,967	121,368	98.2
9) Phoenix	Dimension Cable	11/75	11/76	364,000	300,000	110,000	82.4
	Premier Cable Communications	None	9/80	40,543	17,132	6,411	42.3
10) San Antonio	Rogers Cable System	1977	10/78	435,000	435,000	219,000	100.0
11) Baltimore	United Cable	12/82	12/84	300,000	75,887	26,142	25.3
12) San Francisco	Viacom Cablevision	N/A	1/64	315,000	295,000	121,758	93.7
13) Indianapolis	American Cablesystems	1979	2/80	173,000	125,000	78,000	72.3
14) San Jose	Gill Cable TV	N/A	1965	228,436	220,984	116,297	96.7
15) Memphis	Memphis Cablevision	N/A	1965	273,700	260,000	130,000	95.0
16) Washington, D.C.	District Cablevision	12/82	7/84 (3/85 eff.)	250,000	79,909	21,000	32.0
17) Milwaukee	Warner Cable Communications	5/81	9/82[5/]	259,177	229,977	87,185	88.7
18) Jacksonville	Continental Cablevision	N/A	12/77	257,511	254,949	150,000	99.0
19) Boston	Cablevision Systems Boston Corp.	Fall '80	12/82	275,000	186,047	80,000	67.7

4/ Franchise was transferred by Warner to Heritage in 10/85.

5/ Amended 8/84.

City	Franchisee	RFP Date	Franchise Awarded	Homes in Franchise Area	# Homes Passed	Subs	% Homes Passed to Homes in Area
20) Columbus[6/]	Company A	N/A	5/70	57,585 (est.)	57,009	27,614	99.0
	Company B	N/A	5/70	78,821	78,033 (est.)	40,347	99.0
	Company C	N/A	5/70	104,849	103,801 (est.)	48,340	99.0
	Company D	N/A	5/70	25,326	25,326 (est.)	19,271	99.0
21) Atlanta	Prime Cable	N/A	2/80[7/]	100,000	100,000	49,500	100.0
22) St. Louis	STL Cablevision	2/83	4/84 (7/84 eff.)	143,000	135,800	45,000 (est.)	95.0
	St. Louis City Communications	2/83	4/84 (10/84 eff.)	36,000	34,200	8,000 (est.)	95.0
23) Cleveland	North Coast Cable	12/84	8/86 (7/87 eff.)	230,000	11,000	4,000	4.8
	Telebroadcasters of America	None	4/88[8/]	230,000	0	0	0
24) St. Paul	Continental Cablevision	1979[9/]	8/83	114,000	114,000	42,500	100.0

6/ Four companies providing cable service are Warner Cable, All American Cablevision, Tele-Media Corp. and Coxial Communications. Data provided to city is considered confidential and thus, we were not able to identify data to particular company.

7/ Cox Cable was initially awarded franchise in late 1960s, but system was required to divest around 1977-78 due to the broadcast/cable cross-ownership rules.

8/ Petitioned city for referendum to allow second franchise. In response to referendum city council voted franchise to Telebroadcasters, but under the same terms and conditions as franchise awarded to North Coast Cable (Telebroadcasters had sought franchise under different conditions). No action to date has been taken by Telebroadcasters.

9/ Bids received and rejected; city had referendum on municipal ownership but voters rejected; new RFP issued in 1981; city council selected NorWest but mayor vetoed and selected Continental; NorWest now suing for franchise and damages.

C. Cost of the Franchising Process

Thus, the two principal predicates for cable franchising provide insufficient support for the broad authority that municipalities have exercised in the franchising process, most notably the awarding of exclusive franchises. We turn now to consideration of the costs the process imposes upon franchise applicants, municipalities and, ultimately, cable subscribers.

1. Delays in awarding franchises

The franchising process tends to impede the introduction of cable service into communities. Because of the time involved in preparing a franchise RFP and evaluating responses to it, a year or two typically elapses between a community's decision to issue a franchise and the date on which that franchise is actually awarded.[71] Political controversies surrounding many cable franchise decisions may exacerbate these delays. As a result, potential subscribers are denied the benefits of cable service for a longer period of time than would have likely been the case if the community replaced the formal franchising process with an open entry policy for prospective cable service providers.[72]

The following table summarizes the status of cable availability in the 20 largest cities:

71/ See id. at 1401 (cities typically devote between two and ten years to the franchising process). After the franchise is awarded, service is delayed for an additional period of time while the franchise system is under construction.

72/ In 1982, an official in Fairfax County, Virginia, criticized the open entry policy in neighboring Prince William County as a "disaster." At the time, however, Prince William residents already had cable service while Fairfax County had only recently awarded its franchise. See Consumers' Research, Oct. 1982, at 22, 23.

The delays attendant on the franchising process have been most acute in the large metropolitan areas and have meant that many major cities have been unwired, indeed, unfranchised, until very recently.[73] For example, the franchise selection process in one section of Los Angeles consumed more than five years, amid allegations that council members were delaying their decision in order to collect campaign contributions from the various bidders.[74] Similar delays occurred in Washington, D.C. and Baltimore before franchises were awarded. Philadelphia endured four separate franchising processes since 1966 before it finally selected a franchisee in 1984.[75]

2. Provision of excessive facilities

After delay of service, the principal cost of the franchising process as currently structured is that it frequently produces "goldplated" cable systems with facilities, channel capacities, and equipment for greater than necessary to serve their respective communities. The municipality starts the process by including within its RFP requests for a broad range of facilities and equipment. The exclusive nature of the franchise accelerates the bidding process as applicants offer more and more facilities in an effort to capture the prize. In the end, the system proposed by the winning applicant may have only a passing connection to the kind of services sought by the market.

While some municipalities have thus extracted costly concessions of prospective franchisees, other municipalities have made reasonable requests and the bidding process has not gotten out of hand. From a policy viewpoint, however, it is the excessive cases which have hampered competition and

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73/ See, e.g., New York Times, Apr. 12, 1987, Sec. 1, Pt. 2, at 50; UPI AM Regional Wire, May 5, 1986 ["Construction began in North East Philadelphia on the first of four segments that will make cable TV available to the city..."]; UPI AM Regional Wire, March 14, 1986 ["Baltimore city residents must wait longer and pay more for cable TV"]; Business Wire, Inc., Aug. 3, 1987 ["North Coast Cable secured financing for construction and operation of the City of Cleveland's cable television system."]

74/ See Los Angeles Times, Feb. 16, 1983, at II-1, col. 4; Jan. 17, 1983, at II-1, col. 4.

75/ See Hazlett, 134 U. of Pa. L. Rev. at 1401, n. 237.

increased costs to franchise bidders (and ultimately, subscribers).

To obtain the New Orleans franchise, Cox Cable promised 18 public access channels, a 40 channel institutional network, and a $3.38 million dollar grant to support ethnic, cultural, educational, and general local programming.[76] The Tribune Company won the Tampa franchise by promising to establish a trust fund for community projects. Tribune's initial contribution to the fund was $1.5 million, to be followed by $250,000 annually for the remainder of the franchise.[77] During the bidding for the Denver franchise, which included about 226,000 homes, the various applicants proposed as many as 26 fully equipped production studios throughout the city.[78] After the franchise had been awarded, a study commissioned by the city concluded that the winning bidder had agreed to supply double the channel capacity required to satisfy consumer demand, resulting in an overinvestment of approximately $8 million.[79]

Once these extravagant systems are constructed, many of the facilities will lie fallow for lack of demand. In some areas, access channels are often unprogrammed and production studios are underused.[80] Similarly, one study of 66 cable institutional networks indicated that only 8 percent of the available channel capacity within the sample was being used, and only one institutional network was covering its operating costs.[81] Because these facilities do not attract significant use, the franchisee cannot generate revenues to cover the costs of providing them. As a result, the costs must be recovered through the rates paid by all cable subscribers.

76/ G. Webb, The Economics of Cable Television 162 (1983)

77/ Id.

78/ New York Times, Feb 22, 1982, at A12, cols. 2,4.

79/ Touche, Ross & Co. Financial and Economic Analysis of the Cable Television Permit Policy of the City and County of Denver 39-41 (Jan. 20, 1984) (unpublished study), cited in Hazlett, 134 U. of Pa. L. Rev. at 1357 n.82.

80/ See, e.g., Hamburg, M., All About Cable, § 6.04(1) (1986).

81/ Zupan, Franchising and the Promotion of Efficiency in Cable TV Markets 12 (unpublished dissertation, MIT 1986) ("Zupan"). See discussion of cable I-nets, Appendix B at 7-8.

The evidence indicates that these costs are substantial. One study estimated that franchise requirements (including establishment of production facilities, excess channel capacity, and grants to community groups) increase costs for the typical cable system by some $5.60 per subscriber per month.[82] Another study projected that elimination of franchising requirements would reduce operating costs for the typical cable system by $9.73 per home passed per year.[83]

3. Politicization of the franchising process

Because the franchising process typically ends with the selection of a single winner, cable franchising has taken the appearance of a high-stakes election, with the competing applicants seizing any opportunity to gain an advantage. In the most egregious cases, contestants may have resorted to bribery[84] or blatant anticompetitive conduct.[85] More often, however, the applicants have relied upon the tools of a conventional political campaign.

One tried-and-true method has been an intensive, expensive lobbying campaign. In the competition for the Denver franchise, the three applicants spent nearly $1 million each for "advertising, lobbying, and promotional campaigns armed at winning the support of civic leaders, community organizations and minority groups."[86] In Philadelphia, the various contestants spent about $6 million dollars on lobbying and promotion between August 1982 and

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82/ Ernst & Whinney, The Cost of Cable Television Regulatory & Franchise Requirements: A Preliminary Analysis 3 (Apr. 1982) (unpublished study prepared for the National Cable Television Association), cited in Hazlett, 134 U. of Pa. L. Rev. at 1363 and n. 100.

83/ Zupan at 37. Since not all of the homes passed by cable subscribe, the potential cost savings per subscriber would be even larger.

84/ See, e.g., Teleprompter of Erie, Inc. v. City of Erie, 537 F. Supp. 6, 12-13 (W.D. Pa. 1981); United States v. Kahn, 340 F. Supp. 485 (S.D.N.Y. 1971), aff'd, 472 F.2d 272 (2d Cir 1973).

85/ Central Telecommunications, Inc. v. TCI Cablevision, Inc., 610 F.Supp. 891 (W.D. Mo. 1985), aff'd, 800 F.2d 711 (8th Cir. 1986), cert. denied, 107 S. Ct. 1358 (1987).

86/ New York Times, Feb. 22, 1982, at A12, cols. 2, 4.

January 1984, when the city decided to begin the franchising process anew.[87]

At the same time, the applicants often have taken steps to curry favor with the franchise authorities. One of the most widely used tactics was the "rent a civic leader" approach, whereby an applicant offered an ownership interest in its system to a politically influential local leader.[88] Other approaches have included offering easy payments to the municipal treasury, offers of program time and production facilities to important interest groups, and making campaign contributions to franchising authorities.[89]

Though not necessarily illegal, many of these activities have created an unsavory atmosphere around the franchising process, risking loss of public confidence in that process. The money expended by applicants on lobbying and promotional campaigns have consumed resources that might have been used to provide better facilities and services sought by subscribers. More importantly, perhaps, the politicization of the franchising process increased the likelihood that selection of the ultimate franchisee would depend upon who had the most influence, rather than upon which applicant fered the best package of facilities and services. This, in turn, reduced the probability that a municipality could successfully replicate market forces in choosing the most worthy recipient for its exclusive franchise.

D. Conclusions and Recommendations

For the foregoing reasons, we believe the franchise process, as currently structured, often disserves the public interest. The franchising process eliminates or seriously impedes entry by competitors, imposes substantial costs and delays on franchisees, cable subscribers, and the public, which are not offset by countervailing benefits. The public would be better served by municipal efforts to provide a choice of cable service providers rather than extracting costly concessions from a sole cable franchisee. We

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87/ Philadelphia Inquirer, Jan. 26, 1984, at 10A, cols. 1, 3.

88/ See Fortune, July 2, 1979, at 64, 67. In the words of one cable executive "having the right local people is 80 percent of the game." Id. at 67 (emphasis in original).

89/ See Hazlett, 134 U. of Pa. L. Rev. at 1359, 1360 and n.87.

therefore recommend that municipalities no longer grant exclusive cable franchises. Instead, municipalities should permit, even encourage, entry by competitive cable service providers.[90]

90/ This report later considers ways in which telephone companies should be permitted to participate in the provision of video programming in their local service areas. It recommends, among other things, repeal of the statutory requirement that common carriers only lease channel capacity to franchised cable operators or franchising authorities. See Chapter 3, *infra*.

Chapter 3

Video Common Carriage

Cable television has brought programming to areas previously unserved and has dramatically increased the choices available to its subscribers. Yet in some regions of the country, no cable service is available. Where cable service is available, there is, with rare exception, only one provider. The lack of direct cable competition may be due to a combination of economic factors and regulatory failure.91/ In any case, the level of competition that might exist if two (or more) facilities-based video service providers offered service in most markets has not developed.

In addition, diversity of viewer choice has not developed as fully as it might, so that one cable operator with substantial First Amendment rights selects, arranges, and markets all of the program choices available over the only cable service in town. This powerful First Amendment speaker is often a financial partner in programming services.92/

The deployment of competitive coaxial cable systems would provide competition to incumbent cable operators. The likelihood of competitive cable systems is, however, depressingly small because of factors such as the franchising process and the high capital investment required. Other distribution systems (such as MMDS and DBS) should be encouraged to develop to stimulate competition in the distribution of video programming, although their future is uncertain.

The fact that the vast majority of communities are served only by one wire-based coaxial cable plant has led us to examine whether that situation would change if local exchange telephone companies ("LECs") were permitted to participate more fully in the video market. If telephone involvement would simply lead to replacement of one distributor with another, we would not consider the public to be greatly benefited. It may be that some local telephone companies would build competitive (second or more) broadband facilities. There is no clear indication, however, that this would be the case. We do not recommend a policy that conditions local telephone involvement in video programming

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91/ See discussion regarding costs of the franchising process at Chapter 2, supra.

92/ See discussion of effects of vertical integration at Chapter 6, infra.

only if they construct a facility which would compete with an existing a cable operator; companies should have maximum flexibility in managing their own business affairs and such a decision should be made on business economic factors, not by conditions determined by government.

Similarly, government policies should not be adopted which depend on a specific future scenario to develop. Conditions in 10,000 cable and SMATV systems and the numerous local telephone exchange areas vary greatly. Countless factors would affect the decisions of local telephone companies to buy or build plant capable of carrying video signals. It would be unwise to assume that local telephone companies will, in all cases, build competitive broadband facilities. We must, however, seek a policy that will increase the potential for competition and diversity of viewer choice.

This study has considered three levels of local telephone company participation: (1) retain or increase all current prohibitions;[93/] (2) remove impediments to greater provision of transport facilities; and (3) permit telephone provision of video services in LEC service areas. NTIA concludes that the best way to encourage competition and diversity of consumer choice is by expanding the common carrier regulatory model applicable to video transport (not programming services) and facilitate local telephone company provision of such transport to others (including cable operators, broadcasters, sports organizations, studios, and others) in their exchange service areas.[94/]

93/ As discussed more fully below, telephone companies are generally prohibited from providing video service directly to subscribers in their telephone service areas. Most are free, however, to become franchised cable operators outside their service areas, and all can provide common carrier transport of video programming for franchised cable operators or franchising authorities within their telephone service areas.

94/ This discussion deals with local exchange carriers ("LECs") with regard to provision of video transport or service in their local telephone service areas. It appears that interexchange carriers such as AT&T, MCI, Sprint, and others, having no "local service area" are, in general, like other firms, able to become franchised cable operators. Cf. Implementation of the Provisions of the Cable Communications Act of 1984, 50 Fed. Reg. 18637, 18644 (para. 54) (1985). Of course, they are also able to offer video common carriage as described here. Certain interexchange companies, (e.g., AT&T, US Sprint)

A common carrier alternative to video transport will combine the strengths that exchange telephone companies can bring to video distribution with the demonstrated strengths of the cable and programming industries. Some suggest that local telephone companies would displace the cable industry through any video involvement. These concerns overlook the strengths of the cable industry. Incumbent cable operators enjoy several advantages over new competitors (e.g., other cable competitors, MMDS, DBS, telephone companies, or other broadband facilities providers.) Cable firms control the transmission mode of preference (passing over 80 percent of television homes, with 50 percent of all television homes using coaxial cable for their television viewing); they hold valuable franchises which, in the vast majority of markets, insulate the cable operator from direct competition; they have existing contractual arrangements with program networks; they have human assets and expertise in programming, management, and advertising sales. With these and other strengths, incumbent cable operators are ready to face greater competition; indeed, without some assurance of increased competition and diversity in the video marketplace, cable operators will face increasing pressures from various quarters to be more closely regulated.

This recommendation is consistent with the direction and many of the principles articulated by the Cabinet Committee Report in 1974 which remain sound in recommending the "separation" of facilities from programming.95/ The Cabinet Committee enumerated the potential benefits which could result from a policy to separate the ownership and control of distribution facilities from the ownership and control of the programming carried on the channels. They noted that although they believed "the distribution function in cable . . . is a natural monopoly . . . the programming functions . . . can be highly competitive."96/ Similarly, local telephone provision of video transport facilities (whether or not done

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may be subject to consent decrees which may additionally limit their permissible lines of business. See discussion at 48-50, infra.

95/ In one important respect our conclusion must differ from the Cabinet Committee Report: it would be unfair and impractical to subject existing cable operators to separation of programming and facilities. Indeed, the Cabinet Report recommended an orderly transition to the separation of cable programming and facilities, a transition which has not taken place. Cabinet Committee Report at 51-56.

96/ Id.

through acquisition of existing cable systems or by new construction of broadband local telephone network facilities), should be kept separate from ownership and control of the programming in order to maximize diversity and competition among program providers.

The increased provision of video transport on a common carrier basis should be facilitated because it would yield several public benefits. First, it would have an immediate competitive effect on existing cable systems and should cause them to be more responsive to consumers in terms of quality of service, programming choices, and other competitive points.[97/] Second, consumers have benefited from constantly upgraded exchange telephone facilities over the last 100 years (e.g., single-party lines, touchtone dialing, digital switching), and should benefit from the further enhancements to be made in order to deliver video signals. It would not be too difficult to see a time when a "video dial tone" would be offered to all users (including e.g., cable operators, broadcasters, program suppliers, advertisers) at nondiscriminatory rates.

NTIA is concerned that some cable operators may have been constrained from offering non-video services, including voice and data services. Cable technology should be viewed by regulatory authorities and industry participants as having great potential for meeting consumer demand for non-video services. The entry of cable operators into these services, however, is affected by technical considerations (cable systems generally do not have switching capacity) and state/Federal regulatory issues. Thus, the greater participation by cable firms in providing voice and data services, while desirable, should not be seen as a quid pro quo of Federal policies to encourage local telephone provision of video transport service.

There are at least two impediments to wider provision of video transport facilities by LECs which should be removed: (1) the Cable Act and FCC Section 214 process prohibit telephone companies from providing channel capacity to anyone but franchised cable operators; and (2) the range of activities and degree of affiliation between LECs and cable systems should be clarified to permit local telephone

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97/ I. Pool, Technologies of Freedom 178 (1983) ("Pool")("[t]here will . . . emerge from the phone system a common carrier alternative to cable systems, which will lease channels to those who wish and thus limit the market power of cable systems").

companies to engage in activities ancillary to the provision of video transport (e.g., billing, system maintenance.)[98/]

To be clear, however, we do not recommend any change in the current rules prohibiting local telephone companies from providing video programming directly to subscribers within their service areas.

I. Description:

Applying the common carrier model, local telephone companies would be able to construct, operate, and maintain a transport facility to be leased by programming services on a nondiscriminatory basis. The firms providing programming services might include traditional cable operators, broadcasters, networks, production houses, syndicators, advertisers, and others.

Local telephone companies could provide the facilities for broadband services in a variety of ways. A LEC could purchase an existing cable facility or might construct a fully-integrated broadband facility capable of transporting voice, data, and video services.[99/] Local exchange companies and cable companies might jointly own an entire cable television facility, or each company could own some portion of a facility in a "hybrid" arrangement. For example, a cable company might maintain ownership of its coaxial distribution facility to the home and link this distribution facility to the switched telephone network. Of course, coaxial cable systems and new broadband exchange telephone networks could also exist side by side.

98/ These issues would be properly addressed by the FCC in a proceeding to clarify its telephone-cable cross ownership rule, 47 C.F.R. § 63.54, Note 1 (1986). The Commission's recent decision in Comark Cable Fund III, v. Northwestern Indiana Tel. Co., Inc., File No. E-84-1, FCC 88-166 (released May 27, 1988) ("NITCO"), provides additional guidance on this matter although an adjudication based on facts specific to the case is not as helpful as a rulemaking.

99/ The local telephone companies' circuit-switched networks were not designed for the continuous transmission of the large volumes of information required for many data and almost all video transmissions. Presently, it is not practical to transmit full motion picture video programming through the circuit-switched network.

A. Advantages of Video Common Carriage:

First, local telephone companies should be allowed to take advantage of economies of scope in the provision of communications facilities for all services. Economies of scope such as common billing operations, construction, maintenance, and accounting functions might be realized. As a provider of video transport facilities in addition to transport of voice and data, a LEC would be able to increase utilization of its transport facilities. Greater use of local telephone plant in service should lead to increased efficiency, greater productivity, and in the long run, lower service rates. In addition, local telephone company provision of broadband facilities for video service may ultimately accelerate deployment of advanced transmission technologies such as optical fiber.

Second, technological advances in the development of network equipment and software may also be incorporated into the communications network(s). The potential efficiencies generated through the development of a fully-integrated communications network providing all services with common interfaces would be encouraged.

Third, common carrier regulation would ensure the non-discriminatory treatment of all service providers requesting access to the LEC broadband facility for the provision of their service. Tariffed rates for channel access would ensure nondiscriminatory rates (access) for all.[100/] The potential access of all program suppliers to the available channel capacity would also result in an increase in program diversity.

Fourth, a common carrier regime would obligate a local telephone company to construct and lease facilities to the extent that such demand exists, if a decision is made by the LEC to enter the business.[101/] Again, competition and

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100/ Nondiscriminatory rates need not mean equal rates for all services. Railroad tariffs were different for eggs and coal. Telephone rates are different for households and businesses. Postage rates vary with classes of mail. Nondiscrimination means equal tariffs for all customers seeking the same thing.

Pool at 185.

101/ Under § 201 of the Communications Act, a common carrier is obliged to provide facilities and service "upon reasonable request." 47 U.S.C. § 201(a) (1982).

diversity in programming services would be furthered because (except for temporary delays when capacity must be built to "catch up" with demand) virtually all programmers would have equal access to potential viewers.

Fifth, as cable operators increasingly face greater construction expenses to rebuild and upgrade their systems, some may find it more cost-effective to lease channel capacity from a local telephone company serving the cable franchised area. Paul Kagan estimates that the price per mile to construct new cable plant will increase by about 45 percent from 1988 to 1997, with rebuild construction increasing in the same time period by about 84 percent.[102/] At the same time, more cable systems will need to rebuild plant, with the total number of rebuild miles estimated to increase from 270,000 in 1988 to 684,000 in 1997.[103/]

B. Government Policy and Technology

Great excitement is being generated by the advent of enhancements and new technologies in public and private switched telephone networks. Business, Government, and the general public are becoming aware of the opportunities for new services to be provided over local telephone networks. NTIA has supported policies to permit local exchange companies and others to use those technologies to provide new service.[104/] NTIA has supported the development of competition in the provision of local exchange services in the belief that the public would benefit from more and different services at competitive prices.[105/] Local exchange telephone companies, cable television operators, and other companies (e.g., private fiber networks) have the potential to compete with each other for various local services; should that competition broaden and mature, we believe the public will benefit.[106/]

102/ Paul Kagan Associates, Inc., Copyright 1986 Cable TV Technology.

103/ Id.

104/ NTIA Regulatory Alternatives Report, Rept. No. 87-222 (July 1987).

105/ NTIA Competition Benefits Report, Spec Pub. 85-17 (Nov. 1985).

106/ Although generally supporting competition in local exchange markets, NTIA recognizes that the states generally exercise jurisdiction over intrastate

The deployment of optical fiber would substantially increase the amount of voice, data, and video information that could be delivered throughout a network. It is desirable for optical fiber to be deployed through networks to businesses and residences, creating the potential for "broadband information networks."

NTIA supports advances in technology and firmly believes that Government should play a role in promoting an environment in which, among other things, the development of new technologies is as easy as possible, adequate intellectual property protections insure the rewards of such activities, and worldwide trade arrangements do not impair development of new technologies by U.S. firms.

Government policies should not, however, be employed to promote the introduction of a particular technology only by a certain group of competitors. Thus, while there are significant differences in the design and function of the local exchange networks, coaxial cable systems, and other broadband networks, we will not recommend policies which favor one group over another on an erroneous assumption that only that group can provide advanced technologies or services.

Instead, it is possible that local exchange telephone companies, cable operators, and other companies will all employ optical fiber in their networks.[107/] We are not persuaded that telephone companies must be granted authority to provide video programming in order to have sufficient incentives to deploy optical fiber to the home.

C. Impediments to Widespread Offering of Video Transport Facilities by Local Telephone Companies

There are at least two steps which should be taken to facilitate the offering of video transport facilities by local telephone companies: (1) permit LECs to lease video channels to anyone, not just franchised cable providers or franchising authorities; and (2) clarify the range of activities and degree of affiliation between local telephone companies and cable systems to permit LECs to engage in

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services. National Telecommunications and Information Administration, Issues in Domestic Telecommunications: Directions for a National Policy at 106-108, Spec. Pub. 85-16 (July 1985) ("NTIA Domestic Study").

107/ See discussion in Appendix B, infra, at 8-12.

activities ancillary to the provision of video transport (e.g., billing, system maintenance.)[108]

1. Prerequisite franchise:

First, in the legislative history explaining that provision of the Cable Act prohibiting telephone companies from providing video programming in their local service areas, the Committee explained that the Act:

> does not prevent a common carrier from leasing or otherwise making available a part or all of the capacity of such a system to a franchising authority or to a cable operator who has received a franchise from the franchising authority in accordance with the conditions [herein].[109]

In addition, telephone companies seeking FCC approval of an application to construct cable facilities under Section 214 of the Communications Act must make a showing that the facility will be leased by a franchised cable operator.[110] So long as a programmer (cable firm, network, producer, or others) cannot lease channel capacity directly from a common carrier without first securing a franchise, there will be an impediment to greater competition and diversity in the provision of programming.

Currently, it is generally possible for local telephone companies to provide video channel capacity to franchised cable operators or franchising authorities. Few of these arrangements have been made, however.[111] In 1971, the FCC denied the application of New York Telephone to lease video channel service to a cable company, finding that the

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108/ 47 C.F.R. § 63.54, Note 1 (1986). See also, note 91, supra.

109/ Cable Act Legislative History at 57, 1984 U.S. Code Cong. & Ad. News at 4694 (emphasis added).

110/ Application of General Telephone Co. of California, File No. W-P-C-5927, DA 88-504, para. 17 (released Apr. 12, 1988) ("Cerritos Order"). See also Pacific Bell Inc., Application File No. W-P-C-5384 (Letter from Chief, Domestic Facilities Division, Common Carrier Bureau to Director, Federal Relations, Pacific Bell, Oct. 29, 1984 ("Pac Bell/Palo Alto Order").

111/ Much of this discussion is based on Brenner and Price, § 11.03[4][a], at 11-24 to 11-28.

telephone company forced the cable company to do business with it in lieu of providing requested pole attachments.[112] The ability and incentive of telephone companies to limit competition was especially important during the 1970s and early 1980s when cable construction was booming. Throughout that period, telephone companies appeared to abandon efforts to seek 214 construction approvals for video channel service, except where they sought to provide cable service under the rural waiver provisions.[113] In the 1980s, there has been renewed interest in telephone-constructed cable facilities, although, again, few actual facilities have been constructed. It has been suggested that:

> [p]artly because of the slowdown in urban cable builds and economic shake-out in the cable industry generally, telcos have come to be respected by franchisors and franchisees alike for their deep pockets and willingness to commit construction funds. For their part, urban telcos, generally belonging to RBOCs, may see cable as a quasi-new line of business open to them without divestiture-decree waiver and one they are already well suited to enter.[114]

The Commission's Common Carrier Bureau granted Section 214 approval to Wisconsin Bell to construct a cable system in Brookfield, Wisconsin in 1984.[115] It also granted approval in 1985 to Chesapeake and Potomac Telephone to construct and operate the transmission lines using telephone ducts while District Cablevision, Inc. provides video program service in the District of Columbia.[116] In 1986, Ohio Bell was granted approval to build a cable system in Cleveland[117] and Southern Bell received approval to build a system for a

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112/ Better T.V. Inc., of Duchess County v. New York Telephone Co., 31 FCC 2d 939, 966 (1971).

113/ 47 C.F.R. § 63.58 (1986).

114/ Brenner and Price, § 11.03[4][a], at 11-25.

115/ Wisconsin Bell, Inc., 56 R.R. 2d 1262, rev. denied, FCC 84-618 (released Dec. 13, 1984), recon. denied, FCC 85-348 (released July 11, 1985), aff'd sub nom. Paragon Cable Television, Inc. v. FCC, 822 F.2d 152 (D.C. Cir. 1987).

116/ Chesapeake & Potomac Tel. Co., 57 R.R. 2d 1003, recon. denied, FCC 85-279 (released May 30, 1985).

117/ The Ohio Bell Tel. Co., 1 FCC Rcd 942 (1986).

private developer in Orlando, Florida.[118] Most recently, the FCC's Common Carrier Bureau granted a 214 approval to GTE, Inc. to construct a cable facility for Apollo Cable in Cerritos, California.[119] In these cases, a franchise was already awarded before the telephone company received construction approval.

By contrast, a few years ago, Pacific Bell proposed construction of a 422-mile network in California which would be available to various municipalities to lease video channel capacity, who in turn would select the program suppliers (or cable operators) for the municipality. Palo Alto, the primary community intended to use the system, rejected the plan, and the FCC subsequently denied Pacific Bell's Section 214 application to construct the facility.[120]

The prerequisite franchise appears to have been intended primarily to ensure that telephone companies could not force cable companies into using local telephone transport facilities. Conditions have changed in two important respects since its FCC adoption: (1) over 80 percent of the nation's homes are passed by plant constructed by cable companies; and (2) an explicit FCC rule requires telephone companies intending to provide channel service to show that the cable system had an opportunity to lease pole space at reasonable rates and that the option existed even before the cable franchise was granted. We are confident that these two factors will ensure that local telephone companies will not be able to force cable systems to use LEC transport facilities. However well intended, this prerequisite franchise requirement is no longer necessary and, more importantly, hampers programmers and others who might provide video services directly to subscribers over local broadband telephone facilities.

Thus, telephone companies should be given greater flexibility in proposing construction and leasing arrangements and should not have to obtain an agreement with

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118/ Southern Bell Telephone and Telegraph, File No. W-P-C-5803 (released Sept. 24, 1986).

119/ Cerritos Order.

120/ Pac Bell/Palo Alto Order. Pacific Bell was ultimately granted approval to construct cable facilities for lease to Cable Communications Cooperative. See Pacific Bell, 60 R.R. 2d 1175 (1986), recon. denied, 62 R.R. 2d 129 (1987), aff'd sub nom. Century Federal, Inc. v. FCC, No. 87-1046 (D.C. Cir. May 20, 1988).

a franchised cable operator (or franchising authority) before obtaining an FCC construction grant.

2. Permissible telephone activities related to video service:

Secondly, it would be helpful to clarify the range of activities local telephone companies could engage in while generally "providing video transport facilities." That term may lack the specificity needed to give guidance to companies considering deployment of facilities capable of carrying video signals. So long as services provided by a local telephone company are ancillary to the provision of video channel capacity and do not impair competition or diversity of programming services, we believe they should be permitted. Billing and collection services, order taking, and maintenance of facilities, for example, could be allowed without risking telephone company competitive or editorial control. The Commission should posit a rule describing the requirement that services provided by telephone companies be "ancillary" to the transport function and would not affect the editorial function of programmers. A rule would be preferable to a waiver process which can result in long delays in approval of broadband construction projects involving telephone companies. Similarly, a rule would reduce any ambiguity or confusion about the required procedures a firm must follow.[121/]

II. Restrictions on Telephone Company Participation

The Congress, the FCC, and the courts have all dealt with telephone involvement in video programming to varying degrees. There are rules in three forums which limit telephone involvement in the provision of video programming.

A. FCC Rules

Prior to 1971, local telephone common carriers were free to own and operate cable television systems within their

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121/ In NITCO, the Commission noted that "[i]t was only after a competitor of Northwest filed a complaint alleging that defendants were violating . . . our Rules that we became aware of NITCO's unauthorized construction of interstate lines within its telephone service area." NITCO at n.39.

service areas, and many did so.[122] The FCC adopted telephone-cable cross-ownership rules in 1970 to address the "anomalous competitive situation between cable systems affiliated with the telephone companies, and those which have no such affiliation, but have to rely on the telephone companies for either construction and lease of channel facilities or for the use of poles for the construction of their own facilities."[123]

The FCC rules prohibit telephone common carriers, either directly or indirectly, from providing cable television service in their telephone service areas.[124] Telephone companies are also prohibited from leasing channel or pole line conduit space, or making certain other arrangements with any affiliate if the facilities are to be used to provide cable service within the local telephone service area.[125] The rules do not prohibit telephone companies from leasing facilities in their service areas on a common carrier basis to franchised cable operators,[126] nor do they prohibit telephone companies from providing cable television service outside their service area. To date, however, few telephone companies have engaged in these activities.[127]

122/ Telephone companies affiliated with the Bell System, however, were precluded from cable television operations by the 1956 Western Electric Consent Decree. United States v. Western Elec. Co., 1956 Trade Cas. (CCH) para. 68,246 (D.N.J. 1956). See also Hart, The Evolution of Telco-Constructed Broadband Services for CATV Operators, 34 Cath. L. Rev. 697, 700-01 (1985).

123/ Section 214 Certificates, 21 FCC 2d 307, 323, recon, 22 FCC 2d 746 (1970), aff'd sub nom. General Tel. of the Southwest v. United States, 449 F.2d 846 (5th Cir. 1971).

124/ 47 C.F.R. 63.54(a) (1986).

125/ Id. § 63.54(b).

126/ The companies must, however, obtain FCC authority to construct such facilities pursuant to Section 214 of the Communications Act. See General Tel. Co. of California, 13 FCC 2d 488 (1968), aff'd sub nom. General Tel. Co. of California v. FCC, 413 F.2d 390 (D.C. Cir.), cert. denied, 396 U.S. 888 (1969).

127/ The largest telephone company providing cable service outside its telephone service area is Centel which owns and operates cable systems in seven states serving 521,000 subscribers.

The rules are rather narrowly crafted, permitting local exchange telephone companies to provide the full panoply of cable services directly to subscribers throughout the country except in their local service areas.

In addition, parties may petition for waiver of the general prohibition in cases where cable service (1) "demonstrably could not [otherwise] exist" or (2) upon other showing of good cause."[128] The telephone-cable cross-ownership rules have been amended by the FCC to streamline the waiver procedure and to create what has become a "blanket waiver" for telephone companies seeking to provide cable service to sparsely populated areas.[129]

Under FCC rules, construction of cable television facilities by a local telephone company in order to provide channel capacity to a cable operator requires Commission approval under Section 214 of the Communications Act.[130] The Section 214 approval process is the vehicle for FCC enforcement of the cross-ownership rule.[131]

128/ 47 C.F.R. § 63.56 (1986).

129/ Id. § 63.58. See also Telephone Co. CATV Cross-Ownership, 88 FCC 2d 564 (1981), recon. denied, 91 FCC 2d 662 (1982), aff'd sub nom. National Cable Television Ass'n v. FCC, 747 F.2d 1503 (D.C. Cir. 1984); Cross Ownership Rules, 82 FCC 2d 233 (1979), amended on recon., 82 FCC 2d 254 (1980), amended on further recon., 86 FCC 2d 983 (1981). For an discussion of the rural waiver, see Ferris, Lloyd and Casey, para. 9.13[3], at 9-37 to 9-40.

130/ Exchange telephone companies are not required to obtain 214 approval in two cases: (1) where the construction of video transport facilities is outside of the exchange telephone service area; or (2) if a nondominant carrier provides video transport facilities. 47 C.F.R. § 63.08(a), (b) (1986). All franchised exchange telephone companies are treated by the Commission as dominant carriers. See Competitive Carrier Rulemaking, 85 FCC 2d 1, 11, 23-24 (1980).

131/ NITCO's failure to file the required application pursuant to section 214(a) precluded not only the time exercise of our statutory right and obligation to pass upon a carrier's construction of interstate lines, but also deprived us of the vehicle by which we examine whether proposed construction by a telephone company of cable television

Most recently, the FCC's Common Carrier Bureau authorized GTE, Inc. under Section 214 to build a coaxial cable system in Cerritos, California.[132] The Bureau found that the conditions for a waiver were satisfied because "cable television service demonstrably could not exist except through" the arrangement proposed by GTE.[133]

In general, however, the Commission has followed a policy of strict prohibition on telephone-cable cross ownership.[134] The rule is based on numerous concerns cited in the FCC order, among them: (1) that if permitted to retail cable services, a local telephone company could (a) exclude others from entering the cable service business by controlling the pole lines and conduit space required for the construction and operation of a cable system, and (b) extend its monopoly position to broadband services and the new and different services forecast for the future; and (2) "the Commission's expressed long-range concern about a common carrier acting as a program originator."[135] The Commission believed that the cross-ownership rules were necessary for "preserving, to the extent practicable, a competitive environment for the development and use of broadband cable facilities and thereby avoiding undue and unnecessary concentration of control over communications media either by existing entities or other entities."[136]

B. Cable Act of 1984

The rules adopted by the Commission in 1970 were largely codified in the Cable Communications Act of 1984 to permit

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> facilities within its telephone service area would comply with our cross-ownership rules and policies.

NITCO n.39. See also National Cable Television Ass'n v. FCC, 747 F.2d 1503, 1506-1510 (D.C. Cir. 1984).

132/ Cerritos Order.

133/ Id. paras. 34-37.

134/ See, e.g., Glacier State Telephone Co., 57 R.R.2d 539 (1984); Sugar Land Telephone Company, 76 FCC 2d 230 (1980).

135/ Section 214 Certificates, 21 FCC 2d 307, 308, 314-15, 324 (1970).

136/ Id. at 325.

any common carrier to provide video programming to subscribers throughout the country, but not in its service area.[137] Three differences are noted between the FCC's rules and the Cable Act: (1) the effect of the Cable Act on the "rural blanket waiver;" (2) the Cable Act requires any entity, including a telephone company, to obtain a cable franchise before providing cable service (including video programming); and (3) the Cable Act did not codify the FCC's definitions of "control" and "affiliate" as used in the cross-ownership rules.

First, in the Cable Act, the Congress intended "to codify current FCC rules concerning the provision of video programming over cable systems by common carriers, except to the extent of making the exemption for rural telephone companies automatic."[138] The Commission subsequently eliminated the requirement that telephone companies intending to serve rural areas show that no cable system was under construction or in existence.[139] Today, in order to come within the blanket rural exemption, the Commission requires a telephone company simply to certify that it serves a rural area as defined in its rules.[140]

Second, where FCC rules are silent, Section 621(b) of the Cable Act states that "...a cable operator may not provide cable service without a franchise."[141] In addition, the legislative history of the Cable Act makes clear that the Act "does not prevent a common carrier from leasing or otherwise making available a part or all of the capacity of [a local distribution system owned by a common carrier] <u>to a franchising authority or to a cable operator who has received a franchise</u> from the franchising authority."[142]

Third, some have discussed the different treatment under the Cable Act and the FCC rules of the permissible business

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137/ 47 U.S.C. § 201(b) (1982).

138/ Cable Act Legislative History at 56, 1984 U.S. Code Cong. & Ad. News at 4693.

139/ <u>Implementation of the Provisions of the Cable Communications Policy Act of 1984</u>, 50 Fed. Reg. 18637, 18645-46 (1985).

140/ 47 C.F.R. § 63.09 (1986).

141/ 47 U.S.C. § 541(b) (Supp. III 1985).

142/ Cable Act Legislative History at 57, 1984 U.S. Code Cong. & Ad. at 4694 (emphasis added).

arrangements between a local telephone company and an "affiliated" cable system. The Cable Act simply prohibits telephone provision of video service in the telephone service area "either directly or indirectly through an affiliate owned by, operated by, controlled by, or under common control with the common carrier."[143] The Commission's rules define "affiliation," and "bar any financial or business relationship whatsoever...except only the carrier-user relationship."[144] The Commission recently clarified a decision, saying "[t]he key to the carrier-user exemption is whether the carrier is providing facilities as part of its services as a common carrier and whether such services are generally available."[145]

C. Modified Final Judgment:

Under the terms of a consent decree (the "MFJ") entered into between the U.S. Department of Justice and the formerly unified Bell system,[146] the subsequently divested Bell Operating Companies are generally restricted[147] within and outside of their local service areas from providing "information services," which are defined as:

> the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information which may be conveyed via telecommunications, except that such a service does not include any use of such capability for the management, control, or operation of a

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143/ 47 U.S.C. § 533(b)(1) (Supp. III 1985).

144/ 47 C.F.R. § 63.54, note 1 (1986).

145/ NITCO para. 8.

146/ United States v. AT&T, 552 F. Supp. 131 (D.D.C. 1982), aff'd sub nom. Maryland v. United States, 460 U.S. 1001 (1983).

147/ Under modifications to the MFJ, the BOCs may now provide voice message services, electronic mail, and information service gateways. United States v. Western Elec. Co., Inc, Civil Action No. 82-0192 (D.D.C. Mar. 7, 1988); United States v. Western Elec. Co., Inc., 673 F. Supp. 525 (D.D.C. 1987).

telecommunications system or the management of a telecommunications service.[148]

There has been no judicial or regulatory ruling on whether cable television service is included in this definition. Thus, if a Bell Operating Company[149] were freed from the FCC's telephone-cable cross-ownership rules and the Cable Act provision were repealed, the BOC still might be restricted from providing video programming services under the terms of the Modified Final Judgment. On the other hand, if the Modified Final Judgment were changed to permit the Operating Companies to provide information services, the Cable Act and FCC rules would still prohibit the Bell Operating Companies from providing video programming within their local service areas.

Prior to this study, NTIA had taken no explicit position on whether the Bell Operating Companies should be permitted to provide video programming in their local service areas. This agency has petitioned the FCC to assert jurisdiction over certain communications policy determinations implicated by enforcement of the Modified Final Judgment regarding the provision of information services by the BOCs.[150] Similar to our previous position on electronic publishing[151], we believe that an FCC public interest determination whether the Operating Companies should be permitted to offer specific services falling within the information service definition should be made by the FCC on a service by service basis. Our recommendation that local telephone companies provide video transport only is based on considerations discussed below, including a recognition that video services are, by their nature, much different than non-video information services (e.g., interactive security, emergency services, voice message services, electronic mail, or white pages.) In

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148/ MFJ, Section IV.J.

149/ The GTE Telephone Companies also operate under a Consent Decree arising from GTE's acquisition of the Southern Pacific Communications Company and the Southern Pacific Satellite Company. This Decree requires the GTE Telephone Operating Companies to offer information services under separate entity conditions. The definition of information services is essentially the same in the GTE and AT&T decrees. United States v. GTE, 603 F. Supp 730 (D.D.C. 1984).

150/ Petition for Declaratory Ruling of NTIA (filed Nov. 24, 1987).

151/ NTIA Domestic Study at 48.

addition, NTIA's support for FCC removal of certain line of business restrictions involving information services has never suggested changes in existing regulatory or statutory provisions applying to cable service. Thus, in view of the Cable Act prohibition on telephone provision of video programming, it would be erroneous to assume that this agency has supported telephone company provision of cable service or video programming provision in the service areas of local exchange telephone companies.

III. Reasons for the Programming Prohibition:

We turn now to reasons supporting the cross-ownership rules. Four concerns are grouped roughly as "traditional concerns" and three other issues are discussed separately.

A. Traditional Concerns

At least four concerns have been suggested as reasons to limit local telephone companies to providing video programming outside their local service areas only: (a) the ability of a telephone company to impede development of non-video broadband services; (b) the incentive and opportunity for a telephone company to cross-subsidize its operations; (c) anti-competitive abuses of facilities, pole attachment access and rates; and (d) control of program content, affecting diversity.

1. Non-video Broadband Services[152/]

At the time the FCC adopted its cross-ownership rules, they said that in the absence of competition, telephone companies may have the incentive to stop development of new non-video services or to manage their introduction to minimize losses for the telephone firms' existing services.[153/] Thus, new services might not be introduced as quickly as would be the case if an independent cable industry developed, potentially capable of providing competitive non-video broadband services.[154/]

152/ For the sake of simplicity we will refer to these services as "non-video services", although we recognize that some of these services (like teleconferencing) may involve graphics or video features.

153/ Section 214 Certificates, 21 FCC 2d 307, 324-325 (1970).

154/ Id.

In the intervening years, particularly the last decade, several nonvideo services have been introduced. By and large, information service providers are not affiliated either with telephone companies or with cable firms.

2. Local Telephone Company Incentive and Opportunity to Engage in Cross Subsidy

Another FCC concern was that telephone companies would have the incentive and ability to shift the costs and revenues of its unregulated activities to the detriment of consumers and competitors alike.[155] A telephone company, by virtue of rate-of-return regulation of its monopoly services has an incentive to allocate costs excessively to its regulated telephone accounts (because those costs are fully recoverable) and to attribute revenues excessively to its unregulated enterprises (for which there is no cap on profits).

Cost shifting on the part of the telephone company would have adverse consequences for both regulated ratepayers and cable competitors. Telephone service consumers would face higher rates due to the burden created by additional costs inappropriately shifted from cable services to regulated operations. Cable operators, on the other hand, could be placed at a competitive disadvantage due to the ability of telephone companies to reduce prices in the cable market.[156]

To the extent the cost allocation guidelines set out by the Commission[157] would be effective safeguards against such abuse, they would be helpful, and we have advocated their use in general with respect to Bell Operating Company provision of information services.[158] Here we believe, however, the video common carriage policy outlined above is preferable to telephone provision of video services, even assuming adequate nonstructural safeguards are in place.

155/ Id. at 308..

156/ Id. at 316.

157/ Report and Order in CC Docket No. 86-111, 2 FCC Rcd 1298, recon. 2 FCC Rcd 6283 (1987), petition for further recon. pending.

158/ Comments of NTIA in CC Docket No. 85-229, at 17 (filed Nov. 13, 1985).

3. Pole attachment access and rates

The ability and willingness of local telephone companies to deny or impede access to essential pole space was another rationale underlying the Commission's cross ownership ban.[159] Prior to the 1970 ban, telephone companies refused or delayed access to the necessary pole space, thereby effectively barring cable operators from entering the business in competition with a telephone company affiliate. In many cases where access was allowed, the rates charged were often unrelated to the costs of providing such facilities.[160] This history of abuse, coming at a time when cable service was expanding rapidly, was another reason the Commission concluded that the public interest demanded that telephone companies be restricted from providing cable service in their telephone service areas.

Even in construction-leaseback arrangements, where a local telephone company was not itself involved in provision of video programming, the Commission was concerned that a LEC could use pole attachments to favor cable operators leasing channel capacity.[161] As a result, the Commission established, as part of its cross-ownership rules, a requirement that a telephone company could provide channel facilities to a cable system only if the telephone company showed that the cable system involved had an option for pole attachment rights at reasonable charges. In addition, there could be no undue restrictions on the cable system, and this option must have existed when the franchise was granted as well as before the franchise was granted.[162]

Additionally, in order to correct perceived abuses in access and pricing by pole owners, Congress passed the Pole Attachment Act of 1978 which granted the FCC authority regarding regulation of pole attachments.[163] The Cable Act permits the states to exercise jurisdiction over pole attachment matters and a number of states have enacted pole

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159/ Section 214 Certificates, 21 FCC 2d 307, 327 (1970).

160/ Id. at 311.

161/ Siegel, The History of Cable Pole Attachment Regulation, 6 Comm. and the Law 9, 11-12 (1984).

162/ 47 C.F.R. §§ 63.54(b), 63.57 (1986).

163/ Pole Attachment Act of 1978, Pub. L. 95-234, 92 Stat. 35, as amended by Communications Amendments Act of 1982, Pub. L. 97-259, § 106, 96 Stat. 1091 (codified at 47 U.S.C. § 224 (1982 and Supp. III 1985).

attachment rules, statutes and/or complaint processes.164/ In some states, cable companies are left to negotiate agreements with local telephone companies regarding pole attachment rates, terms, and conditions. In other states the state commission has prescribed a formula based on the usable space criteria used in the Commission's pole regulations.

The introduction of these statutes and regulations following the passage of the cross-ownership rules has reduced somewhat the need for the cross-ownership rules to protect against pole attachment abuses. The issue of access to poles may be less serious than in the past, since over 80 percent of all U.S. homes are passed by cable today.

Conversely, however, there has been an extraordinary level of conflict, dispute, and litigation arising from the pole attachment issue.165/ The scope of the problem is not limited to future construction, moreover, since manipulation of existing pole attachment arrangements can also be a source of dispute.166/ Firms who would compete with local telephone companies (e.g. competitive cable companies or private fiber networks) might well still encounter problems in obtaining access or in maintenance, inspection, or other terms of agreement.

164/ 47 U.S.C. 224(c)(3) (Supp. III 1985).

165/ Comments of NCTA in CC Docket 87-266, at 6-14 (filed Dec. 2, 1987). As recently as 1984, the District of Columbia Circuit Court of Appeals recognized that telephone companies' control over pole attachments might enable them "to extract a monopolist's premium from providers of cable service," although the court noted that "[t]he opportunities for phone companies to extract such a premium have diminished with the passage of [the Pole Attachment Act]." National Cable Television Ass'n v. FCC, 747 F.2d 1503, 1505 and n.1 (D.C. Cir. 1984).

166/ Several Maryland cable companies recently alleged that some telephone companies are making excessive charges for maintenance and inspection (over $4,000 per mile, more than 18 times average for these items) and other abuses of pole arrangements. Cable Television Association of Maryland, Delaware and District of Columbia, et al. v. Chesapeake and Potomac Telephone Company of Maryland, Inc., Complaint filed with the Federal Communications Commission, Mar. 10, 1988.

4. Control Of Program Content and Diversity

A different concern over local telephone company provision of video programming arises from the potential problems associated with having a common carrier act as a programmer.[167] This concern results from the traditional responsibility of a common carrier under Title II of the Communications Act to "hold oneself out indiscriminately to all."[168] This objective may be frustrated if the same common carrier is also a content provider.[169]

In addition to our recommendation here that local telephone companies not be permitted to provide video services in their local service areas, others have advocated the separation of content and conduit, some commenting only on telephone companies and others speaking more broadly to include cable systems.[170] Centel, a telephone company which operates several cable systems outside its local service area, asserted that the Commission and the courts have an obligation to preclude monopolists from exercising media control to the exclusion of those with differing views.[171]

167/ Section 214 Certificates, 21 FCC 2d 307, 308, 314-15 (1970).

168/ National Ass'n of Reg. Util. Comm'rs. v. FCC, 525 F.2d 630 (D.C. Cir.), cert. denied, 425 U.S. 992 (1976).

169/ See National Ass'n of Reg. Util. Comm'rs. v. FCC, 533 F.2d 601, 608-609 (D.C. Cir. 1976).

170/ Hart, Telco-constructed Broadband Services, 34 Cath. U. L. Rev. 697, 734 (1985); Nadel, COMCAR: A Marketplace Cable Television Franchise Structure, 20 Harv. J. on Legis. 541, 548-551 (1983); Noam, Towards an Integrated Communications Market: Overcoming the Local Monopoly of Cable Television, 34 Fed. Comm. L. J. 209 (1982). In his order approving the MFJ, Judge Greene noted the "real potential for harm to First Amendment diversity principles" where a telephone company is also a information source. United States v. AT&T, 552 F. Supp. 131, 183-184 (D.D.C. 1982). The 1974 Cabinet Committee Report also recommended separation of these functions. Cabinet Committee Report at 29-30.

171/ Comments of Centel in CC Docket 87-266, at 27-28 (filed Dec. 2, 1987).

Others have discussed a separations policy more expansively.[172] One author has proposed a scheme christened "COMCAR" by which cable operators would be "limited to providing transmission services to 'video publishers' in much the same way that newsstands limit themselves merely to distributing periodicals."[173] In its "Promise versus Regulatory Performance" report, the House Subcommittee on Telecommunications supported the "separations" policy advocated by the Cabinet Committee and concluded that:

> [t]he sound approach is to establish a market structure for cable that in itself serves the public interest, (i.e., the cable operator wants to lease channels or sell time on channels because that is his only business) -- and not to permit an industry structure that invites abuse and then close government regulation to deal with the abuse.[174]

Finally, the Cabinet Committee focused on the importance of keeping these content and conduit functions separate. They said:

> [b]y separating the distribution function...from the programming functions...the dangers of government intrusion and influence in programming can be avoided while the wide variety of competitors vying for the public's attention can be expected to produce a diversity of programming.[175]

The Cabinet Committee placed a high priority on maintaining the separation of content and conduit, rejecting the alternative of detailed regulation over the content of

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172/ See, e.g., Verrill, CATV's Emerging Role: Cablecaster or Common Carrier?, 34 J. Law and Contemp. Prob. 586, 608-609 (1969).

173/ Nadel, COMCAR: A Marketplace Cable Television Franchise Structure, 20 Harv. J. on Legis. 541, 552 (1983).

174/ Cable Television: Promise Versus Regulatory Performance, 94th Cong., 2d Sess. 90 (1976). Cable operators are required to set aside channel capacity for commercial leased access. See 47 U.S.C. § 532 (Supp. III 1985); Cable Act Legislative History at 30, 47-55, 1984 U.S. Code Cong. & Ad. News at 4667, 4684-4692.

175/ Cabinet Committee Report at 20.

programming.[176] The separation of facilities and programming, in contrast, permitted the development of an "essentially neutral distribution medium" in which the facilities operator "would be obliged to deliver the messages of channel users with as little regard to content as the Postal Service has for the content of the print media."[177]

Scholar Ithiel de Sola Pool observed:

> A major issue for the 1980s and 1990s will be how to prevent cablecasters from seeking the advantages of becoming publishing monopolists in their communities, controlling both the conduit and its content. The issue has not become salient yet, because cable is still nothing more than a marginally improved way of delivering television entertainment...[T]he public can still watch the same sort of material over the air or else buy cassettes or disks. But as more and more material migrates off the air onto pay channels, and as cable becomes the delivery system for all sorts of local and community and nonentertainment services, <u>it will become important that the monopolist of the conduit not have control over content.</u>[178]

Whether or not the question of separating cable systems becomes more pressing, these advocates of separating control of video content and conduit make a compelling case for retaining the video services restriction on local telephone companies.

The extent to which telephone companies have a first Amendment right to provide video programming has not been adjudicated. In arguing that the Bell Regional Holding Companies should not be kept from providing information services, for example, one RHC argued that, "Insofar as the RHCs propose to create such information, they are no different than any other information providers for the purposes of First Amendment analysis. Therefore, they may not constitutionally be excluded from doing so unless it is proven that such an exclusion is necessary to protect an

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176/ Id.

177/ Id.

178/ Pool at 172-173 (emphasis added).

important public interest."[179] The court has rejected this type of argument, however, responding:

> There is no merit to the contention raised by some that the information services restriction infringes the Regional Companies' own First Amendment rights. Like all business establishments, those engaged in, or those that, as the Regional Companies here, consider engaging in, publishing are subject to the antitrust laws. Moreover, common carriers are quite properly treated differently for First Amendment purposes than traditional news media.
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> * * *
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> These companies, which have never been publishers, thus cannot bootstrap their own failure to make the showing necessary for the relief of their obligations under an antitrust decree into an infringement of their First Amendment rights.[180]

Finally, we are aware that, historically, the primary function of telephone companies has been to provide transport facilities on a common carrier basis. To permit these firms to exercise highly discriminatory functions such as program selection, marketing, and origination is an unnecessary step with unforeseeable consequences. In contrast, we believe that maintaining the "bright line" between content and conduit in the applicable video services will further the first amendment goals of access and diversity of viewpoints. This conclusion is consistent with prior findings of the FCC,[181] the 1974 Cabinet Report and the Congress as well as

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179/ Memorandum for US West, Inc. Presenting Points and Authorities in Support of its Motion for Relief from Line of Business Restrictions Imposed by § II(D) of the Modification of Final Judgment and Responding to Comments 35, United States v. Western Elec. Co., Inc., 673 F. Supp. 525 (D.D.C. 1987).

180/ United States v. Western Elec. Co., Inc., 673 F. Supp. 525, 586 n.273 (D.D.C. 1987) (citations omitted).

181/ See National Cable Television Ass'n v. FCC, 747 F.2d 1503, 1506 (D.C.Cir. 1984) ("Because the FCC does not wish to further such anticompetitive practices by phone companies and because the FCC often considers diversity in the provision of media services to be an end in itself, the FCC has frequently regulated the role of local telephone companies in providing cable

our general stance favoring BOC provision of non-video information services.

5. Other Considerations

In addition to the traditional reasons for the cross-ownership rules and our view that diversity of video choices will be maximized by local telephone companies serving as video transport providers only, we briefly describe other matters which should be evaluated by public policy makers judging whether to permit LECs to provide video services within their service areas.

a. Diversification of Telephone Operations

Telephone company entry into the provision of video services within their local telephone serving areas could dramatically alter the complexion of local telephone operations if the Commission were to follow its previous rulings that video service is an unregulated service.182/

For example, as of June 30, 1986 the NYNEX Corporation (the fourth largest BOC) had $20.3 billion in assets attributable to regulated operations and $699 million in assets assigned to unregulated activities.183/ Thus, approximately 3.4 percent of NYNEX assets support its unregulated activities. Entry into the cable television business, even on a modest scale could radically change this picture.

To illustrate the entry by a much smaller telephone company into cable on a scale that has proven to be advantageous to the company, we looked at the Centel Corporation. Centel, the nation's 12th largest local telephone company and which has actively pursued cable operations outside its telephone serving area, had $505 million in cable assets at year end 1987.184/ With over 500,000 subscribers Centel Cable is among the top 25 cable

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television") (citation omitted).

182/ Cerritos Order para. 39 ("Because General is a Tier I carrier, we will expect General to follow the accounting methodologies adopted in the Joint Cost Order . . . and to treat all costs associated with the Cerritos project as unregulated activity costs")

183/ NARUC Audit Report on NYNEX Corporation and Affiliates, Mar. 24, 1987, at 1-12.

184/ Centel Cable Corporation 1987 Annual Report.

system operators and has a market value of approximately $1 billion.[185] If NYNEX Corporation, (approximately 12 times larger than Centel [186]) were to acquire Centel's cable systems, the $1 billion investment would increase unregulated NYNEX holdings by 243 percent.

Another indication of the effect of LEC entry into cable is demonstrated by noting that if NYNEX purchased just two franchised cable operations in its serving territory, for example, the Cablevision system on Long Island, and Manhattan Cable in New York City, the market value would be approximately $960 million dollars,[187] more than doubling NYNEX's unregulated holdings.

Even on the conservative level suggested above, local telephone ownership and operation of cable systems could translate into an almost instantaneous doubling of unregulated operations.

b. Concerns about Cable Concentration and Vertical Integration

To the extent that concerns have been expressed over the ability of cable operators to exercise excessive market power through increasing concentration and vertical integration (See Chapters 5 and 6) those problems could be partially attenuated if transport is increasingly made available on a common carrier basis. A program supplier would be able to lease channel(s) directly or use other program retailers to reach viewers, an alternative which should help mitigate whatever unequal bargaining power might exist between program suppliers and MSOs.

The ability of cable operators to secure exclusive rights to programs and networks then, would become more

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185/ This estimate assumes an acquisition price of approximately $2000 per subscriber, which may be low in view of Centel Cable's above average 60.2 percent basic penetration rate.

186/ NYNEX's 1986 revenues were $10,394,582,176 compared to Centel's 1986 revenues of $833,000,000. United States Telephone Ass'n, Phone Facts 1987.

187/ Cablevision Long Island, with 252,661 basic subscribers, and Manhattan Cable New York City, with 227,800 basic subscribers, multiplied by an assumed price per subscriber of $2000. Paul Kagan Associates, Cable TV Financial Databook, at 57 (June 1987).

important, much like the exclusive affiliations broadcast networks enter with stations and the individual program contracts made by independent stations with syndicators. (See Chapter 7.)

On the other hand, if local telephone companies were permitted to retail video programming to subscribers in their telephone service areas, they might be able to wield even greater market power than cable firms do (today and in the future), and to engage in the possible abuses arising from vertical integration and concentration.

The gains in terms of competition and diversity from this approach can only be realized if the transport or channel capacity continues to be made available on a regulated, common carrier basis. As a common carrier, telephone companies would be required to offer video transport to all users on a nondiscriminatory basis. This requirement protects against telephone company incentives to use their monopoly power in the local telephone service market to extract premiums from some users or to favor other users. Under regulation, local telephone company provision of cable facilities would be subject to tariff requirements as well as complaint processes.[188/] The common carrier approach would underscore the main business goal of the transport provider, namely, to maximize traffic volume from many subscribers. In order to do so, common carriers have incentives to make improvements in the network, provide better service, and run more efficient operations, activities which serve the public interest. Appropriate measures should be taken so that costs are recovered, generally, from the actual cost-causers and that existing rate payers are not harmed.

Conclusion

As technology advances and expands our means of distributing information we must continue to be sensitive to the diversity issue, and insofar as possible, rely on increased competition to deliver better quality video service, greater choice, and other public benefits. In the final analysis, it is the policy option that best advances both of these objectives that is our choice. Increased competition and diversity will occur under our recommendation without regard to whether a community has one or more broadband wire facilities. Facilitating local telephone companies to provide video common carriage will result in more competitiveness and diversity in the video market.

188/ See 47 U.S.C. §§ 202, 203, 208 (1982).

Chapter 4

Broadcast Cable Cross Ownership

Since 1970, FCC rules which were codified in the Cable Act of 1984 have prohibited the common ownership of a television broadcast station and cable system within the same market if any portion of the cable system was within a broadcast station's predicted Grade B contour.[189] There are no restrictions, however, on common ownership of cable systems and television broadcast stations outside the same market.[190] As a result, as of 1987, such well-known broadcast entities as Cox, Tribune, Hearst, and Scripps Howard own cable systems in markets outside of their service areas.[191] The Commission has also permitted a handful of stations with "non-egregious" interests (i.e., where more than one broadcast station serves the cable community) to retain their cross-ownership in a co-located cable system/broadcast station.[192]

While common ownership of broadcast stations and cable systems is permitted on a limited basis, FCC rules[193] continue to prohibit the three television networks (ABC, CBS,

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189/ Second Report and Order in Docket 18397, 23 FCC 2d 816, 820-821 (1970). See also 47 U.S.C. § 533 (Supp. III 1985); 47 C.F.R. § 76.501 (1986). The predicted Grade B contour is a line on a map connecting points of equal signal strength theoretically broadcast from a given television transmitter. Within this perimeter, it is estimated that at least 50 percent of viewing locations, with a 30 foot high outdoor antenna, may expect good to excellent reception 90 percent of the time.

190/ In addition, the Commission's rules provide for a waivers if it could be shown that the cross-ownership prohibition would not result in greater diversity. Second Report and Order in Docket 18397, 23 FCC 2d 816, 821 (1970).

191/ 1987 Broadcasting/Cablecasting Yearbook, at D-324-327. As of 1984, broadcasters (radio and television) owned 32 percent of cable systems. 1984 Television & Cable Factbook (Services Volume), at 1726.

192/ Third Report and Order, Docket No. 20423, 97 FCC 2d 65 (1984). At the time, there were 13 non-egregious cross-owned interests. About 10 such cross-owned interests remain.

193/ The Cable Act did not codify the prohibition on television network/cable system ownership.

NBC)[194] and their owned and operated stations from holding an ownership interest in any cable system (i.e., both within and outside their service area).[195] Network affiliates, however, are subject only to the restriction on cross-ownership within the same market.

The basis for the ownership restrictions was twofold: to encourage diversity of programming and the expression of a variety of viewpoints, and to safeguard against undue concentration of economic power.[196] In recent years, however, the Commission has begun to reexamine the rationale supporting its ownership rules on networks and broadcasters, questioning whether ownership restrictions remain necessary to promote these goals.

In 1982, the Commission issued a Notice of Proposed Rulemaking proposing repeal of the television network/cable system cross-ownership rule based on two factors: (1) studies suggesting that the network/cable cross-ownership prohibition was not "soundly based," and; (2) changes in the video marketplace which had occurred since 1970 and would occur in the foreseeable future.[197] Comments were filed in that proceeding, with most parties supporting repeal of the network cross-ownership restrictions.[198]

This section will examine the rationales (and goals underlying them) which formed the basis for the cross-

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194/ For purposes of this analysis, the definition of "national television networks" has been taken from the FCC's cross-ownership rules. 47 C.F.R. §76.501(1) (1986). To date, no ruling has been made as to the status of Fox Broadcasting for purposes of the cross-ownership rules.

195/ Second Report and Order in Docket 18397, 23 FCC 2d 816, 821 (1970). In 1981, the FCC granted a waiver to CBS to serve a limited number of cable subscribers (no more than one-half of one percent of total U.S. cable subscribers, or 90,000, whichever was greater). Memorandum Opinion and Order, 87 FCC 2d 587 (1981). The following year, however, CBS sold its cable interests.

196/ See, e.g., Report and Order in Gen. Docket 83-1009, 49 Fed. Reg. 31877, 31884 (1984).

197/ Notice of Proposed Rulemaking in CT Docket 82-434, 91 FCC 2d 76, 81 (1982).

198/ To date, the docket remains open, with no action apparently expected in the near future.

ownership restrictions on networks and broadcasters. We will first assess the validity of those earlier rationales within the context of today's video marketplace. For example, does the strong growth in the number of conventional broadcast TV outlets (e.g., independent stations) and advent of new distribution technologies (e.g., MMDS, home earth stations, VCRs) since 1970 suggest that a change in the rules may be warranted? Based upon this analysis, we then will consider those options which can best promote the goals of competition in the economic marketplace and diversity in the marketplace of ideas. Finally, we recommend that the cross-ownership rules be modified as follows: (1) eliminate the restriction on television network ownership of cable systems; and (2) allow broadcast stations to own cable systems within their service area on a waiver basis where the applicant has shown that cross-ownership will not lessen economic competition and diversity in that market. The latter proposal will require that the Cable Act of 1984 be amended to provide the FCC with clear authority to permit permanent waivers.

I. Rationale for Restrictions

In its initial consideration of cross-ownership rules in 1965, the FCC viewed cable as a complement to broadcasting, not a competitor.[199] As such, early concerns about cross-ownership were limited. The Commission was only concerned that a co-owned cable system might be used to enhance the competitive position of the broadcast owner in competition with other broadcasters (i.e., by not allowing competing broadcasters carriage on the cable system or by technically deficient carriage of other broadcast stations).[200] Adoption of "must carry" rules in 1965[201] was thought to eliminate this risk.[202]

By 1970, perceptions of the cable television industry began to change. It addition to its role as a distribution medium for broadcast television programming, cable began to provide local origination programming, cable networks, and

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199/ Further Notice of Proposed Rulemaking in Docket 20423, 81 FCC 2d 150, 154 (1980).

200/ First Report and Order in Docket 15415, 1 FCC 2d 387 (1965).

201/ First Report and Order in Docket Nos. 14895 and 15233, 38 FCC 683 (1965).

202/ First Report and Order in Docket 15415, 1 FCC 2d 387, 388 (1965).

other new services (e.g., data transmission). As cable television began to be viewed as a potential competitor to local broadcasters in the same market, concerns about cross-ownership and concentration also expanded. For the first time, the FCC recognized the "potential conflict of interest" inherent in cable/broadcast competition that could adversely affect program diversity if cross-ownership in the same markets were permitted to continue.[203]

The Commission was primarily concerned that a broadcast station (whether a network affiliate or independent), would be encouraged to restrict other broadcast and cable originated programing carried on its cable system in order to maximize the for its programming. In addition to reducing the level of program diversity within local markets, the Commission was concerned that television network ownership of cable systems might hinder the development of new "cable-oriented" networks.[204] The result would be "a dampening effect on potential programming competition on the national level as well."[205] Finally, there was also a First Amendment concern that allowing cable-broadcast cross-ownership would reduce pubic access to the media by reducing by one the number of outlets or "gatekeepers".[206]

Despite these assertions, no economic analysis was presented at the time the cross-ownership rules were adopted (or since then) to suggest a need for the prohibition.[207] For example, while the 1970 Order noted that 37 percent of

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203/ Second Report and Order in Docket 20423, 55 FCC 2d 540, 542. See also Further Notice of Proposed Rulemaking in Docket 20423, 81 FCC 2d 150, 155 (1982).

204/ Second Report and Order in Docket 18397, 23 FCC 2d 816, 821 (1970). See also Notice of Proposed Rulemaking in CT Docket 82-434, 91 FCC 2d 76, 82 (1982).

205/ Second Report and Order in Docket 18397, 23 FCC 2d 816, 819 (1970).

206/ Office of Plans and Policy, Federal Communications Commission, FCC Policy on Cable Ownership at 74-75 (Nov. 1981) ("FCC Cable Ownership Report").

207/ See, e.g., Notice of Proposed Rulemaking in CT Docket 82-434, 91 FCC 2d 77 (1982); S. Besen, T. Krattenmaker, A. Metzger, and J. Woodbury, Misregulating Television 151 (1984) ("Besen"); FCC Network Inquiry Special Staff, New Television Networks: Entry, Jurisdiction, Ownership and Regulation, Final Report, Vol. I, 433 (1980) ("Network Inquiry").

cable systems nationwide were owned by broadcasters, no data were presented to indicate the number of broadcast/cable combinations in the same markets, the focus of the Commission's concern,[208] nor were data presented on the number of network/cable cross-ownership interests. Finally, no analysis was undertaken to assess the operation of cross-owned broadcast/cable and network/cable systems. Instead, the basis for the rules appears related to more general concerns in the late 1960s with the degree of national and local concentration in the broadcasting industry.[209]

II. Reexamination of the Cross-Ownership Rules

A. Network Inquiry

In the early 1980s, the FCC's staff released three reports in which the continued need for the cross-ownership restrictions was questioned. First, in the October 1980 Network Inquiry report, the staff concluded that "the Commission had failed to appreciate that such a rule (network/cable cross-ownership) prohibits the networks from engaging in some integration into cable system operations ... that could enhance efficiency and lower the price and increase the quality of cable service to both advertisers and viewers."[210]

B. OPP Report on Cable Ownership

In 1981, the FCC's Office of Plans and Policy (OPP) issued a report concurring with the Network Inquiry staff that the television network cross-ownership rule was unwarranted and might prevent potential benefits such as increased efficiencies and lower costs.[211] With respect to

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208/ Telecommunications in Transition, at 294. In its reconsideration of the Second Report in 1973, the Commission cited data from Newhouse Broadcasting Corporation which indicated that at date of issuance of the 1970 Order, 10 percent of all cable subscribers (approximately 400,000) were served by systems cross-owned with co-located television broadcast stations. Memorandum Opinion and Order in Docket 18397, 39 FCC 2d 377, 392 (1973).

209/ Id.

210/ Network Inquiry, Vol. I, at 435.

211/ See FCC Cable Ownership Report.

the local broadcast cross-ownership rule, the report suggested that: (1) increases in the number of channels available on cable systems, (2) development of numerous video substitutes to cable, and (3) consumer demand for existing cable programming services ensured that most local distribution markets were "conducive both to competition in the economic marketplace and competition in the marketplace of ideas."[212] For those markets with few alternative media outlets, it was suggested that the antitrust laws and franchising authorities could effectively deal with any potential problems.[213] If these options were judged as insufficient, however, retention of a limited cross-ownership rule (for markets with few independent media outlets) was recommended.[214]

Finally, the OPP report dismissed suggestions that cross-ownership would substantially increase local advertising rates,[215] arguing that: (1) the wide range of advertising choices (e.g., other television broadcast stations, radio, newspapers, magazines, etc.) would curtail the ability of the cross-owned system to exercise market power, and (2) antitrust laws could be enforced, if necessary.[216]

C. OPP Concentration Report

The OPP staff also examined the question of concentration the following year (1982) within the context of the FCC's proceeding to repeal the network/cable cross-ownership rules.[217] This report argued that as the national program distribution market consisted of many local distribution markets, the issue of market concentration should focus on the level of competition in those local

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212/ Id. at 54-55.

213/ Id. at 80.

214/ Id. at 81.

215/ While the impact of cross-ownership on the advertising market was not mentioned in the 1970 Order, the rules may have important implications, particularly for the goal of promoting diversity. In both national and local markets, advertisers traditionally have provided the financial support for broadcast programming.

216/ Id. at 74.

217/ Notice of Proposed Rulemaking in CT Docket 82-434, 91 FCC 2d 76 (1982). This proceeding remains open.

markets. Where those markets were competitive, the goals of diversity and competition would be realized and the television network cross-ownership rule would be unwarranted.[218] For non-competitive local markets, the report recommended that the FCC "scrutinize mergers and acquisitions for their effect on concentration, rather than adopt a flat ban."[219]

III. Changes in the Video Marketplace

The video marketplace has changed significantly, particularly at the national level, since the cross-ownership prohibitions on the television networks and broadcast licensees were adopted in 1970 and since the FCC last examined the network rule six years ago. At the time the cross-ownership rules were adopted, there was little competition in either the local or national program distribution markets. The television networks had market power both within the local distribution market and national programming market. In part that situation was the result of government policies (e.g., channel allocation table, pay television and cable distant-signal importation rules) which may have precluded the development of additional television networks. Since 1970, however, regulatory changes and technological developments have helped to foster an increase in the number of participants in both markets.

A. Local Distribution Market

As noted earlier, the local video distribution market has expanded rapidly since the cross-ownership rules were adopted in 1970. Thus, while the three broadcast television networks (ABC, CBS, NBC) are still the most significant forces in the national and local markets (two-thirds of all stations are affiliated with the three networks and half of all viewing in cable households is still of the three networks[220]), their influence in the overall video

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218/ Office of Plans and Policy, Federal Communications Commission, Measurement of Concentration in Home Video Markets, vi (Dec. 1982).

219/ Id.

220/ As of January 1, 1987, there were approximately 1,000 broadcast television stations on the air. 1987 Broadcasting/Cablecasting Yearbook, at A-2. Of those stations, approximately 650 were affiliated with the three television networks. Business Week, April 13,

marketplace has diminished significantly, particularly in the past ten years.

Two important factors are responsible for the continuing decline of television network audience shares. The first has been the continued growth in the cable television industry, both in terms of households subscribing to cable and availability of alternative programming. Perhaps equally important has been the growth of independent broadcasters. Since 1981, the number of independent broadcast stations has grown from 135 to 310.[221] As a result of this growth, sixteen of the top 20 television markets have four or more independents, and 43 of the top 50 markets have at least two or more.[222] Total audience share for independents in those markets has increased to 21 percent, compared to 14 percent in 1980.[223]

As a result of this decline in their audience shares, the networks have experienced some softness in their advertising revenues. In 1985, for example, network advertising revenues decreased by 3 percent, the first decline since Congress banned cigarette commercials on television in 1971.[224] While revenues increased by 2.5 percent in 1987 to $8.8 billion,[225] the figures are still well below the double-digit increases experienced in previous years.[226] Moreover, as cable viewership grows and cable advertising rates become more competitive with broadcast

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1987, at 104. Cable Advertising Bureau reported that the three networks had a combined viewing share of 48 percent in cabled households in 1987. Cable '88, Cable Advertising Bureau.

221/ "Good Signs for TV Independents," New York Times, January 22, 1988, at D-1. (Source: Paul Kagan Associates, Inc.)

222/ Channels, January 1988, at 64.

223/ NCTA Position Paper on Syndicated Exclusivity, May 1987, Table 7.

224/ "Culture Shock Rattles the TV Networks," Fortune, April 14, 1986, at 25.

225/ Communications Daily, February 19, 1988, at 10.

226/ Television Advertising Bureau, Trends in Advertising Volume (June 1987).

stations, cable should be an increasingly attractive advertising medium.227/

While the foregoing discussion indicates a clear trend towards greater competition in the local distribution market than existed in 1970, what is less certain is whether the increase in alternative distribution outlets is sufficient to ensure that the same market is effectively competitive. It is beyond the scope of this study to undertake an economic analysis of whether the local video distribution market is not effectively competitive. Further work is warranted to define the local video distribution market, although as one group of authors has noted, the task is challenging:

> Is the local video market the sum of activated channels that viewers in fact receive? Or does it include those channels that could be received if viewers subscribed to them? In either event, does it include viewer-activated channels (such as those provided by renting or purchasing videocassettes) or potentially available channels (such as those served by direct broadcast satellites)? Are market shares to be measured in dollars rather than viewers or channels? If so, does the market consist of total receipts, including advertiser, viewer, and public expenditures? Again, does it include actual revenues from videocassettes and potential income from emerging technologies?228/

Absent a clear definition of the market, they argue that "no rational claim can be made that the network-cable cross-ownership ban prevents concentration in local video markets."229/

B. National Programming Market

As with the local distribution market, the national programming market, due primarily to the large demand for

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227/ For 1987, cable advertising revenues rose 15% to $865 million, with estimates for 1988 exceeding $1 billion (a 20 percent increase). "Cable Television Ad Revenues Poised for Growth in 1988," Wall Street Journal, Jan. 22, 1988, at 32; "Baruch Says Cable Takes Advantage Of Web 'Chaos'," Television /Radio Age, Jan. 11, 1988, at 40.

228/ Besen, Misregulating Television, at 151.

229/ Id. at 152.

cable programming, has flourished since 1970.[230] As noted earlier, there are at least 64 national basic and pay service cable channels,[231], as well as 22 regional cable networks.[232] As recently as 1981, there were only 34 national basic and pay cable networks.[233] The development of "superstations" (broadcast stations retransmitted by satellite to cable systems) was aided by such factors as: (1) satellite technology and deregulation (2) preferred treatment (e.g., compulsory license and "passive carrier" exemption) under the Copyright Act of 1976; and (3) repeal of the FCC's syndicated exclusivity and distant signals rules.[234]

The cable industry is expanding its base of cable-exclusive programming. Over the past six months, new programming services have included The Fashion Channel, The Travel Channel, Shop TV, and You TV (health and fitness channel).[235]

Through financial support of cable networks, the television networks have helped foster cable-exclusive programming. For example, Capital Cities/ABC owns 80% of ESPN, as well as 33% of Lifetime and the Arts & Entertainment networks.[236] NBC as well owns 33% of the Lifetime network.[237] In addition, NBC recently acquired a majority interest in Tempo Enterprises from TCI. As part of that deal, NBC reportedly promised to launch two new programming services which TCI, in turn, agreed to carry on its cable systems.[238]

230/ As noted earlier, imposition of the Financial Interest and Syndication Rules also spurred the development of independent program producers for broadcast television.

231/ Broadcasting, November 23, 1987, at 41-2.

232/ Comments of Motion Picture Association of America in Gen. Docket 87-24, at App. C-2, (filed July 22, 1987).

233/ FCC Cable Ownership Report, at 117-8.

234/ See discussion at Chapter 7, infra.

235/ Broadcasting, Mar. 28, 1988, at 46; Nov. 23, 1987, at 33.

236/ Broadcasting, Nov. 23, 1987, at 34.

237/ Id.

238/ Communications Daily, May 3, 1988, at 1.

NBC views the cable programming business as an opportunity to: (1) increase company sales and revenues; (2) capitalize on cost efficiencies inherent in using its programming units (e.g., news, sports) for both cable and broadcast operations; and (3) acquire a financial interest in programming which might later be profitable in cable syndication.239/ With respect to the last point, one cable interest suggests that cable programming "is a way for [television networks] to get started so that when the financial interest rules are ended or relaxed in a few years, they have a production capability up and running."240/ Finally, one ABC executive has suggested that with declining network shares, generally at the expense of cable, "it made sense to get involved in that which would do the eroding."241/

At the same time the television networks have shown an interest in the provision of cable programming, some cable services are seeking to serve as program suppliers to broadcasters. One deal recently announced will permit Fox Broadcasting to air Showtime's "It's Garry Shandling's Show," 30 days after each episode is carried on Showtime. Recent reports indicate that approximately one dozen programs which had run exclusively on cable have since been sold to broadcasters.242/

In addition, some cable networks have taken an interest in purchasing the syndication rights for television network programming. Recently, the USA Network announced that it had acquired the rights to "Murder She Wrote," and "Miami Vice." Another cable network, Lifetime, has acquired the rights to "Cagney & Lacey." In part, the ability of cable networks to acquire these television network programs is due to substantial growth in cable advertising revenues. Cable

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239/ Broadcasting, Nov. 23, 1987, at 34.

240/ Comments of Fred Dressler, vice president of programming at ATC, as reported in Broadcasting, January 25, 1988, at 46.

241/ Comments of Herb Granath, president of ABC Video Enterprises, as reported in Broadcasting, January 25, 1988, at 43.

242/ "Cable Television Channels Emerge As Important Sources of Programs," Wall St. J., March 16, 1988, at 33. Unlike the three major broadcast networks, cable networks are permitted to own the syndication rights to programs.

networks are also improving their ability to identify and measure their audiences to potential advertisers.

As a result of these developments, the earlier rationales put forth as reason to institute cross-ownership rules no longer appear valid in today's marketplace. Cable has emerged as an important source of programming, not only for itself, but increasingly for broadcast television stations. The ability of a television network to foreclose competing cable programmers through ownership of cable systems is extremely unlikely. Even if a network could acquire the number of cable systems necessary to influence the success or failure of a new cable network, however, there is no evidence to date in the cable industry to suggest that MSOs favor their own programming to the exclusion of unaffiliated programming and no reason to think networks would behave differently from other MSOs.[243/]

Recommendation

A. Eliminate Network/Cable Cross-Ownership Rule

As the previous discussion has indicated, the bases for the network/cable cross-ownership rules cannot withstand empirical or theoretical analyses. While the television networks continue to be significant players in the video market, their influence has diminished greatly since the rules were implemented in 1970. This diminished influence translates into a lessened ability to employ cross-ownership as an effective tool to reduce competition, either from competing television or cable networks.[244/] In fact, recent statements and actions indicate growing concern that cable

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243/ To the extent that vertical integration creates other problems, however, broadcast networks would be the same as other cable MSOs. See discussion at Chapter 6, *infra*.

244/ As observed by the National Cable Television Association in its comments filed with the FCC in 1982, "[t]he broadcast networks may still have the incentive to use ownership of cable systems to stifle cable's development as a medium and to thwart the growth of competing cable networks that dilute their audiences for broadcast programming. However, they no longer have the ability to achieve these goals." Ferris, Lloyd, and Casey, at 9.09[4], n.15.

may now be the dominant video medium in many markets.[245/] Concerns have also been raised with respect to the cable industry's role in the national programming supply market.[246/]

As such, the network/cable cross-ownership rule appears to serve only as a poor mechanism by which to address the overriding public interest concern: preventing any one firm from acquiring market power in the local and national video markets. Ownership restrictions based on the technologies employed for distribution (broadcasting vs. cable)[247/] not only ignore this overriding public interest concern, but also may be counterproductive, by limiting competition for control of local outlets.

Continuation of the ownership restrictions may also impose costs on the public in terms of potential lost efficiencies that might be realized by vertical integration (e.g., use programming units for both cable and broadcast operations). The accelerated pace of vertical integration within the cable industry in the past several years suggests the importance placed upon it.

Administratively, it appears that eliminating the network/cable ownership restriction is not precluded by the Cable Act.[248/] With a docket (CT Docket 82-434) still open on this issue, moreover, the Commission could act swiftly on this recommendation. Thus, we recommend that the FCC once again ask for comments in its proceeding to reflect

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245/ This statement appears to be borne out by the statements and actions of the broadcast industry in wake of the recent court action striking down the FCC's must carry rules. See, e.g., Communications Daily, Jan. 15, 1988, at 4; Broadcasting, Dec. 21, 1987, at 32, 49.

246/ See, e.g., Second Report in Gen. Docket No. 86-336, FCC 88-67 (released Mar. 11, 1988); First Report in Gen. Docket No. 86-336, 2 FCC Rcd 1669 (1987).

247/ To the extent that telephone companies are permitted greater regulatory flexibility in providing transport facilities for the provision of video programming (as recommended in Chapter 3, supra), concerns about television network ownership of cable systems should be diminished further.

248/ While Section 613(a) of the Cable Act codified the Commission's rules prohibiting ownership of a cable system and co-located broadcast station, the Act does not specify any restriction on the networks.

marketplace changes which have occurred since the first round of comments six years ago and urge repeal of the network/cable cross-ownership rule.

B. Allow Co-located Broadcast/Cable Ownership Through Waivers

A closer question is raised by examining the need for a local rule. Unlike the television networks, whose marketplace is primarily the national audience and advertisers, broadcasters focus on the local marketplace. There they must compete with all other television broadcasters (including network-affiliated and owned stations and independents), and cable networks for a share of the local audience, and the advertising dollars which are based upon those market shares.[249/]

Maintaining the existing prohibition, therefore, ensures that local ownership of the cable system will not permit a television broadcaster to use this control to enhance his competitive position at the expense of other local broadcasters (e.g., by refusing carriage on the cable system, or giving them an undesirable channel position on the cable system), thereby potentially reducing economic competition in the market as well as program diversity for viewers. It cannot be concluded however, that absent cross-ownership rules, anti-competitive harms would result. For example, even in the absence of "must carry" rules pressure from viewers may make it difficult for the cross-owned system to drop popular broadcast stations and basic cable networks. Nor must there be an inherent conflict between the operation of a television broadcast station and cable system. For example, while carriage of a cable network might result in a loss of advertising revenues for a broadcaster's programming, it may be offset by additional revenues generated from the cable programming.

The present rule also fails to take into account differences between local distribution markets. Thus, while cable system operators generally may possess market power, that may not be the case within specific local markets which are fully competitive.

Continuation of current broadcast/cable cross-ownership rules also may hinder any efficiencies associated with cross-ownership at a cost which appears far greater than necessary

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249/ At the same time, television broadcasters also compete generally with other media (e.g., radio, newspapers) for the local advertising market.

to protect against the possibility of lessened economic competition and program diversity in certain markets. The main benefit of cross-ownership would be the ability of local broadcast stations to take advantage of the cost efficiencies inherent in the ability to consolidate production and administrative operations. One result might be an increase in local origination programming.250/

Cross-ownership may serve as a means of preserving or promoting television service in certain markets. As Commissioner Robert Lee argued in his dissenting statement to the cross-ownership Order in 1970:

> I believe UHF should be encouraged to own and operate cable in the same market where they have a station on the air. Such an added source of revenue may well keep a station on the air during its developmental period and thus ensure service to rural areas not capable of being wired.251/

Similarly, the benefits of increasing the competitiveness of an economically ailing station and maintaining its operations by allowing its purchase by a cable system should outweigh any adverse effect of such ownership combinations on diversity.

In the past, the Commission has granted waivers of its other ownership rules. For example, the Commission has granted waivers to its one-to-a-market rule for AM-UHF, FM-UHF, and AM-FM-UHF combinations upon a showing that revenues from ownership of the radio station(s) are necessary to support the UHF station.252/ The Commission also has permitted cross-ownership involving AM/FM and UHF stations where such ownership would result in a first or second local

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250/ An analysis performed in 1979 (using 1977 data) by the Commission estimated that each additional $1 million of station revenues was associated, on average, with about 14 minutes of additional local programming per week. FCC Broadcast Bureau, Television Public Service Programming and Audience Diversion: An Economic Study, (1979).

251/ Second Report and Order in Docket 18397, 23 FCC 2d 816, 824 (1970).

252/ See, e.g., WOIO (TV), 1 FCC Rcd 293 (1986); American Public Life Broadcasting Co., 58 FCC 2d 891 (1976); Central Broadcasting Co., Inc., 21 R.R. 2d 482 (1971); Wilton E. Hall, 43 R.R. 2d 91 (1978).

television station within a market.[253] Cross-ownership waivers for radio/VHF combinations also have been approved (although on a more limited basis), for those unique markets too small or geographically distant (e.g., Alaska, Guam) to be compared to any other television markets in the U.S.[254] In each case, the Commission has considered "the number of media voices present in a particular market where cross-ownership is requested, and whether the grant of an applications would cause an undue concentration of control by a multiple owner."[255]

A similar approach should be employed with respect to broadcast/cable combinations within the same market.[256] Waivers should be considered in those cases where the applicant has shown that the broadcast/cable combination is unlikely to reduce economic competition or diversity within that local market.

253/ See, e.g., Windmill Broadcasting Corp., 85 FCC 2d 654 (1981), recon. denied, 89 FCC 2d 984 (1982).

254/ See, e.g., Evangelistic Missionary Fellowship, 75 FCC 2d 724 (1980); Pacific Broadcasting Corp., 66 FCC 2d 256 (1977), recon. denied, 68 FCC 2d 845 (1978); Forward Tele-Productions, Inc., 31 FCC 2d 26 (1971); Combined Communications Corp., 28 FCC 2d 16 (1970); KINY Associates, 50 R.R. 2d 981 (1981).

255/ Notice of Proposed Rulemaking in MM Docket 87-7, 2 FCC Rcd 1138, 1139 (1987). In that Notice, the Commission proposed modification of its multiple ownership rules to allow AM-UHF, AM-VHF and AM-FM-UHF combinations in the same market and its duopoly rules to permit common ownership of two AM or two FM stations in the same market.

256/ Since the Cable Act codified the prohibition on broadcast/cable combinations in the same market, the Act would have to be amended to provide the FCC with clear authority to approve permanent waivers of the rule.

Chapter 5

Concentration of Cable Ownership

The last decade has witnessed steadily increasing concentration of ownership within the cable industry.[257] As a matter of communications policy, we are cognizant that excessive concentration of ownership may confer a great deal of buying power upon a few multiple system operators (MSOs)[258] which have two unique characteristics: first, cable operators own the sole wireline medium that is the primary source of video programming for over half of all U.S. homes, and second, these exclusive franchises cover many of the major markets that historically "make or break" new programs and new program services. The result may constrain diversity of program choices.

The FCC has, in the past, imposed ownership limits on radio and television broadcasters in order to ensure that diversity would not be harmed by concentration in those industries. The agency has also sought affirmatively to promote competition and new entry into most broadcast markets, through licensing of low-power television, additional FM radio outlets, and by strengthening the relative competitiveness of UHF and independent television stations generally.

Competition and First Amendment values are closely linked, as suggested by Mr. Justice Holmes' praise of the "marketplace for ideas," advanced some 70 years ago. That is, policies aimed at fostering diversity likely will yield commensurate public dividends in terms of economic competition. While aggregate concentration levels in virtually all over-the-air video service markets thus have declined in recent years, precisely the opposite has occurred in cable. There, not only has concentration of ownership risen sharply, but institutionalized barriers to new, competitive entry have solidified.

It is time for the Commission to reconcile the disparate treatment of the cable and broadcasting industries. Those same policies of maximum open entry and competition, and limitations on aggregate ownership control, which have worked

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257/ See Attachment 2 for a listing of the top 25 cable system operators and the percentage of cabled homes served over the past several years.

258/ An MSO is a firm that owns more than one cable system.

well in other video service markets should be affirmatively pursued in this sector.

Moreover, anecdotal evidence raises the troubling possibility that a few large cable operators may be able to exercise such buying power in the programming market as to impair the development of incipient alternative distribution media and disadvantage smaller cable operators.

This section of the report examines ownership concentration within the cable industry, describing the potential benefits associated with concentration as well as the harmful effects on program diversity if concentration becomes excessive. We conclude that the diversity issues raised by increasing concentration among cable system owners warrant an FCC inquiry into the issue.

A. Benefits of Ownership Concentration

Concentration of ownership occurs in most industries as they mature and is often accompanied by benefits to shareholders and consumers, as discussed below. As a preliminary point, however, there are specific characteristics of the cable industry which deserve attention.

1. Cable Specific Industry Features

The cable industry has characteristics which may limit applicability of typical industry concentration analyses. First, as pointed out in other sections of this report, in the vast majority of local markets, there is currently but a single provider of cable service. In addition, as the number of homes passed by cable exceeds 80 percent, and over 50 percent of all television homes rely on cable for video services, it is an increasingly popular and dominant medium.259/

259/ One author says that cable operators' ability to charge high fees should not be the main concern over what appears to be a local cable monopoly, but "[i]nstead, the major problem with cable television lies in each operator's potential control over the majority of programs that the population of an entire city or region can watch," which is a "threat to the diversity of programs and to the sources that can reach the public." Noam, Towards an Integrated Communications Market: Overcoming the Local Monopoly of Cable Television, 34 Fed. Comm. L.J. 209, 215 (1982) ("Noam").

Second, cable shares with other video distributors the ability to "clear" local markets, or to assure program suppliers that their program or network service will be available to potential viewers in a given market. Unless a certain number of potential viewers (usually about 70 percent of the nation's television households) are cleared by a program supplier, major advertisers will be generally unwilling to buy time in the program on the network.[260/] The critical function of cable system operator and broadcasters to "clear" markets places them in a powerful position to affect the number and types of programs supplied. While similarly important functions may be fulfilled by retail sellers of manufactured goods, it is clear that by its nature, diversity in video program supply has a special importance. Concentration, while yielding economic efficiencies, may be troublesome when it comes to distributors of video programming.[261/]

2. Economies of Size in Cable System Ownership

The growth in ownership concentration within the cable industry stems largely from the efforts of cable MSOs to add systems and subscribers so as to capture economies of size.[262/] For example, cable firms incur significant fixed costs in providing service to their customers, costs that are largely independent of the number of subscribers served. Among these are capital and financing costs and "overhead" expenses, such as "market research; program evaluation, procurement ..., billing; and legal services (including

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260/ There are important exceptions for advertisers seeking certain demographics or with regional marketing strategies.

261/ "[C]ost efficiency of program production can hardly rank equal with the assurance of diversity of program sources as a goal for public policy. Such diversity is an important value in itself, unlike the diversity of origin of, say, the components of a GM car..." Noam, at 214.

262/ For a general discussion of the benefits of concentration, see Scherer, Economies of Scale and Industrial Concentration, in H. Goldschmid, H. Mann, and J. Weston, Industrial Concentration: The New Learning, 16 - 54 (1974) ("Goldschmid").

dealing with the FCC and local franchising bodies)."[263] By expanding the number of systems owned (and, thus, subscribers served), a cable MSO can spread these fixed costs over a larger customer base and reduce the unit cost per subscriber. If prices to subscribers remain constant, the reduction in per subscriber costs will translate into higher profits to the MSO.

Concentration can also enable a cable firm to reduce the prices it pays for programming, the lifeblood of its business. By expanding the number of subscribers served, an MSO can increase its bargaining position vis-a-vis program suppliers.[264] The MSO's increased bargaining power may allow it to negotiate rate discounts from program suppliers. In fact, rate discounts are prevalent throughout the cable industry, although there is little definitive data on the size and distribution of those discounts or their change over time.[265] Some published figures are available, however. One publication reported, for example, that in 1986, TCI, the largest MSO, paid $.90 per subscriber for Home Box Office ("HBO"), the largest pay service, while a "small" cable operation paid $5 per subscriber.[266] Another firm informed us that TCI currently pays about $1.50 per subscriber for Showtime, another pay cable service, while a non-MSO system pays roughly $4.50. Finally, we were told that Cable News Network ("CNN") costs $.02 per subscriber for MSOs with more than 3 million subscribers, [267] $.22 per subscriber for MSOs

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263/ Office of Plans and Policy, Federal Communications Commission, FCC Policy on Cable Ownership 103 (Nov. 1981) ("OPP Report)"

264/ In this regard, one must keep in mind that program suppliers are frequently owned or affiliated with powerful interests including broadcast networks, Hollywood studios, and other large, well-financed corporations.

265/ While the various parties involved readily concede that discounts exist, they are very reluctant to reveal "proprietary" information about how large those discounts are or who gets them.

266/ Television Digest, July 21, 1986, at 7. All amounts are monthly charges.

267/ The Chairman of the Home Satellite Television Association recently testified to the Senate Antitrust Subcommittee that TCI, which has well over 3 million subscribers, pays "approximately $.02-.17 per month" for CNN. Variety, Mar. 23, 1988, at 116, col 1.

with between 500,000 and 3 million subscribers, and $.29 per subscriber for firms with fewer than 500,000 subscribers.

Such rate discounts, if accurate, may be cost-justified, and reflect advantages to program suppliers of selling in large block units. But they doubtless also reflect the enhanced bargaining power which increased size has created for MSOs. In some cases, moreover, the size of the discounts raises concerns that the largest MSOs, at least, may have excessive leverage over program suppliers. The 82 percent discount on HBO received by TCI vis-a vis a non-MSO ($.90 per subscriber versus $5 per subscriber), and the 91 percent differential between the rates for CNN paid by an MSO with 3.1 million subscribers and the MSO with 1.5 million subscribers ($.02 per subscriber versus $.22) are noteworthy. The size of the alleged discrepancy suggests that, while rate discounts generally may reflect reasonable marketplace negotiations between program suppliers and MSOs, the discounts received by the very largest MSOs may instead represent the exercise of excessive market power by those firms.[268]

While concentration can produce cost savings for cable MSOs, it may also benefit subscribers by increasing the supply of programming. First, to the extent that concentration can increase an MSO's profits, it will generate monies that can be used to create or assist new programming ventures. Second, where concentration allows an MSO to pay lower rates for each programming service it carries, the result may be an increase in the number of programming services carried by the MSO's cable systems, thus expanding the diversity of program sources for subscribers. Finally, concentration can expand the range of programming available by lowering the costs of forming new program ventures, such as new cable networks. A new program supplier must incur substantial costs in marketing its new service, negotiating and enforcing carriage contracts with cable systems, billing customers, and collecting from them.[269] That supplier can

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268/ One might argue that the large gap between the rates charged by the largest MSOs and small cable firms reflects the exercise of greater bargaining power of cable networks vis-a-vis the small firms, as opposed to the large MSOs. Cable networks will have such bargaining power, however, only if the relevant programs are highly sought after. Since that does appear to be the case with respect to many services such as HBO, the rate differentials discussed could be attributed to price gouging of small cable systems by cable networks.

269/ OPP Report at 101.

avoid a portion of those costs if it can reach a given number of subscribers by dealing with a single large firm, rather than a group of smaller cable systems. The reduction in costs may make a new service financially viable or, more frequently, facilitate wider distribution of that service. The result in either case may be an increase in the diversity of programming options available to cable subscribers.270/

The key issue from a public policy standpoint is not whether size yields potential commercial and subscriber gains, but rather at what point do the potential risks equal or exceed those gains. All indications today are that any economies of scope or scale peak at relatively low levels; above a certain size, moreover, there may well arise significant inefficiencies and diseconomies of scale. All the economies of scope and size theoretically possible, additionally, may prove a matter of relative indifference to subscribers if excessive size impedes effective competition. For competition in most other markets has proven the best means of assuring customer responsiveness, and obliging producers equitably to share their surplus with consumers. Without the spur and marketplace accountability borne out of a competitive commercial environment, excessive size may yield few economic gains for subscribers (as distinguished from shareholders) and impose unacceptably high diversity losses.

B. Disparate treatment of broadcasters and cable owners

Cable concentration may conflict with First Amendment interests that seek to promote diversity of media outlets. Policymakers have long believed the proper functioning of a democratic society requires "the widest possible dissemination of information from diverse and antagonistic sources."271/ Since increased concentration of ownership necessarily entails the control of media outlets in fewer hands, concentration may, at some point, undermine the attainment of important diversity goals. For this reason, the FCC has over the years promulgated ownership restrictions on other media to avoid such a result. For as the Commission has noted, in the United States, Government ownership and control of media traditionally has been deemed too great a

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270/ This increase in diversity may be offset, however, if increased concentration enables MSOs to wield excessive market power as buyers of programming, which may decrease program development.

271/ Associated Press v. United States, 326 U.S. 1, 20 (1945).

potential power (and possible source of abuses) to be entrusted to any Government entity, even one elected by or responsible to all the people. But in avoiding this hazard, the FCC has also sought to minimize an equally dangerous risk, namely the concentration of media power in self-perpetuating, unaccountable, private management groups.

The factors which led to FCC ownership limits on broadcasters are present with respect to cable, and as ownership trends continue to produce greater concentration in the cable industry, pressures to limit ownership of cable systems, will, predictably, also increase. As early as 1943, the Supreme Court upheld a Commission determination that NBC and CBS owned "the most powerful and desirable" stations in the country.272/ "This 'bottling up' of the best facilities has undoubtedly had a discouraging effect upon the creation and growth of new networks."273/ Thus, it seems, Government should permit ownership growth in order to see new program sources develop (as described above), but must recognize the possibility that unrestrained growth might hamper new sources of programming as well.

The FCC has frequently imposed ownership limitations to preserve and promote First Amendment diversity interests even where levels of ownership concentration did not raise competitive concerns as a matter of antitrust law. In 1975, the FCC promulgated, and the Supreme Court upheld, regulations precluding certain newspaper/broadcast cross ownerships despite the FCC's conclusion that such arrangements did not violate the antitrust laws.274/ Other ownership rules prohibit one firm from owning more than one television station in a market,275/ or from owning a television and radio station in the same market and are premised on diversity, not strict antitrust grounds.276/

In 1984, the FCC amended its television multiple ownership rules to limit ownership by a single entity to stations serving no more than 25 percent of the nation's

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272/ NBC v. United States, 319 U.S. 190, 206 (1943).

273/ Id.

274/ See FCC v. National Citizens Comm. for Broadcasting, 436 U.S. 775, 786 (1978).

275/ 47 C.F.R. § 53.3555 (a)(3) (1987).

276/ Id. § 53.3555(b)(1),(2).

households,[277] even though the Herfindahl-Hirschman Index ("H-Index")[278] for the television industry was, at the time, 229.[279] Since the largest MSO, TCI, is rapidly approaching a 25 percent market share, the time is now ripe for the FCC to consider whether to impose a similar ownership limit for cable systems,[280] or at least to determine why cable systems

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277/ Amendment of Section 73.3555 of the Commission's Rules Relating to Multiple Ownership of AM, FM and Television Broadcast Stations, 100 FCC 2d 17, modified on recon., 100 FCC 2d 74 (1984).

278/ For a discussion of traditional economic measures of concentration used by the Antitrust Division of the U.S. Department of Justice, the Federal Trade Commission, and other antitrust enforcement agencies, see Attachment 2.

279/ Id. at 42. The market shares used in computing the H-index were based upon station revenues. If market shares were based upon each station's potential audience share, the H-index for the industry was only 115. Id. As noted above, the H-index for the cable industry at the end of 1987 was 662.

280/ The size of cable firms on an aggregate, nationwide basis is important, particularly in terms of bargaining power in the national market for programming. A more important source of market power, however, may be the fact that the vast majority of cable systems do not face direct competition in their local markets. It is this local monopoly in the specific transmission mode of cable television which should be the primary focus of Government efforts to promote competition. Thus, if a cable system is in direct competition with a multi-channel video service provider (i.e., MMDS, another cable operator, or in the future, other multi-channel program provider using a competitive broadband wire-based facility), the cable operator's market power in the national programming market will be reduced.

In the Commission's consideration of the effects of concentration on diversity, various approaches to ownership limits could be considered. In the modification of the television ownership limit in the 1984, the Commission determined that UHF stations, because of generally smaller coverage areas and other long-acknowledged "UHF handicaps," should be counted as serving only 50 percent of the actual potential viewing population in their areas. Similarly, the Commission might consider the appropriateness of discounting the measure of cable subscribership for those cable systems

and broadcast television stations should be treated differently.

Cable, by some measures, has achieved co-equal status with television broadcasting. In some ways, however, it may wield greater power in the local market, with one firm typically controlling dozens of video channels and experiencing no direct competition. In contrast, a television broadcaster's ability to affect diversity is limited since that licensee controls only one channel and faces direct competition from many other over-the-air broadcasters (and, increasingly, cable networks.) There is no apparent reason for the widely disparate treatment of these two media. It is necessary, therefore, to reconcile the ownership limitations placed on broadcasters with the lack of such limitations on cable systems.

C. Communications Policy Implications of Excessive Concentration within the Cable Industry

Concentration of ownership within the cable industry may limit diversity of programming by giving MSOs monopsony power as a buyer of programming.281/ Most cable programming networks, for example, generate revenues through a combination of advertising revenues and subscription fees.282/ Both revenue streams, however, are determined by

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facing direct competition from other multi-channel program providers.

281/ Monopsony power arises where there is a single buyer for a particular good or service. Thus, monopsony is the obverse of monopoly. Because monopsony and monopoly are so closely related "the formal analysis of monopoly power in buying [i.e., monopsony] is symmetrical with that of monopoly power in selling." G. Stigler, The Theory of Price 206 (3d ed. 1966). Accordingly, a level of ownership concentration that permits the exercise of monopoly power should, in most cases, permit the exercise of monopsony power.

282/ There are, of course, exceptions to this rule of thumb. The pay cable networks, such as HBO and Showtime, rely exclusively on subscription fees as they are commercial-free. Additionally, when a cable network commences operation, it may forego subscription fees for some period of time in order to induce carriage by cable operators.

the number of subscribers the network can attract. Subscription revenues vary directly with the number of subscribers because subscription fees are usually based upon a monthly charge for every subscriber receiving the service. An increase in subscribers may also provide the additional viewers that may persuade advertisers to buy time on a cable network or to pay more for that time, thus enhancing its advertising revenues.

Because a cable network's revenues are so closely tied to the number of subscribers it attracts, the network must garner a "critical mass" of subscribers in order to generate sufficient revenues to cover operating expenses. In a highly concentrated market, a network will have difficulty reaching and maintaining that critical mass if it is not carried by the largest MSOs. If a large MSO were to refuse to carry a particular network, the programmer would immediately lose access to a large portion of its potential market. Depending on the MSO's franchises, the programmer might also lose access to significant parts of markets like New York, Los Angeles, or Chicago, which are crucial in assembling advertiser support. It might then have to assemble the requisite subscribers through negotiations with myriad smaller firms. If the costs of doing so are too high, the programmer may face a Hobson's choice of ceasing operations or dealing with the large MSOs on their terms.

In that situation, the MSOs would have substantial leverage vis-a vis the network programmer. In extreme cases, they could dictate whether the service would succeed or fail, thus directly affecting the diversity of programming available to other cable subscribers, whether served by those MSOs or not. More commonly, the MSOs could exchange carriage for sharp discounts in network charges fees or for an equity interest in the network itself. By so doing, they could appropriate some or all of the profits the network programmer would expect to receive as a return for creating a desirable new program source.

Even if this transfer of profits does not endanger the network's viability, it may limit the network's ability to acquire new programming, thus reducing its ability to compete with other cable networks. The need to marshall "countervailing power" may oblige existing and potential network service providers to align with major media interests, thus limiting entry by small, independent entrepreneurs and reducing the number of possible new, additional media voices. Moreover, the MSOs' ability to extract profits from cable program networks may dissuade other entrepreneurs from attempting new programming ventures, again lessening the supply and quality of programming available to subscribers.

D. Effect of Excessive Concentration on Incipient Competitive Distribution Technologies

Large MSOs might also use their leverage over cable program suppliers to impede the development of competitive video distribution media. At present, only anecdotal evidence has been presented on the difficulties of acquiring programming encountered by new technologies such as packagers of programming for home satellite dish owners (HSDs) or multi-channel multipoint distribution service (MMDS). Nevertheless, the development of competitive multi-channel services is critical as few communities are served by more than one coaxial cable service. Therefore, policy makers should be attentive to the possible effects of concentration on these and other competitors to cable.

In the fall of 1985, for example, three cable network providers, Showtime, ESPN, and Turner Broadcasting, reportedly attempted to assemble a package of services for sale to owners of home satellite dishes. Those plans were dropped, however, when TCI allegedly expressed its displeasure. Shortly thereafter, TCI began marketing to HSD owners its own service package, which included Showtime, ESPN, and Turner's Cable News Network ("CNN").283/

E. Consumer Benefits and Concentration

As explained above, concentration of ownership can reduce the costs an MSO incurs in providing cable service. The extent to which those cost savings flow through to subscribers, however, depends upon the amount of competition faced by the MSO. If competition is effective, market forces

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283/ See Satcom Petition at 25 (citing Wall St. J., Feb. 11, 1986, at 6). There are also reports that cable MSOs are exerting pressure on program suppliers not to deal with MMDS licensees. See Cable Television: A Study in Antitrust, a study by the office of Congressman Charles Schumer, at 7 (Sept. 14, 1987). See also Forbes, Feb. 10, 1986, at 82. It should be noted that the Department of Justice, after investigating cable influence on the developing markets for MDS and home satellite distribution has brought no charges, either civil or criminal and has closed its investigation. (Satellite Times, May 4, 1988 at 1.)

will inevitably drive price towards costs, compelling an MSO to pass through the cost savings it realizes to its subscribers in the form of lower rates. If competition is inadequate, an MSO's lower costs will translate into higher profits for the firm and its shareholders. At present, we know of no evidence that any cost savings enjoyed by MSOs are being passed on to consumers.

F. Conclusions and Recommendations

We conclude that ownership concentration within the cable industry has reached levels that warrant investigation and, perhaps, action by the FCC. The relevant concentration indexes for the industry increased sharply between 1986 and 1987, after having been relatively stable during the preceding four years.[284/] TCI's market share nearly doubled between 1986 and 1987, and the gap between TCI and the second largest MSO, ATC, increased from 2.2 percentage points to more than 11. At the same time, the market share differential between ATC and the next largest MSO more than quadrupled between 1985 and 1987.

An FCC review will serve several important purposes. First, the Commission should develop a record on the extent to which cost savings by MSOs are being passed through to subscribers. Second, the FCC should develop a record on the extent to which MSOs' market power is precluding the development of alternative media competition. The lack of local competition in serving the nonbroadcast demands of the public creates much greater risks due to ownership concentration. Finally, as pointed out above, cable's principal competitors, broadcasters, are under ownership limits which should be evaluated in tandem with the need for ownership limits upon cable MSOs in order to develop a rational, equitable regulatory approach to ownership of these outlets in the video marketplace.

284/ See Attachment 2.

Chapter 6

Vertical Integration

The increase in concentration within the cable industry has been paralleled by a growth in vertical integration. Briefly, vertical integration occurs when a firm at one stage of the production and distribution process for a particular good acquires an ownership interest in a firm at a different stage of that production process.[285] For the purposes of this discussion, the term vertical integration refers to circumstances in which a firm that owns cable system also hold an equity interest in a cable program network.[286]

Vertical integration has been common within the cable industry for a number of years. For example, the more popular pay services, Home Box Office ("HBO"), Showtime, Cinemax, and The Movie Channel, have been affiliated from their inception in the 1970s with firms that also own cable systems. The pace of vertical integration has accelerated in the past several years, particularly with respect to basic cable networks.[287] In a major 1986 transaction, a group of MSOs paid $550 million for a 37 percent interest in Turner Broadcasting, owner of WTBS, Cable News Network ("CNN"), and

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285/ See P. Areeda and D. Turner, Antitrust Law para. 723, at 194-95 (1978). Where an acquisition brings the firm closer to the ultimate consumer of the good produced, the firm is said to integrate "downstream." Vertical integration "upstream" occurs when the acquisition brings the firm closer to the first stages of the production process.

286/ We consider a cable firm to be vertically integrated into programming if the firm holds any ownership interest in a cable program network. Although the size of a firm's interest is generally unimportant, it will be relevant in particular circumstances. For example, to the extent ownership of a cable network may give a cable operator the incentive to favor that network over a competing service, see Section II.C.1., infra, that incentive should exist even if the operator's ownership stake is relatively small. On the other hand, to the extent vertical integration gives a cable operator the incentive to withhold an affiliated program service from a competing video distribution media, see Section II.C.2., infra, the operator will be unable to act on that incentive (in the absence of collusion) unless his ownership interest in the service confers control.

287/ As used throughout this report, the term "basic cable network" includes the so-called "superstations", such as WTBS, WGN, and WOR.

CNN Headline News. MSOs have since secured equity interests in most of the basic networks started within the last 18 months.288/ As a result of their investments, MSOs currently have ownership stakes in seven of the nine national pay cable networks and 20 of the 52 national basic networks, including 12 of the top-20.289/

As in the case of ownership concentration, various parties have alleged that the expansion of vertical integration within the cable industry may have given vertically integrated firms the ability to impair competition in cable-related markets. As with concentration, however, one cannot resolve that issue correctly by simply counting the number or percentage of cable networks that are affiliated with MSOs. In this section of the report, the effects of vertical integration in the cable industry will be carefully examined. We will evaluate potential competitive problems posed by vertical integration, as well as the markets that could be affected. In addition, the benefits and cost-savings that vertical integration can produce for MSOs and their subscribers will be considered. One can then make a reasoned judgment whether existing levels of vertical integration within the industry raise policy concerns and, if so, what corrective measures should be taken.

A. Benefits of Vertical Integration

Common ownership of a cable system and a cable program service may produce significant benefits for the integrated firm and its customers.290/ The principal benefit is that vertical integration allows the cable firm to avoid the transaction costs291/ of obtaining programming. These costs include not only time, manpower and money expended in negotiating and enforcing program contracts, but also costs caused by the uncertainties of completing agreements in an adversarial setting. For example, because contracts between

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288/ See Broadcasting, Nov. 23, 1987, at 40.

289/ Id. at 41, 42.

290/ For a discussion of the benefits of vertical integration, see Network Inquiry Report Vol. I at 374-76; OPP Report at 109-10. For a more general defense of vertical integration, see R. Bork, The Antitrust Paradox 225-38 (1978).

291/ "Transaction costs refer to any expenditure of resources associated with the use of the market in transferring a good or service from one party to another". R. Blair and D. Kaserman, Law and Economics of Vertical Integration and Control (1983).

unaffiliated parties are often difficult to renegotiate after the fact, the program buyer will have to expend additional time and energy trying to anticipate all future contingencies so that they can be incorporated into the contract.[292] More significantly, the adversarial nature of most contracting situations creates incentives for "opportunism" by both parties, the tendency to withhold information or to deceive in order to obtain a more favorable deal.

Vertical integration can eliminate or substantially reduce these transaction costs by bringing program contract negotiations within the confines of a single firm. Since the negotiators will tend to share a common goal (i.e., produce a deal that benefits the firm, rather than the respective negotiators), the contracting process will likely be of shorter duration and less costly. The communal, rather than adversarial, nature of the negotiations will also minimize the potential for opportunistic behavior. Finally the negotiation need not worry about future contingencies because problems can be resolved within the firm as they arise through normal administrative processes.[293]

Vertical integration can also expand the supply of cable programming, thus expanding the diversity of viewing choices for subscribers. Starting a cable programming service is an expensive, risky proposition. By underwriting some of the costs of a new program service, a cable operator can spread some of those risks among several firms, thereby increasing the probability that the service will make it to the marketplace.[294] In this way, cable operators can "insure that services they feel their subscribers want will see the light of day,"[295] or insure that existing services continue to do so. Examples of this process abound. The cable industry's $550 million investment in Turner Broadcasting provided a much-needed infusion of capital to the latter firm, solidifying, among other things, the financial health of WTBS and CNN, two of the three largest basic cable networks. C-SPAN, which transports viewers to the floors of both houses of Congress, would probably not exist without

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292/ See Williamson, Transaction Cost in Antitrust Policy, 122 U. Pa L. Rev. 1400, 1445 (1974).

293/ Id. at 1445.

294/ This process is like that in other industries where firms decide whether to "make or buy" needed components or other input materials.

295/ Broadcasting, Nov. 23, 1987, at 40.

financial support from the cable industry. The same may be true of other cable services.

B. Potential Competitive Effects of Vertical Integration

While common ownership of cable systems and program services produces benefits for cable operators and their subscribers, it also raises the potential for competitive dislocations in various markets. The potential varies from market to market. For example, vertical integration may have no direct impact in the output market for cable television service, that is, with respect to the rates cable operators charge subscribers. In all cases, the operator will set rates that maximize his profits under the market conditions he faces. He will not be able to increase or decrease those rates profitably by integrating backwards into the programming market.[296] In other words, vertical integration into programming cannot give the cable operator any greater power to establish excessive subscriber rates than competitive conditions in the franchise area already permit.

Vertical integration may conceivably reduce the supply of cable programming or limit the diversity of program services available to cable subscribers. Ownership of a program service could induce a cable operator not to carry competing program services. That decision would likely not jeopardize the viability of the excluded service and, thus, reduce the supply of cable programming unless the cable operator's market share is relatively large. Discrimination against competing program services in favor of the operator's affiliated service may nevertheless deny his subscribers services they would prefer to receive, thereby artificially and inefficiently limiting viewing choices for those subscribers.

Vertical integration may also enable cable operators to preclude or impede competitive entry into their franchise areas. Cable systems currently face competition in some areas from home satellite earth stations. Additional competition may emerge from multichannel multipoint distribution systems ("MMDS");[297] competition may increase

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296/ On this point, see Network Inquiry Report, Vol. 1, at 380-81.

297/ MMDS is a microwave-based system that transmits multiple channels of video programming over-the-air to homes and other dwellings. MMDS systems are capable of providing as many as 34 video channels. An MMDS system is currently operating in Cleveland. Additional MMDS operations have recently commenced in Washington, D.C., Detroit, and New

further with the much-awaited introduction of direct broadcast satellite service ("DBS").[298]

Each of these alternative distribution media must have programming to attract customers, however. Cable operators could attempt to defeat or delay competitive entry by vertically integrated into the programming market and denying competitors' access to their most abundant potential source of programs -- existing cable networks. Not having access to existing programming, competitors could enter the video distribution market only by simultaneously entering the programming market, substantially increasing their costs and risks.[299] If the elevated costs do not preclude entry entirely, they may delay it. In the interim, cable operators would be insulated from market forces that could have exerted downward pressures on subscriber rates.

C. Likelihood of Competitive Harm From Vertical Integration

We next turn to whether the competitive problems vertical integration presents in theory occur, or are likely to occur, in practice. To address this question, in part, we gathered program carriage data for a sample 901 cable systems from the 1986 Cable & Television Factbook. We identified, for each system sampled, each basic and pay service that system carried. The information collected was then used to generate the data set forth in Tables 1, 2, and 3 below.

1. Effects on diversity and the supply of programming

Ownership of cable programming could conceivably give a cable operator the incentive to carry affiliated services to the exclusion of unaffiliated services. In the extreme case (i.e., where the operator's market share is relatively large), discrimination could put the excluded service out of business, thereby reducing diversity of programming for all

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York City.

298/ DBS systems will provide multiple video channels direct to the home via satellite.

299/ See, e.g., Stigler, The Division of Labor Is Limited by the Extent of the Market, 59 J. Pol. Econ. 185, 191 (1951).

subscribers. More commonly, the operator's discriminatory action may simply reduce the viewing choices only for its own subscribers.

Table 1 addresses whether ownership affiliation affects the probability that a cable operator will carry a particular cable service. Table 1 lists the national basic and pay cable networks that were affiliated with cable MSOs in 1986, according to the 1986 Television & Cable Factbook.[300] The parenthetical entries beneath each service indicates which MSO or MSOs held an ownership interest in that service. The first two numbers to the right of each service indicate the percentage of affiliated and unaffiliated systems, respectively, in the sample that carried the service (the "carriage percentage" or "rate of carriage"). The final two entries, the "T-value," determine whether there is a statistically significant difference between the carriage percentages for each service.[301]

300/ 1986 Television & Cable Factbook, at C-33 thru C-38.

301/ If the T-value lies outside of the interval between -3.09 and 3.09, the carriage percentages associated with it are statistically different at the 99 percent confidence level. For a discussion of the formula used to calculate the T-Values and the interpretation of those values, see W. Wallis and H. Roberts, Statistics: A New Approach 391, 418-430 (1956).

TABLE 1

Pay Services	Carriage Percentage By Affiliated Systems	Carriage Percentage By Unaffiliated Systems	T-value
HBO (ATC)	100.0	88.3	3.43
Cinemax (ATC)	88.9	49.8	7.06
Showtime (Viacom)	100.0	53.5	4.03
The Move Channel ("TMC", Viacom)	21.1	29.3	-.78
American Movie Classics ("AMC", Cablevision)	23.1	2.4	4.57
Bravo (Cablevision)	38.5	6.8	4.37
Playboy Channel (Cablevision)	30.8	9.3	2.61
Home Theater Network ("HTN", Group W)	38.1	5.2	11.66
Basic Services			
USA Network (ATC)	96.7	67.7	5.73
Black Entertainment Network (ATC, TCI)	20.4	11.4	3.50
Lifetime (Viacom, Hearst)	78.0	48.0	3.14
Arts & Entertainment (Hearst)	0.0	34.7	-1.63
Weather Channel (Telecable)	95.7	31.5	6.46

Table 1 demonstrates that ownership affiliation typically increases the probability that a particular cable service will be carried by a cable system. For ten of the thirteen services listed, there is a large and statistically significant difference in the carriage percentages between affiliated and unaffiliated systems. Systems carried an affiliated service less frequently than unaffiliated systems in only two cases (The Movie Channel and Arts & Entertainment), although the difference was again not statistically meaningful.

Clearly, then, a cable service is more likely to be carried if it shares an ownership affiliation with the cable system making the carriage decision. This fact does not raise policy concerns,

however, unless the systems' carriage of affiliated services also limits carriage of unaffiliated services. Table 2 considers this question with respect to pay cable services. It focuses on the carriage patterns for systems affiliated with the four MSOs that owned national pay services in 1986, ATC, Viacom, Group W, and Cablevision. For each MSO, Table 2 displays the rates at which its systems carried all pay services unaffiliated with it. Those carriages percentages are then compared to the rates at which the same services were carried by unaffiliated systems.

TABLE 2

Service	Carriage Percentage: ATC Systems	Carriage Percentage: Unaffil. Systems	T-Value
Showtime	45.6	54.4	-1.59
TMC	15.6	30.8	-3.00
AMC	3.3	1.9	.89
Bravo	5.6	6.4	-.30
Disney Channel	72.2	48.0	4.36
Playboy Channel	30.0	7.0	7.17
HTN	3.3	5.5	-.88
Galavision	4.4	6.4	-.75

Service	Viacom Systems	Unaffil. Systems	T-Value
HBO	89.5	88.3	.16
Cinemax	47.4	49.9	-.22
AMC	5.3	2.0	1.00
Bravo	21.1	6.0	2.68
Disney Channel	36.8	50.7	-1.20
Playboy Channel	42.1	8.6	4.97
HTN	15.8	4.9	2.12
Galavision	10.5	6.1	.79

Service	Group W Systems	Unaffiliated Systems	T-Value
HBO	85.8	88.8	-.99
Cinemax	46.3	50.5	-.89
Showtime	87.3	47.5	8.51
TMC	32.1	28.7	.80
AMC	0.7	2.3	-1.20
Bravo	9.7	5.7	1.76
Disney Channel	53.7	49.8	.83
Playboy Channel	0.0	11.0	-4.03
Galavision	14.2	4.8	4.16

Service	Cablevision Systems	Unaffiliated Systems	T-Value
HBO	84.6	88.3	-.41
Cinemax	46.2	49.9	-.26
Showtime	53.8	53.5	-.02
TMC	53.8	28.9	1.96
HTN	53.8	4.4	7.93
Disney Channel	38.5	50.6	-.87
Galavision	15.4	6.1	1.38

In seventeen of the 32 cases posed, the vertically integrated systems were as likely or more likely than non-integrated systems to carry the unaffiliated service, although the difference was statistically significant in only five instances. In only one of the remaining fifteen cases (Group W systems' carriage of the Playboy Channel) were the lower carriage percentages for vertically-integrated systems statistically significant.[302/] Thus, there is scant support for the notion that vertical integration into pay programming by MSOs has led them to discriminate against unaffiliated services, thereby reducing the diversity of pay services to their subscribers.

Table 3 addresses the discrimination issues with respect to basic cable services. The left-hand column of the table lists the fifteen largest basic services (excluding so-called superstations), according to the 1986 Television & Cable Factbook. The second column shows the frequency at which those basic services were carried by each of the five MSOs affiliated with basic cable services in 1986.[303/] Column three displays the frequency at which the fifteen basic services were carried by systems that had no ownership interests in basic services in that year.

302/ The Group W systems' disinclination to carry the Playboy Channel may be attributable to the sexually-oriented content of the programming, rather than any favoritism towards the Group W owned Home Theater Network.
The ATC systems' relative tendency not to carry The Movie Channel, though not quite statistically significant, is more troubling, given those systems' greater propensity to carry their competing affiliate, Cinemax.

303/ The dashes in columns two and three indicate the basic services affiliated with each MSO. Thus, BET and USA Network were both affiliated with ATC in 1986.

TABLE 3

Service	Carriage Percentage: ATC Systems	Carriage Percentage: Unaffil. Systems	T-Value
Arts & Entertainment ("A&E")	70.0	30.8	7.41
Black Entertainment Television ("BET")	--	--	
C-SPAN	82.2	37.5	8.15
Christian Broadcasting Network ("CBN")	90.0	73.0	3.52
CNN	91.1	69.1	4.38
CNN-Headline News	67.8	26.5	8.08
ESPN	95.6	79.3	3.73
Financial News Network	37.8	17.1	4.73
Lifetime	82.2	44.1	6.85
MTV	90.0	56.1	6.22
Nashville Network	75.6	51.3	4.39
Nickelodeon	85.6	54.9	5.60
Spanish International	12.2	5.8	2.35
USA Network	--	--	
Weather Channel	64.4	27.8	7.08

Service	Carriage Percentage: Telecable Systems	Carriage Percentage: Unaffil. Systems	T-Value
A&E	69.6	33.8	3.56
BET	30.4	15.0	2.01
C-SPAN	43.5	40.8	.26
CBN	78.3	74.5	.41
CNN	65.2	70.8	- .58
CNN-Headline News	91.3	29.7	6.29
ESPN	100.0	80.6	2.35
Financial News Network	34.8	18.7	1.94
Lifetime	52.2	47.9	.41
MTV	95.7	58.7	3.57
Nashville Network	91.3	53.2	3.62
Nickelodeon	82.6	57.2	2.84
Spanish International	21.7	6.2	2.96
USA Network	95.7	66.9	2.91
Weather Channel	--	--	

TABLE 3 (continued)

Service	Carriage Percentage: Viacom Systems	Carriage Percentage: Unaffil. Systems	T-Value
A&E	26.3	34.9	- .78
BET	21.1	15.4	.68
C-SPAN	73.7	41.3	2.83
CBN	52.6	75.2	-2.24
CNN	89.5	70.9	1.77
CNN-Headline News	0.0	31.3	-2.93
ESPN	84.2	80.8	.36
Financial News Network	10.5	19.4	- .97
Lifetime	--	--	
MTV	84.2	59.0	2.21
Nashville Network	15.8	54.5	-3.35
Nickelodeon	36.8	58.4	-1.89
Spanish International	15.8	6.2	1.69
USA Network	57.9	67.9	- .92
Weather Channel	26.3	31.7	- .54

Service	Carriage Percentage: Hearst Systems	Carriage Percentage: Unaffil. Systems	T-Value
A&E	--	--	
BET	0.0	15.6	- .96
C-SPAN	0.0	41.7	-1.89
CBN	20.0	74.8	-2.80
CNN	20.0	71.2	-2.51
CNN-Headline News	0.0	30.6	-1.48
ESPN	20.0	80.9	-3.43
Financial News Network	0.0	19.2	-1.09
Lifetime	--	--	
MTV	40.0	59.4	- .88
Nashville Network	0.0	53.6	-2.40
Nickelodeon	0.0	58.0	-2.62
Spanish International	0.0	6.5	- .59
USA Network	20.0	68.0	-2.29
Weather Channel	0.0	31.7	-1.52

TABLE 3 (continued)

Service	Carriage Percentage: TCI Systems	Carriage Percentage: Unaffil. Systems	T-Value
A&E	10.6	39.9	-7.06
BET	--	--	
C-SPAN	25.0	36.6	-2.80
CBN	66.9	73.1	-1.58
CNN	40.6	68.4	-6.62
CNN-Headline News	13.1	27.3	-3.77
ESPN	51.9	78.9	-7.07
Financial News Network	5.0	16.6	-3.77
Lifetime	26.3	52.9	-6.09
MTV	30.0	54.9	-5.71
Nashville Network	28.8	52.1	-5.35
Nickelodeon	26.3	54.9	-6.56
Spanish International	2.5	4.9	-1.33
USA Network	53.1	71.3	-4.41
Weather Channel	9.4	36.5	-6.67

In 32 of the 68 cases presented in Table 3, the vertically-integrated systems were as likely or more likely to carry unaffiliated basic services than non-integrated systems, with the differences being statistically significant in 16 of those 32 cases. Moreover, the carriage percentages for two vertically-integrated MSOs, ATC and Telecable, were higher in all but one instance, with the differences being statistically significant in 16 of 27 cases.

Only two of the five vertically-integrated MSOs, Hearst and TCI, showed a consistent pattern of carrying unaffiliated basic services less frequently than non-vertically integrated systems. Neither MSOs' systems, however, exhibited the general tendency to favor their affiliated basic services in terms of carriage.[304/] Only 20 percent of the Hearst systems sampled carried one affiliate, Lifetime; none carried the other, Arts & Entertainment. The comparable statistics for non-Hearst systems were 48.8 percent and 34.7 percent, respectively.

Slightly more than 6 percent of the TCI systems sampled carry the Black Entertainment Network, as compared to 15.5 percent of the non-TCI systems. Because Hearst and TCI systems

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304/ The tendency of Hearst and TCI systems not to favor their affiliated services was masked in data in Table 3 because the data for those MSOs were combined with those of other MSOs that also held ownership interests in the relevant services.

do not appear to favor their basic network affiliates, one cannot conclude with confidence that their smaller complements of basic networks will be less reflective of subscriber preferences than would be the case if they had no programming affiliations.

In sum, common ownership of cable systems and cable programming services does not appear to affect adversely the supply of cable programming or the diversity of viewing choices for cable subscribers. While ownership affiliation does indeed increase the probability that a service will be carried by a particular system, carriage of affiliated services generally does not occur to the exclusion of unaffiliated services. This conclusion is strong with respect to pay services, though less definitive with respect to basic services. There is thus scant justification for a policy restricting vertical integration within the cable industry because of fears that it may produce market dislocations within the cable industry.

2. Effects upon competition between cable television and other video distribution media

By vertically integrating into cable programming, MSOs could conceivably erect or increase barriers to entry for alternative video distribution technologies, thus impeding the growth of competition to cable television. This concern is of particular importance today because new alternatives to cable may be emerging. Since growth of competitive alternatives will increase market pressures on cable operators, to the ultimate benefit of subscribers, policymakers must take care that vertical integration within the cable industry does not provide a tool for unfairly limiting competition to cable television.

One can assess whether the potential link between vertical integration and anticompetitive conduct by cable operators has been forged in practice by examining the experience of the nascent MMDS industry. MMDS operators have complained of their inability to secure contracts from major cable networks, and have attributed those difficulties to anticompetitive conduct on the part of the cable industry and their program suppliers.[305]

While the MMDS industry's tribulations with cable program networks may be a matter of policy concern, Chart 1 suggests those troubles are not attributable to the existence of vertical integration within the cable industry.[306]

305/ See, e.g., Variety, Mar. 23, 1988, at 116; Forbes, Feb. 10, 1986, at 82.

306/ This chart is based upon information submitted to NTIA by the Wireless Cable Association, the trade association for the MMDS industry.

CHART 1

	Cable Networks Available to MMDS	Cable Networks Unavailable to MMDS
Networks Affiliated With Cable System	Black Entertainment Network[307] CNN Headline News C-SPAN Home Shopping Network MTV Nickelodeon WTBS[310]	Arts & Entertainment American Movie Classics Bravo CNN[308] Discovery Channel HBO[309] Lifetime Showtime[311] The Movie Channel Travel Channel
Networks Unaffiliated With Cable Systems	Christian Broadcasting Network Financial News Network Galavision Learning Channel Nashville Network Nostalgia Channel WGN WOR	Disney Channel ESPN USA Network Weather Channel

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307/ Although generally available to MMDS operators, BET is not available in Washington, D.C., where several of BET's owners hold the cable franchise.

308/ Shortly after several cable operators acquired a substantial interest in CNN's parent corporation, Turner Broadcasting, CNN reportedly adopted a policy against selling to MMDS. CNN is carried by the MMDS operator in Cleveland pursuant to a preexisting contract. It is not clear what will happen when that contract expires.

309/ Although HBO has elected not to deal with new MMDS operators, HBO is available to some MMDS systems. See note 313, infra, and accompanying text.

310/ WTBS is delivered to local distributors by a satellite common carrier. WTBS, like other broadcast stations, has no control over who may receive it. See discussion in Chapter 7.

311/ Showtime became available to the Cleveland MMDS system after the MMDS operator threatened to bring a lawsuit.

Chart 1 shows no discernable pattern between a cable network's ownership affiliation and the likelihood that it will be made available to MMDS operators. Although most of the networks affiliated with cable systems are not available to MMDS, there is a significant number that are. Conversely, several major networks with no cable system affiliations have opted not to deal with MMDS. Accordingly, one cannot attribute the MMDS industry's inability to secure carriage contracts with all cable networks to the existence of vertical integration within the cable industry.

At the root of the MMDS industry's difficulties in gaining access to cable programming is the decision by some cable programmers, whether or not vertically integrated, not to deal with MMDS or to deal exclusively with cable systems. Neither of these actions necessarily evidences anticompetitive intent on the part of the programmers or unlawful coercion from cable operators.

A program network's reluctance to do business with MMDS may reflect a desire to avoid the financial risks of dealing with a particular distribution technology. When MDS began as a single channel subscription service, for example, HBO was a major source of programming.[312] MDS was soon plagued with a serious theft of service problem, however, meaning that HBO was effectively prevented from obtaining full payment from all people viewing HBO via MDS.[313] Moreover, when the MDS industry began to decline in the early 1980s, HBO faced a growing number of defaults from failing MDS operators.[314] In large part, these past problems appear to have persuaded HBO not to deal with new MDS or MMDS operators at this time, there are significant exceptions to this policy.[315]

Exclusive dealing arrangements between programmers and cable systems may also represent legitimate business arrangements that benefit both parties. Although antitrust courts have historically looked askance at exclusive dealing arrangements and

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312/ See Testimony of Joseph Collins, HBO, Before the Subcomm. on Antitrust, Monopolies & Business Rights of the Sen. Judiciary Comm. at 10 (Mar. 17, 1988) ("Collins Testimony").

313/ Id. at 10, 11. Between 1982 and 1985, HBO spent more than $400,000 prosecuting theft of MDS service.

314/ Id.

315/ HBO currently has an agreement in principle with Microband, which plans to include HBO in its MMDS operations in New York City, Detroit, and Washington, D.C. See id. at 10.

similar vertical arrangements between sellers and buyers, courts have increasingly recognized that such arrangement can enhance economic efficiency.[316]

Exclusive dealing arrangements can benefit a programmer by eliminating so-called "free rider" problems that may dissuade cable operators from aggressively promoting the programmer's service. Suppose, for example, that HBO is being provided by two distributors -- cable and MMDS -- within a community. Assume further that the cable operator undertakes an aggressive promotional campaign to attract new subscribers to HBO, the costs of which raise the price of HBO above the levels charged by the MMDS operator, who elects not to incur similar expenses.

Potential customers could then use the cable operator's promotional campaign to learn what HBO has to offer, then do business with the MMDS operator because of his lower rates. In essence, the lack of exclusivity for the cable operator enables the MMDS operator to take a free ride on the cable operator's promotional campaign. To avoid such a result, the cable operator may forego the promotion entirely. As a result, HBO will likely garner fewer subscribers (and revenues) than would have been the case if one or both of the distributors had an incentive to promote the service vigorously. An exclusive dealing arrangement between HBO and either the cable system or the MMDS operator would likely create those incentives.

Exclusive dealing arrangements benefit cable operators by providing unique programming that distinguishes cable from other video distribution media. In this regard, every participant in the video industry recognizes the value of program exclusivity, although they tend to be less committed to exclusivity for their competitors. All video distribution media look alike from the front of a television set. The ability to attract and retain customers thus depends on whether a particular medium can provide programming that is different from its competitors.

The cable industry has successfully distinguished itself from its principal rivals by developing new programming services. Creation of that programming required substantial investment and has fostered a mutually beneficial partnership between cable systems and cable programmers. Having succeeded, programmers and systems may be reluctant to jeopardize the partnership by making their programming available to cable's emerging competitors.

In short, refusals to deal by programmers, or exclusive dealing arrangements generally appear to be legitimate

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316/ Compare Continental T.V. Inc. v. GTE Sylvania Inc., 433 U.S. 36 (1977) with United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967).

arrangements conferring benefits on the parties involved. On the other hand, evidence that those arrangements may have anticompetitive intent is circumstantial. At one time, for example, CNN was available to MMDS; that policy apparently changed shortly after several cable operators acquired a substantial minority interest in Turner Broadcasting, CNN's parent.[317] Similarly, Black Entertainment Television is available to MMDS operators, except in Washington, D.C., where BET's owners hold the cable franchise.[318]

Though somewhat troubling, this circumstantial evidence of anticompetitive intent beneath some exclusive dealing arrangements between cable programmers and cable systems does not warrant condemning all such arrangements. Where exclusive dealing arrangements raise competitive concerns in particular cases, the aggrieved parties or the Government may seek relief by pursuing antitrust actions.

D. Conclusions and Recommendations

At present, there is no reason to prescribe corrective action concerning existing levels of vertical integration within the cable industry. Common ownership between programming services and cable systems appear to have produced substantial benefits. At the same time, despite potential for competitive harm, there is no convincing evidence that vertical integration within the industry has (1) adversely affected diversity or the supply of basic and cable programming, or (2) impeded the growth of competitive alternatives to cable television.

We therefore recommend against rules precluding or limiting cable systems from securing ownership interests in program services, or vice versa. Besides eliminating or reducing the benefits vertical integration may produce, to be applied fairly, such rules would likely necessitate extensive divestiture within the industry, causing hardship to parties who have made substantial investments in programming services on the assumption, then correct, that their actions were perfectly legitimate.[319]

317/ Cable Television v. The Alternatives: A Study in Antitrust, a study by the office of Cong. Charles Schumer, at 8-9 (Sept. 14, 1987).

318/ Id. at 8.

319/ In any event, programmers and cable systems could easily circumvent restrictions upon vertical integration by concluding long-term exclusive dealing arrangements, financing arrangements, and other ties.

We also do not favor policies proscribing or limiting exclusive dealing arrangements between cable programmers and cable systems. Such arrangements generally represent sound and legitimate business transactions creating benefits for both parties. Programmers should therefore be allowed to sell, and cable systems should be allowed to buy, programming on an exclusive basis unless there is compelling evidence such transactions cause competitive abuses in most cases. That evidence is lacking, at least at this time. Therefore, although we support efforts to examine exclusive dealing arrangements more closely,[320/] we recommend against a policy prohibiting or restricting exclusive dealing arrangements between cable programmers and cable systems.

320/ See the State Attorneys General investigation.

Chapter 7

Exclusive Rights to Video Programming

Strengthening incentives to produces news, information, and entertainment program choices is a major public policy goal and objective. The copyright regime is the primary means used to accomplish this goal. Communications policy is also affected by the strength of creative incentives because the supply of programming today appears to fall short of the abundance of channels available to many viewers. Communications policy may successfully increase diversity of viewer choice, but will mean little if those channels are vacant.

Competition among cable networks, home video (VCR) distributors, broadcasters, and others to secure "exclusive" rights to programming is intensifying. This chapter assesses to what degree government should limit the ability of parties to enter and enforce contracts for exclusive performance rights. We conclude that the copyright law appropriately balances the rights of program owners and users, with one important exception -- the cable compulsory license. In addition, the inability of broadcasters to enforce exclusivity provisions in their programming contracts should be remedied until the cable compulsory license is repealed. It is also appropriate for cable systems using the cable compulsory license to be required to carry all local broadcast signals until its repeal.

Background:

As competition in the distribution of video programming increases, distributors and exhibitors strive to secure exclusive rights to programming. Exclusivity may refer to (a) geographic rights, so that a licensee will be the only firm to distribute or exhibit a program in a given geographic market; (b) temporal rights, so that a licensee will have an exclusive "window" or period of time for the distribution or exhibition of a program, usually crossing all media; and, sometimes, (c) intermedia rights, so that a distributor may acquire rights for one or more media.[321/]

A brief review of trade press reports underscores the

321/ If a licensee contracts for exclusive control over several media, in many geographic markets, over a long period of time, they assume the role of a sub-licensor; this function is often filled by distributors or syndicators.

importance of exclusivity for broadcasters[322/] and, increasingly, for cable networks and program distributors as well.[323/] Problems arise when technologies are capable of shifting programming from one geographic region to another, from one time period to another, and from one media to another. The holder of exclusive rights may find "its" program being viewed on another outlet in the same market. Usually, activities which violate contractual rights can and are enforced through lawsuits.[324/] In the case of satellite and cable retransmission, or "secondary transmission" of broadcast programming, however, certain provisions in the copyright law[325/] have precluded copyright owners and licensees from usual enforcement powers, as described more fully below.

Both buyer[326/] and seller[327/] can benefit from the

322/ "WTNH-TV New Haven Socks Fox With Suit Over 'Mash' Contract", Variety, Sept. 18, 1985, at 68. Communications Daily, March 4, 1988, at 6-7 [PBS trying to arrest "migration" of public TV shows to non-PTV outlets.]

323/ Communications Daily, Oct. 9, 1986, at 10; "Pay Cable Emphasizing Exclusivity in Schedules," Electronic Media, Sept. 22, 1986, at N18; "USA Aims at Ratings Increase with $30 million Program Buy," Cablevision, Aug. 4, 1986, at 16. Multichannel News, May 12, 1986, at 1; Sept. 15, 1986, at 13.

324/ Exclusive rights to syndicated TV programs do not violate antitrust laws: "Although restraint may be the 'essence' of every contract, under the rule of reason standard only those agreements that unreasonably restrain trade violate the Sherman Act." Ralph C. Wilson Industries, Inc. v. Chronicle Broadcasting, 794 F.2d 1359, 1363 (9th Cir. 1986)(citation omitted).

325/ Under the Copyright Act of 1909, cable system retransmission of broadcast signals was not held to be a "performance." Fortnightly Corp. v. United Artists Corp., 392 U.S. 390 (1968); Teleprompter Corp. v. Columbia Broadcasting System, Inc., 415 U.S. 394 (1974). In 1976, the Congress imposed copyright liability for cable retransmissions, 17 U.S.C. § 111 (1982 and Supp. III 1985).

326/ e.g., broadcaster, cable networks, videocassette distributor, etc.

availability and enforceability of exclusive rights. For the buyer, exclusivity may differentiate the programming, making it more marketable. For the seller, by using exclusivity as a concept to divide the range of possible licensees into different markets, the seller can arrange a sequence of distribution that will maximize revenue from the licensing of that product through several uses. In fully competitive markets, these benefits should be passed on to consumers.

The exclusive rights concept is central to the copyright scheme established in the Constitution. Article I, Sec. 8, empowers the Congress "[t]o promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."[328/] The copyright to any work is composed of a bundle of exclusive rights defined by statute to include the right to reproduce the work in copies or phonorecords, to prepare derivatives, to distribute copies or phonorecords, and to control the public display or public performance of the work.[329/] Most rights acquired in the video distribution fields are performance rights.[330/]

The Communications Act also gave enforcement power to broadcasters to control retransmissions of their signals.[331/] In 1979, NTIA proposed the FCC extend this "retransmission

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327/ e.g., motion picture studio, television syndicator, sports league, etc.

328/ U.S. Const. art. I, § 8.

329/ 17 U.S.C. § 106 (1982).

330/ The Copyright Act of 1976, Pub. L. 94-553, 90 Stat. 2541 ("the Act" or "the 1976 Act") made significant changes in the definition of "public performance", eliminating any reference to a "for profit" element. Prior to the 1976 Act, whether a use of the work was a public performance sometimes turned on whether the use was "for profit." Today performance rights must be "cleared" or acquired for any public performance of a copyrighted work (with some statutory exceptions.)

331/ ("[No] broadcasting station [shall] rebroadcast the program or any part thereof of another broadcasting station without the express authority of the originating station.") See 47 U.S.C. S 325(a) (1982).

consent" principle to cable,[332] so that cable system operators would have to obtain prior approval of broadcasters before retransmitting a broadcast signal.[333] The Commission, however, rejected the proposal because of "Congress' explicit rejection of it and its enactment of a differing allocation of property rights as between copyright owners and cable systems and subscribers less than three years [before in the Copyright Act]."[334]

In addressing the challenge posed by the new technology of satellite distribution of video programming, in 1984 the Congress established a comprehensive scheme to balance the rights of copyright owners with the needs of satellite dish viewers.[335] Although one approach to the issue might have been to outlaw home satellite dishes, (which could well have proved an enforcement nightmare) Congress instead adopted an approach which clearly contemplated that many program owners would encrypt their programming. Thus, HSD owners are legally permitted to receive unencrypted satellite signals;[336] legal remedies are be available, however, if HSD owners "pirate" encrypted signals.[337]

Although the issue of exclusivity often arises in terms of copyright law, it is an area where antitrust concerns, communications policy, and copyright principles all converge. The Office of Technology Assessment noted:

> Situations in which access is controlled by a proprietor heighten the potential for anti-competitive behavior, especially where cross ownership exists between the medium of communications and the material that is communicated. This potential becomes even more acute when the copyrighted content is accessed, but not purchased by the consumer...This combination of content and distribution is a form of "vertical

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332/ In 1968, the Commission considered, but did not adopt, a retransmission consent requirement for cable importation of distant signals. See CATV, 15 FCC 2d 417, 433 (1968).

333/ Notice of Proposed Rulemaking, 71 FCC 2d 1004, 1027-1042 (1979).

334/ Id. at 1036.

335/ See 47 U.S.C. § 605 (Supp. III 1985).

336/ Id. § 605(b).

337/ Id.

> integration" and forms the junction between copyright policy -- which has traditionally dealt with ownership of content -- and communications policy -- which has traditionally dealt with the ownership of carriage...[w]hen control over content and control over carriage are located in the same entity, the power of copyright becomes closely related to the number of channels of access to a given work.[338]

Performance Rights:

From the earliest broadcasting cases dealing with performance rights, the Supreme Court has found that the copyright "monopoly is expressly granted for all public performances" of a work.[339] The Congress addressed the other uses which might arise after a performance is made by noting that it is not only the initial performance but also "any further act by which that rendition or showing is transmitted or communicated to the public."[340] The House Report clearly explains that a person performs the work when

> for example: a singer is performing when he or she sings a song; a broadcasting network is performing when it transmits his or her performance (whether simultaneously or from records); a local broadcaster is performing when it transmits the network broadcast; a cable television system is performing when it retransmits the broadcast to its subscribers; and any individual is performing whenever he or she plays a phonorecord embodying the performance or communicates the performance by turning on a receiving set.[341]

338/ U.S. Congress, Office of Technology Assessment, Intellectual Property Rights in an Age of Electronics and Information, OTA-CIT-302 at 207-208 (1986) ("OTA Report").

339/ Buck v. Jewell-LaSalle Realty Co., 283 U.S. 191, 197 (1931).

340/ H.Rep. No. 94-1476, 94th Cong., 2d Sess. 63, reprinted in 1976 U.S. Code Cong. & Ad. News 5659, 5676 ("House Copyright Report") (1976).

341/ Id.

Many performance rights are negotiated privately between user and owner and are governed by contractual terms. Broadcasters, for example, enter into contracts with syndicators and other program suppliers to acquire the performance rights to broadcast specific programs. Other rights are contractually transferred by intermediaries or performing rights societies. These organizations (the first of which was established in France in 1871) act as brokers for music synchronization and performances. In the United States, the American Society of Composers, Authors, and Publishers (ASCAP) and Broadcast Music,Inc. (BMI) are the most well known, licensing hundreds of thousands of pieces of music to about 1,000 local television stations, 10,000 radio stations, the television networks, almost 1,000 noncommercial radio and television stations, over 2,500 colleges and universities, hundreds of background music services, 700 symphony orchestras, and thousands of general licensees, like bars, hotels, ice and roller rinks, circuses, and fraternal organizations.

Balance between Owners and Users:

Recognizing that the ownership and control of the bundle of rights amounts to a monopoly limited by a statutory term of years, the Congress sought to balance the rights of owners with the needs of users of those works.342/ In the 1976 Act there are several types of limitations placed on copyright owners. The Congress used five approaches to balance certain uses against owners' exclusive rights which are discussed in the following paragraphs: (a) definitions which limit user liability; (b) exemptions for certain, generally nonprofit, uses; (c) the "fair use" exemption; (d) the "first sale" doctrine; and (e) four "compulsory licenses."

In some cases, the definitions established by Congress created certain exemptions for users, such as the maintenance of the requirement that a performance be "public" before

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342/ The necessary balance was articulated by Lord Mansfield over 200 years ago: We must take care to guard against two extremes equally prejudicial; the one that men of ability, who have employed their time for the service of the community may not be deprived of their just merits and reward for their ingenuity and labor; the other that the world may not be deprived of improvements nor the progress of the arts be retarded. Sayre v. Moore, 102 Eng.Rep. 139, 140 (1785), quoted in Bevan v. Columbia Broadcasting Sys., Inc., 329 F. Supp. 601, 605 (S.D.N.Y. 1971).

triggering liability.[343] In other cases, the Congress created nine specific exemptions from liability,[344] such as face-to-face teaching activities using audiovisual works, the performance of a nondramatic literary or musical work in the course of services at a place of worship or other religious assembly, and performance of a work in the course of a transmission specifically designed for and primarily directed to blind or other handicapped persons.

One of the most important limitations placed on ownership and control of exclusive rights is the "fair use" exemption from liability[345] which, when applied by the courts, has resulted generally in exempting private, noncommercial uses which would otherwise be infringing uses.[346]

Another important limitation on the control of exclusive performance rights is the "first sale doctrine"[347] which cuts off the rights of copyright owners, once a sale takes place of the tangible thing in which the copyrightable material is fixed. Thus, the first sale of a videotape from distributor to retail video store cuts off the rights of copyright owners to share in any revenue generated by the rental of that tape by the video store.[348]

The first sale doctrine has had an important effect in shaping the development of the home video industry. Unlike other methods of video distribution, no exclusive

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343/ 17 U.S.C. § 106(4) (1982).

344/ Id. § 110.

345/ Id. § 107.

346/ Perhaps the most famous and significant "fair use" case in the last few years has been Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417 (1984).

347/ 17 U.S.C. § 109(a) (1982).

348/ Based on evidence of harm to the recording industry (i.e., reduction in the number of new releases), the first sale doctrine was amended in 1984 so that copyright owners would share in revenue generated by the rental of audio tapes. See Record Rental Amendment of 1984, Pub. L. 98-450, 98 Stat. 1727, codified at 17 U.S.C. § 109(b)(Supp. IV 1986). The Motion Picture Association of America, Inc. sought similar legislation for rental revenue from video tapes, but has been unsuccessful.

arrangements can be made between tape distributors and retail stores because the first sale doctrine cuts off the owners' (or distributors') rights. Virtually anyone willing to make an initial investment can buy the requisite number of tapes and open a video retail store. In 1986, there were 24,000 retail video stores, twice the number of 1985, and competition among them flourished in towns of almost any size.[349]

Compulsory Licenses:

Besides these substantial means used by Congress and the courts to ensure access to copyrighted works in certain cases ("public" performance, "fair use," "first sale"), the Congress has also established four "compulsory licenses."[350] By the operation of these compulsory licenses, the copyright owner is essentially "compelled" to license a work to a user specified by statute, under terms and conditions specified by statute.

Under a compulsory license, the inability of the copyright owner (or licensee) to preclude others' use of the work dramatically alters the programming distribution market for these works. In the case of the cable compulsory license, the cable operator (or "secondary transmitter") is able to retransmit to its subscribers any programming received from a primary transmission, so long as the cable system complies with the statutory payment process and fee schedule, and so long as the cable system does not alter the programming or delete any part of it (including commercials).[351]

The intent of Congress in establishing the cable compulsory license is ambiguous. The three main reasons for its implementation seem to have been (1) to nurture an infant cable industry by guaranteeing the availability of programming at low rates; (2) to limit transactions costs which might otherwise be insurmountable; (3) to implement

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349/ Channels 1986 Field Guide at 76 (1986).

350/ See 17 U.S.C. §§ 111 (cable compulsory license for "secondary transmissions) 115 (mechanical license) 116 (the jukebox license) and 118 (noncommercial broadcasting license) (1982 and Supp.IV 1986).

351/ Id. § 111(c)(3) and (d).

part of the industry Consensus Agreement of 1971,[352] described more fully below.

NTIA and others have been critical of the Sec. 111 compulsory license, having reexamined these reasons for its implementation and found them wanting.[353] Moreover, the special copyright treatment afforded cable has the practical effect of diminishing the incentive to produce additional cable program choices, both on the part of cable operators as well as the programming industry.

First, the cable industry has long outgrown its status as an "infant" industry. Gross revenues have grown from $1.2 billion in 1977 to over $11.2 billion in 1987.[354] Under the compulsory license, cable systems pay about 1.5 percent for the programming rights to local and distant signal broadcast programming, the programming most watched by cable viewers.[355] In addition, cable reportedly paid

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352/ Representatives of the cable, broadcasting, and motion pictures industries met in 1971 at the behest of the Office of Telecommunications Policy to resolve the question of cable's copyright liability and signal carriage obligations. The resulting agreement formed the basis for FCC regulations and the copyright compulsory license. The text of the Consensus Agreement is reprinted as Appendix C to the FCC's Cable Television Report and Order, 36 FCC 2d 141, 260-279 (1972).

353/ National Telecommunications and Information Administration, Cable Retransmission of Broadcast Television Programs Following Elimination of the "Must Carry" Rules (1985); National Telecommunications and Information Administration, Cable Copyright Liability: Alternatives to the Compulsory License (1981); See also Hearing before the Subcommittee on Copyrights, Civil Liberties and the Administration of Justice of the House Judiciary Committee, 97th Cong. 1st and 2d Sess., at 736 (1981)(statement of former Register of Copyrights Barbara Ringer); Besen, Manning and Mitchell, Copyright Liability for Cable Television: Compulsory Licensing and the Coase Theorem, 21 J. Law and Econ. 67 (1978); Cramer, Some Observations on the Copyright Law of 1976: Not Everything Is Beautiful, 1 Comm/Ent 157, 163 (1977).

354/ Paul Kagan Associates, Inc., Copyright 1987.

355/ Payments are made on a semi-annual basis to the Copyright Office. If a dispute exists among the claimants to the funds collected for a given year, the

another $2 billion, or roughly 20 percent, for cable network programming. One study estimated that, on average, local broadcast station sin 1983 (affiliates and independents) spent about $8.73 per television household compared with an average of $1.08 per subscriber spent by cable systems for carriage of broadcast signals.[356/] The current system, therefore, has potential to distort market development by conferring an artificial cost advantage on one competitor.

Second, the Congressional view that "it would be impractical and unduly burdensome to require every cable system to negotiate with every copyright owner whose work was retransmitted by a cable system"[357/] is no longer correct. As one scholar noted,

> What the revisors overlooked was the fact that transaction costs are undesirable to both the prospective licensor and licensee and that it is in the interests of both to attempt to reduce them. Absent compulsory licensing, the transactional and antitrust problems underlying section 111 might have been avoided through blanket licenses executed between cable operators and copyright proprietors. Alternatively, with the proper incentives, an entrepreneur might have developed a computer-based negotiating system containing a catalogue of programs available for licensing together with information on royalty charges and broadcast times. The system could have administered the bargaining process and billing procedures for individual deals.
>
> In short, the variety of alternatives that could be devised is as great as the ingenuity of private entrepreneurs to strike the bargain that suits them

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Copyright Royalty Tribunal conducts a distribution proceeding. 1987 copyright payments were exceptionally low because of the U.S. District Court decision in Cablevision Co. v. Motion Picture Association of America, Inc., 641 F. Supp. 1154 (D.D.C. 1986), rev'd, 836 F.2d 599 (D.C. Cir. 1988). Payments for second half of 1987 will total well over $75 million, making a full year estimate of about $160 million for 1988. Broadcasting, Mar. 7, 1988, p. 8.

356/ Fratrick, Broadcasting and Cable Programming Cost Compaisons, unpublished paper, Sept. 16, 1985, at 2.

357/ House Copyright Report at 89, 1976 U.S. Code Cong. & Ad. News 5704.

> best. Yet, these efforts will be undertaken only if there exists the exclusive rights to warrant them. By reaching so quickly for the compulsory licensing solution, Congress effectively foreclosed experimentation with possibly more efficient private alternatives.358/

Third, the justification that the industry Consensus Agreement of 1971 contemplated implementation of a cable compulsory license, while true, deserves a more thorough review. The Consensus Agreement reached between program suppliers, cable operators, and broadcasters in 1971 was comprised of three parts: program suppliers were assured that cable systems would be subject to copyright liability; cable operators were assured that copyright liability would be limited by creation of a compulsory license; and broadcast interests were protected by an array of signal carriage rules and regulatory copyright exclusivity protection. These signal carriage rules required cable systems to carry a complement of broadcast signals.

It would have been grossly unfair to require cable systems to carry, and, thus, "perform", audiovisual works in certain signals, while subjecting those systems to full copyright liability. Free market negotiations could not have taken place, since copyright owners, knowing cable systems were required by law to carry those programs, could have extracted any price for the cable retransmission rights. The solution was a Congressional compromise: the compulsory license would balance, indeed, complement, the implementation of the carriage rules.

In addition to the requirement that cable systems retransmit (and, so, "perform") all copyrighted works in local broadcast signals, other FCC rules also constrained cable system duplication of locally broadcast programs. The FCC severely limited the number and kind of "distant signals" (i.e., broadcasts from stations licensed beyond the local service area of a cable system) that could be imported by a cable operators. In addition, the Commission's "syndicated exclusivity" rule permitted a copyright owner or broadcaster who had licensed exclusive rights to the local market to demand a cable system delete duplicative syndicated programming on imported stations. In 1980, however, the FCC repealed its distant signals and syndicated exclusivity

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358/ Goldstein, Preempted State Doctrines, Involuntary Transfers and Compulsory Licenses: Testing the Limits of Copyright, 24 UCLA L. Rev. 1107, 1138-39 (1977) (footnotes omitted).

rules[359/], creating what many termed an imbalance in the copyright-signal carriage scheme created in the early 1970s.

The court invalidation of the "must carry" rules as violative of cable operators' first amendment rights[360/] further unbalanced the regulatory scheme. Today, the network nonduplication rule[361/] and the sports blackout provisions[362/] are the only carriage limitations imposed on cable operators.[363/] On the other hand, increasing numbers of cable systems are importing increasing numbers of distant broadcast signals. It is estimated that between 50 and 55 percent of all broadcast stations are retransmitted by at least one of the larger cable systems outside their local broadcast areas.[364/]

Passive Carrier Exemption and Superstations:

With the advent of satellite distribution, the ability of cable systems to import distant signals was no longer limited to the broadcast signals in nearby markets. Satellite distribution of programming led to new programming options (basic cable networks) and changed traditional television programming practices (creation of superstations.)

359/ Report and Order in Docket Nos. 20988 and 21284, 79 FCC 2d 663 (1980), aff'd sub nom. Malrite TV of New York v. FCC, 652 F.2d 1140 (2d Cir. 1981), cert. denied, 454 U.S. 1143 (1982).

360/ Quincy Cable TV, Inc. v. FCC, 768 F.2d 1434 (D.C. Cir. 1985), cert. denied, 476 U.S. 1169 (1986); Century Communications Corp. v. FCC, 835 F.2d 292 (D.C. Cir. 1987), clarified, 837 F.2d 517 (D.C. Cir.), cert. denied, 56 U.S.L.W. 3816 (Mar. 31, 1988).

361/ 47 C.F.R. §§ 76.92 - .99 (1986).

362/ Id. § 76.67.

363/ In addition, new syndicated exclusivity rules will become effective in 1989, as discussed infra.

364/ This estimate is based on copyright fee payments by large (Form 3) cable systems only. If smaller cable systems (Form 1 and Form 2 systems) could be included, it is estimated that 60 to 70 percent of all stations are carried as "distant signals" on some cable system. Estimated by Tom Larson, President, Cable Data, Bethesda, Maryland.

The "passive carrier" exemption from copyright liability[365/] is used by satellite carriers like Tempo, Eastern Microwave, and United Video, to escape copyright liability when they uplink and retransmit popular broadcast stations, thus creating "superstations." The former Register of Copyrights and others (including NTIA) have pointed out that the use of the "passive carrier" exemption for such activities was not intended by Congress.[366/] The courts, however, have not ruled against the satellite carriers for uplinking, retransmitting and marketing "superstations" to cable systems.[367/]

Instead of invoking the "passive carrier" exemption, one satellite carrier, SBN, has raised a novel defense in a lawsuit brought by Capital Cities/ABC and other networks for SBN's uplinking, encryption, and marketing of network affiliate broadcast signals to home satellite dish owners and cable systems.[368/] SBN claims that so long as it complies with requirements of the cable compulsory license, it qualifies as a non-terrestrial "unwired cable system." SBN is willing to pay copyright fees under the cable compulsory

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365/ 17 U.S.C. § 111(a)(3) (1982).

366/ Copyright Issues: Cable Television and Perfroamcne Rights, Hearings Before the Subcommittee on Courts, Civil Liberties and the Administration of Justice of the House Committee on the Judiciary, 96th Cong., 1st Sess. 23 (1979) (statement of Barbara Ringer, U.S. Register of Copyrights); Leibowitz, The Sequential Distribution of Television Programming in a Dynamic Marketplace, 34 Cath. L. Rev. 671, 679 (1985); NTIA, Cable Retransmission of Broadcast Television Programs Following Elimination of the "Must Carry" Rules at 34-35.

367/ Hubbard Broadcasting, Inc. v. Southern Satellite Sys., Inc., 593 F. Supp. 808 (D. Minn. 1984), aff'd, 777 F.2d 393 (8th Cir. 1985), cert. denied, 107 S. Ct. 643 (1986); Eastern Microwave, Inc. v. Doubleday Sports, Inc., 534 F.Supp (N.D.N.Y.), rev'd, 691 F.2d 125 (2d Cir. 1982), cert. denied, 459 U.S. 1226 (1983); WGN Continental Broadcasting Co. v. United Video, Inc., 523 F.Supp. 403 (N.D. Ill. 1981), rev'd 693 F.2d 622 (7th Cir. 1982).

368/ Answer of Satellite Broadcast Network, Capital Cities/ABC v. Satellite Broadcast Network, No. 87 Civ. 495 (S.D.N.Y. Jan. 26, 1987.)

license.[369] At issue in the case is the scope of the Copyright Act's definition of "cable system"[370] The Copyright Office also has a proceeding underway to examine the meaning of the "cable system" term.[371]

Today, following elimination of the "must carry" rules in two constitutional challenges[372], the imbalance has worsened. With no requirement to carry certain signals, no limitation on the importation of distant signals, and no obligation to delete duplicative syndicated programming,[373] broadcasters and copyright owners are trying to make a market work, while cable systems operate outside that market and render exclusive contractual provisions useless.

369/ For the reporting period covering the first six months of 1987, Satellite Broadcast Network reported $9,000 in gross receipts and paid the $28.00 fee for a Form 1 cable system. For the second half of 1987, SBN, under the name of Prime Time 24 Joint Venture, reported revenue of $111,000 (putting it in the category of a Form 2 cable system) and paid $379.57 in copyright fees. Data from the Licensing Division of the Copyright Office.

370/ A "cable system" is a facility, located in any State, Territory, Trust Territory, or Possession, that in whole or in part receives signals transmitted or programs broadcast by one or more television broadcast stations licensed by the Federal Communications Commission, and makes secondary transmissions of such signals or programs by wires, cables, or other communications channels to subscribing members of the public who pay for such service..." 17 U.S.C. 111(f).

371/ Definition of Cable Systems, 51 Fed. Reg. 36,705 (1986).

372/ Quincy Cable TV, Inc. v. FCC, 768 F.2d 1434 (D.C. Cir. 1985), cert. denied, 476 U.S. 1169 (1986); Century Communications Corp. v. FCC, 835 F.2d 292 (D.C. Cir. 1987), clarified, 837 F.2d 517 (D.C. Cir.), cert. denied, 56 U.S.L.W. 3816 (Mar. 31, 1988).

373/ Report and Order in Docket Nos. 20988 and 21284, 79 F.C.C. 2d 663 (1980), aff'd sub nom. Malrite TV of New York v. FCC, 652 F.2d 1140 (2d Cir. 1981), cert. denied, 454 U.S. 1143 (1982).

Syndicated Exclusivity:

One action that will restore some balance to these relationships is the FCC's recent decision to reinstate a syndicated exclusivity rule.[374] When the new rules become effective, broadcasters will be able to request a local cable system delete any imported program that would duplicate programs to which the local broadcaster had exclusive rights. NTIA has supported reinstatement of syndicated exclusivity protection so long as the cable compulsory license remains in effect.[375]

The cable compulsory license, in the absence of a syndicated exclusivity rule, impairs the ability of copyright owners and primary transmitters (i.e., broadcasters, but could be others in the future) to acquire and enforce exclusive performance rights. The Congress may not have known that this would be the case because it could not have anticipated the wholesale cable deregulation by the FCC in the late 1970s (or the Quincy and Century rejections of the must carry rules.) With respect to the FCC's repeal of the distant signal and syndicated exclusivity rules, Chairman Robert Kastenmeier wrote, "We did not contemplate such a sweeping change in the regulatory structure when we drafted Public Law 94-553."[376]

Following the 1980 repeal of the syndicated exclusivity and distant signal rules by the FCC, the Copyright Royalty Tribunal (CRT) prospectively adjusted fees for importation of distant signals. In 1982, the CRT (1) created a new

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374/ FCC Rep. No. DC-1171, Mimeo 3035 (released May 18, 1988).

375/ Basic and pay cable networks may be disadvantaged vis a vis superstation carriers in two ways. First, cable networks have entered into market-based contracts with copyright owners and have increasingly obtained exclusive rights to programs, which may make it necessary for them to charge more to cable systems for carriage than superstation carriers. Second, superstations may broadcast some of the same programming (intended for a local broadcast market) as cable networks, and, as with terrestrial broadcasters, cable networks may find their "exclusivity" diluted by superstations duplication.

376/ Chairman Robert Kastenmeier, Chairman of the House Subcommittee on Courts, Civil Liberties and Administration of Justice, in a letter to FCC Chairman Charles Ferris, March 13, 1980, quoted in Report and Order in Docket Nos. 20988 and 21284, 79 FCC 2d at 897.

surcharge to compensate owners for repeal of the syndicated exclusivity rule (which amounted to about 30 percent of the normal rates in 1983); and (2) adjusted the fee for each distant signal equivalent added to a cable system after June 24, 1981, to 3.75 percent of gross revenues from basic service, a tradeoff for repeal of the distant signal carriage rules. In 1983, this fund was worth about 25 percent of the normal fees collected. Since the Commission has acted to reimpose syndicated exclusivity protection, it is expected that a CRT proceeding will follow to eliminate the syndicated exclusivity surcharge.

Compulsory License for Local Signal Carriage:

However meritorious, imminent repeal of the cable compulsory license remains unlikely. Indeed, NTIA noted recently that repeal of the license, if possible, should be accomplished over a period of years to permit programming contracts to be written prospectively.[377/] In addition, there may be countervailing communications policy reasons to retain the compulsory license for all local broadcast signals. The television allocations scheme established in 1952 created an expectancy that viewers would have local service from a certain number of commercial and noncommercial signals with certain channel designations. So long as cable operators have a privilege to retransmit any class of broadcast audiovisual works, it should carry with it a responsibility to further communications policy goals.

Conclusion:

As noted above, copyright exclusivity generally promotes the public interest by ensuring creators that they will be compensated for their works. That protection of intellectual property is increasingly important hardly needs repeating here, but we wish to underscore the connection between adequate incentives for creators to produce new works and the public interest in promoting diversity, new program choices, from an expanding pool of creators.

We have pointed out that the Congress has carefully balanced the needs of users against the rights of creators in its exemptions, definitions, "first sale doctrine," and "fair use exemption." We have called for an end to the cable

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377/ Comments of NTIA in Gen. Docket 87-24 at 16-17 (filed August 6, 1987). NTIA also outlined four possible market-based mechanisms that might be employed to "broker" or transfer rights. Id. at 12-16.

compulsory license, however, because events have superseded its purposes: transactions can be directly accomplished between cable and copyright owners (or others holding retransmission rights), the industry is no longer an "infant", and the required retransmission of copyrighted works in local broadcast signals has been invalidated.

The increasing number of cable networks entering into direct negotiations with program suppliers is relevant in at least three respects: (1) it is evidence that intermediaries, packagers, brokers, on behalf of the cable industry can successfully acquire rights from program suppliers;[378/] (2) as these networks gain in viewing popularity, the reliance of cable systems on retransmitted broadcast signals should decline; (3) other media may demand, need, want access to cable network programming and may try to extend the "secondary transmission" compulsory license to their uses of those primary transmissions. These observations may mean that the cable industry is moving towards an acceptance that the compulsory license can and should be repealed.

378/ Cable system operators in Rochester, New York, and San Diego, California have reportedly licensed certain news and sports programming directly from distant signals broadcasters. Multichannel News, Sept. 8, 1986 at 1; Cablevision, May 18, 1987 at 21.

Conclusions and Recommendations

Over the last forty years, cable television has benefited much of the public by bringing video programming to areas previously unserved and by dramatically increasing the choices available to its subscribers. Cable has helped increased the competitiveness of the video market and the diversity of program choices available to increasing audiences. However, despite rapid deployment of cable technology, today 20 percent of the country's households do not have access to cable service. Moreover, where cable service is available, few consumers have a choice of cable firms.

Most cable systems are no longer subject to local regulation of basic cable service rates. There is, predictably, significant concern about whether rate deregulation is working. Our evaluation of the limited rate studies done to date demonstrates that it is too early to make judgments about economic justifications for rate increases on a nationwide, industry-wide basis.

In reviewing the status of the cable industry, we find that, although the public has benefited and will continue to benefit from cable television, there are serious problems on the horizon. Vertical integration of MSOs into programming and increasing concentration of cable ownership among the largest MSOs has the potential to harm competition and diversity in video programming. Cable service is increasingly relied upon by more than half of all the nation's television households as the primary source of video programming, yet these households are typically unable to choose among two or more cable providers. Thus, cable operators have come to dominate the local medium of choice for most Americans. Such lack of direct competition risks undermining diversity of program choices, and denies the public benefits resulting from more competitive markets such as better quality service, lower prices, and more choices.

To avoid such consumer harms, two conditions need to occur: first, local markets should be "opened up" to more competition from multichannel program distributors; and second, legal impediments should be removed in order to facilitate provision of video common carriage by local telephone companies in their service areas.

This report has not sought precisely to quantify the level of competition present in the video market. Instead, we recognize that whatever the level of competition in the provision of video programming, policies can be implemented which are intended to increase the competitiveness and diversity of the video market. Government policies should

not adversely affect the advances made by cable television in making the video market more competitive and diverse. We conclude, however, that new policies are needed to improve on the levels of competition and diversity in video programming distribution in the future.

The deployment of competitive wire-based broadband facilities would indeed provide competition to cable. The likelihood of widespread competitive wire-based broadband systems is small, given factors such as the franchising process and the high capital investment required. Other distribution systems (such as MMDS and DBS) should be encouraged to develop to stimulate competition in the distribution of video programming, although their future is uncertain.

Thus, we conclude that impediments to exchange telephone companies offering "video common carriage" in their service areas should be removed, allowing them to provide video transport (not programming services) directly to subscribers.

There appear to be two actions necessary to remove impediments to achieving this competition and diversity goal: deletion of the requirement that common carriers lease channel capacity only to franchised cable operators or franchising authorities and a related FCC condition for approval of a construction application under Section 214 that the prospective lessee of the channel capacity be a franchised cable operator; and clarification of the range of activities telephone companies should be able to engage in which might be "ancillary" to the provision of transport or channel capacity, so long as those services do not affect competitiveness or entail editorial control of programming.

As for broadcast ownership, we have minimal concerns about the ability of local broadcasters to act anticompetitively, but prudent decisions on a waiver basis seem the best course. Network ownership of cable systems should no longer be prohibited because of substantial changes in the national market for programming and advertising.

The increasing competitiveness of the local market will occur through video common carriage and, hopefully, development of alternative distribution media. These conditions can be achieved, but they will not develop immediately. Until then, the fundamental communications policy goal of diversity may be thwarted by the trend towards concentration of ownership. We recommend, therefore, that the FCC initiate an inquiry into the effects of concentration on diversity in the video market and to determine whether steps should be taken to limit cable ownership.

This report has also reviewed the benefits and potential for anticompetitive behavior by cable MSOs vertically integrating into the programming production and supply businesses. On balance, cable's ability to support new and different cable-specific program sources and networks is a benefit from vertical integration that, at present, outweighs the potential harms from the trend. Although no government action is warranted at this time, the FCC and Congress should be prepared to intervene to ensure that communications policies are not undermined by practices which may not yet rise to the level of antitrust violations.

Finally, cable television has been favored with preferential copyright treatment throughout its history. This preferential treatment is no longer justified because cable has long outgrown its "infant" status and many of cable's regulatory obligations have been eliminated (e.g., must carry and distant signal rules). So long as the cable compulsory license exists, it should only be available to those cable systems which carry all local broadcast signals. Free market conditions, however, remain the best way to ensure that program creators and suppliers have adequate incentives to continue to strive to fill the abundance of channels with new and different programming.

Appendix A

Studies of Basic Cable Service Rate Increases

In the early years of cable television, state and local governments exercised broad authority over the rates cable systems charged their subscribers.[1] Over the last fifteen years, that authority has been reduced substantially.[2] Congress continued the process with the passage of the Cable Communications Policy Act of 1984 ("Cable Act").[3] The Cable Act authorizes rate regulation only for "basic cable services,"[4] and only for those cable systems that do not face "effective competition," as defined by the FCC.[5]

1/ The FCC never elected affirmatively to regulate cable rates. Instead, the Commission has limited the scope of state and local rate regulation. See note 2, *infra*.

2/ In 1974, the FCC effectively deregulated rates for pay cable services by preempting state and local rate regulation of services provided on a per program or per channel basis and by not imposing any rate regulation on those services. *Clarification of the Cable Television Rules*, 46 FCC 2d 175, 188 (1974), *aff'd sub nom. Brookhaven Cable TV, Inc. v. Kelly*, 573 F.2d 765 (2d Cir. 1978), *cert. denied*, 441 U.S. 904 (1979). Subsequently, the FCC further limited non-Federal regulation of basic cable service rates by preempting all governmental program regulation except for the rates charged for the lowest tier of basic service, which need only include local broadcast signals and mandated access channels. *Community Cable TV, Inc.* 94 FCC 2d 1204 (1983), *recon. denied*, 98 FCC 2d 1180 (1984).

The Cable Act modified the latter decision by expanding the "basic cable services" subject to rate regulation. The Act, however, limited the circumstances under which rate regulation would be permitted. See notes 4 and 5, *infra*, and accompanying text.

3/ Pub. L. No. 98-549, 98 Stat. 2779 (codified at 47 U.S.C. §§ 521-559 (Supp. III 1985)).

4/ 47 U.S.C. § 543 (Supp. III 1985). Under the Act, "basic cable service" means "any service tier which includes the retransmission of local broadcast signals." *Id.* § 522(2).

5/ *Id.* § 543(b).

The FCC has since determined that a cable system faces effective competition when at least three over-the-air broadcast television signals are available within the community served by that system.[6/] Thus, the Cable Act effectively bars all governmental regulation of cable service rates, except for the basic services offered by systems in communities served by fewer than three over-the-air broadcast signals. As a result of the Cable Act and the FCC's implementing regulations, most cable systems' basic service rates are no longer subject to governmental control.[7/]

Since rate deregulation became fully effective on December 29, 1986,[8/] many cable systems have increased their basic rates. The combination of unregulated pay rates and regulated basic rates, coupled with effects of the franchising process, may have resulted in artificially low basic rates prior to deregulation. The increases in basic rates over the last eighteen months may simply reflect a market "correction."

6/ Implementation of the Provisions of the Cable Communications Policy Act of 1984, 50 Fed. Reg. 18637, 18648-50 (1985), aff'd in part and rev'd in part sub nom. American Civil Liberties Union v. FCC, 823 F.2d 1554 (D.C. Cir. 1987), cert. denied, 108 S.Ct. 1220 (1988). Initially, the FCC deemed a signal to be "available" within a community if the signal's Grade B contour covered any portion of that community. 50 Fed. Reg. at 18651. On remand after reversal by the court of appeals, the FCC amended its availability standard to require that the signal's Grade B contour encompass the entire community. Second Report and Order in MM Docket No. 84-1296, FCC 88-128 (released Apr. 12, 1988).

7/ The president of Community Antenna Television Association (CATA), a trade association of small cable systems, estimates that 85 percent of all cable subscribers are served by deregulated cable systems. Electronic Media, Mar. 28, 1988, at 35.

8/ The Cable Act took effect on December 29, 1984, sixty days after having been signed by President Reagan on October 30. See Pub. L. No. 98-549, § 9(a), 98 Stat. 2806. All franchises issued after December 29, 1984, were subject to the rate provisions of the Cable Act. For systems in operation on or before that date governmental regulation of basic rates was permitted (whether or not those systems faced "effective competition") for an additional two years. 47 U.S.C. §543(c) (Supp. III 1985).

Growing complaints about the size and prevalence of rate hikes have prompted greater scrutiny from Federal and state authorities. The National Association of Attorneys General Antitrust Committee recently formed a five-state task force to discuss basic rate increases, among other issues.[9/] Basic cable rates were also discussed in recent proceedings before the Senate Antitrust Subcommittee and the House Telecommunications Subcommittee. In the Senate hearings, Senator Metzenbaum cited a list of 93 cable systems that had raised basic rates by 50 percent or more in 1987.[10/] During the House hearings, Congressman Tauke mentioned a 44 percent increase in Dubuque, Iowa, and Congressman Eckart referred to four systems in Ohio that had increased basic rates between 46 and 80 percent.[11/]

While there is ample evidence that, individually, some cable systems have substantially increased basic rates since deregulation, information on basic rate levels throughout the industry is more limited. To date, three studies have attempted to track changes in basic rates in the months since deregulation. Paul Kagan Associates, a cable consultant, gathered data from 53 multiple system operators regarding the rates charged on December 31, 1986 and September 30, 1987.[12/] The survey revealed that average basic rates have increased 16 percent during that nine month period, from $11.27 to $13.07.[13/] Because average pay rates decreased by 7.6 percent over that time, however, the average combined price for basic and pay service increased only 4.8 percent, from $21.37 to $22.40.[14/]

In September 1987, the National League of Cities ("NLC") released the results of a survey of "cable regulators around

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9/ See Broadcasting, Mar. 21, 1988, at 45. The five states involved are Maryland, New Hampshire, Ohio, Texas, and West Virginia.

10/ Electronic Media, Mar. 21, 1988, at 31.

11/ Multichannel News, Apr. 4, 1988, at 44.

12/ Paul Kagan Assoc., Inc., Cable TV Investor, Jan. 27, 1988, 4.

13/ Id.

14/ Id.

the nation."[15] Responses were received from 233 franchising authorities covering 274 cable systems serving 4,681,318 subscribers.[16] Of the systems surveyed, 82.6 percent, or 226 systems, increased their basic rates after December 30, 1986.[17] In 48.9 percent of those cases, the rate hikes were accompanied by an increase in the number of basic services offered.[18] The NLC stated, without elaboration, that "these increases in the services provided were considered to be equivalent in value to the rate increase."[19] For 51.1 percent of the 226 systems, the basic rate increases did not include any increase in services provided. The average increase in the latter instances was 27.5 percent, the median increase 18.5 percent.[20] The escalation in basic rates was counterbalanced by a reduction in pay service rates in 17.3 percent of the cases.[21]

15/ National League of Cities, Impact of the Cable Act on Franchising Authorities and Consumers, (Sept. 18, 1987) (attached as Exhibit B to Comments of the National League of Cities in MM Docket No. 84-1296 (FCC Dec. 4, 1987)) ("NLC Study").

16/ Id. at 1. The systems and subscribers included in the survey represented about 3.7 percent of all cable systems and 10.5 percent of all subscribers.

17/ Id.

18/ Id. The NLC's report is unclear on this point. It states that, of the systems increasing rates after deregulation (82.6 percent of the systems responding), 40.4 percent also increased the number of basic services provided. Id. In 42.3 percent of the cases, NLC asserts, the rate increase included either no change in the services offered or a reduction in services provided. Id. at 2. These two statements exhaust all possible responses, yet leave some 20 percent (100-(40.4 + 42.3)) of the responding systems unaccounted for. We have attempted to reconcile the two systems by assuming the percentages given are based upon all 274 systems in the survey, rather than just the 226 systems that raised basic rates. As reinterpreted, the 40.4 percent of all systems that increased rates and services becomes 48.9 percent of the 226 systems that have raised basic rates since December 1986.

19/ Id. at 1.

20/ Id. at 2.

21/ Id.

The final study was performed by the National Cable Television Association ("NCTA"), with assistance from Arthur Andersen & Company.[22] NCTA sent out questionnaires to a random sample of 2,577 cable systems, receiving responses from 598 systems serving 7,150,000 subscribers.[23] The responses indicated that the basic rate paid by the average subscriber[24] increased 10.6 percent between December 1986 and June 1987, from $11.85 to $13.11.[25] Over the same period, the number of basic services received by the average subscriber expanded 5.9 percent, from 27.3 channels to 28.9 channels.[26] Because of a reduction in pay rates, the average subscriber's monthly bill for cable service increased 6.7 percent between December 1986 and June 1987.[27]

While these three studies provide some insight into the changes in basic cable rates since deregulation, the studies contain several flaws that limit the strength of their findings. First, there is some question whether the systems responding to the NLC and NCTA surveys are representative of the entire cable industry. NCTA acknowledges, for example, that the systems responding to its questionnaire represent "a higher proportion of larger systems than found in the universe of cable systems."[28] Roughly 95 percent of the systems included in the NLC study serve urban or suburban

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22/ National Cable Television Assoc., Inc., Rate Deregulation: Cable Industry Pricing Changes and Service Expansion in a Deregulated Environment (Nov. 1987) ("NCTA Study").

23/ These figures represent 8 percent of all systems and 16 percent of all cable subscribers.

24/ To calculate the average basic rate per subscriber, NCTA multiplied the number of subscribers served by each responding system by that system's basic rate. The results for each system were then added together and divided by the total number of subscribers in the survey. See id. at ii n.2. This process compensates for the differences in size among cable systems.

25/ Id. at 5, 6.

26/ Id. at 5.

27/ Id. at 17.

28/ Id. Executive Summary at 1.

communities.[29] Thus, both the NCTA and NLC studies probably do not accurately reflect changes in basic rates (and, thus, the effects of deregulation) in small or rural communities where viewing alternatives may be more limited.

The NLC study also provides only partial information on changes in basic rates since deregulation. It furnishes rate information only for those systems responding that raised rates without also increasing the number of basic services offered. The NLC study thus says nothing about the rate of increase in basic rates for the cable industry as a whole, or even for all systems that have raised basic rates since December 1986.

The Kagan survey does not consider changes in the number of basic services provided. By not factoring in instances where an increase in basic rates is accompanied by an increase in value to subscribers (in the form of more basic services), the Kagan study may provide a distorted picture of basic rate increase.

Finally, all three studies appear to include both regulated and deregulated systems. The inclusion of regulated systems in each survey may bias the results, with the direction of the bias dependent upon the effectiveness of rate regulation. If regulation effectively constrains a system's ability to set rates,[30] for example, the percentage increase in basic rates for the entire sample will likely be greater than would be the case if the sample did not include regulated systems.

Even if the three studies reliably depict the movement of basic rates since deregulation, they would be of limited use to the debate concerning the wisdom of basic service deregulation. The Kagan survey includes rate information only for the first nine months after deregulation. The NCTA and NLC studies contain data for the first six months of 1987. It would be unwise to make judgments about the merits of cable rate deregulation on the basis of partial data from the first year after comprehensive deregulation.

29/ NLC Study at 1.

30/ There is some reason for questioning this assumption. One study has suggested that, in general, cable service rates are higher in states with rate regulation than in states without regulation. Braunstein, Kalba, and Levine, The Economic Impact of State Cable TV Regulation, Report Prepared for the Harvard Program on Information Resources Policy (Oct. 1978).

Moreover, one cannot determine whether recent basic rate increases reflect the exercise of undue market power by deregulated cable systems without considering rate levels prior to deregulation. The cable industry has contended, for example, that regulation has in the past kept basic rates artificially low.[31/] Some cable operators may have had to agree to low, inflexible basic rates in order to obtain a franchise. Thus, basic rate increases since December 1986 may merely indicate a necessary market adjustment, rather than the exercise of undesirable market power by cable systems.

There is some evidence, though not conclusive, to support the cable industry's argument. Basic rates increased some 65 percent between 1976 and 1986, from $6.72 to $11.09.[32/] During the same period, overall consumer prices, measured by the Consumer Price Index, increased 93 percent.[33/] The costs of providing basic services also appear to have escalated significantly.[34/] These figures provide some support for the notion that, under regulation, basic cable rates were not allowed to keep pace with increases in costs.

CONCLUSION

It is not possible at this time to determine whether changes in basic cable rates since December 1986 have caused any problems warranting Government intervention, and whether the costs of such action would be less than the welfare gains conferred. Anecdotal evidence and several broader studies indicate that basic rates have risen since comprehensive deregulation occurred on December 29, 1986. The anecdotal evidence must be investigated further, however, and the available studies contain flaws that cast doubt on whether their findings accurately depict the current marketplace. More generally, the policy implications of basic rate increases since deregulation cannot be determined without

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31/ See National Journal, Jan. 2, 1988, at 42.

32/ National Cable Television Association, Cable Television Developments 5 (Sept. 1987) (citing Paul Kagan Assoc., Inc., The Pay TV Newsletter, June 26, 1987, at 4).

33/ NCTA Study at 2 and n.4.

34/ For example, the average per subscriber license fees charged by the most frequently carried basic cable networks increased 83 percent between 1984 and 1986. Paul Kagan Assoc., Inc., Cable TV Programming, Nov. 25, 1986, at 3.

examining rate levels prior to deregulation, as well as changes in the costs of providing basic service.

Appendix B

Broadband and Cable Television Technology

Broadband network facilities can carry many voice conversations, data, and many channels of television-like video programming simultaneously.[1/] The most common broadband networks in the United States, cable television systems carry predominantly video programming. Some cable system facilities called institutional networks, or I-nets, also carry voice and data. Public switched telephone facilities serving residential customers have been traditionally designed to carry voice traffic and may not be suitable to carry video programming without substantial modifications. Private network facilities, offered by telephone companies and other providers, can, however, carry such traffic.

As new technology enables telephone companies to expand the capacity of public network facilities, new service offerings, including carriage of video programming to residential and other subscribers, can be made available over telephone company facilities.

There have been several traditional design differences between current cable television and telephone plant. The principal design difference between cable television and telephone systems, as they exist today, lies in the differing primary markets intended to be served.[2/] Because cable systems deliver mostly video signals and telephone systems transmit voice and data, the respective systems are designed for the different types of signals to be transmitted to subscribers. Cable systems typically carry many wideband signals (perhaps 30 or more television programs, each requiring 6 MHz) while the latter carry much narrower bandwidth signals to subscribers (including voice messages

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1/ Data Communications Terms: A Detailed Glossary for the Communications Professional, Data Communications Institute, A Division of the American Institute, 1986.

2/ There are developments which already blur these distinctions. Telephone companies are experimenting with plant which carries multiple voice and data channels for subscribers. Several telephone companies are planning experimental facilities which can carry video programming. Cable companies, on the other hand, have operated facilities carrying voice and data with limited success.

requiring less than 4 KHz).[3] Second, while telephone systems are customarily designed for two-way point-to-point communications, cable television systems are built primarily as multipoint systems. In cases in which cable services convey information in two directions, the information path from the cable company origination facility to the subscriber is often much larger than the path in the opposite direction. One practical implication of these differences in information flow is that switching machines, found in virtually all telephone networks, are not common in cable television networks.

Telephone companies and other vendors provide private broadband network facilities which do not necessarily interconnect with public-switched network facilities. Indeed, broadcast networks use such facilities to carry programming to their affiliate stations. Interexchange telephone service carriers use broadband facilities to move traffic into and through their networks. And public and private organizations involved in such diverse activities as business, government and education use broadband facilities to transmit data, voice, and video among their geographically dispersed locations.

Telephone companies are actively engaged in research and development aimed at bringing more broadband transport capabilities to their networks. Several trials are underway experimenting with the use of lightwave systems in local loop plant to study the operational feasibility of extending broadband transmission capabilities into residential applications. The telephone industry is also in the midst of developing technical standards for lightwave equipment which are "expected to radically improve the economics of lightwave transmission in the public network, as well as pave the way for broadband services."[4] Another important research area focuses on developing economical switching equipment which will be compatible with broadband transmission facilities. Success in these areas could perhaps someday increase consumer choice in the delivery of video programming and other services.

3/ This difference in transmission capacity to subscribers can be quite large. A cable system carrying 30 channels would require more than 20,000 times the capacity needed to carry a two-way voice telephone conservation.

4/ Lightwave, April, 1988 at 3.

Cable Television Technology:

The technology of cable services is designed to carry large amounts of information (usually many television signals) to subscribers. The equipment employed is usually designed to deliver a large number of high-quality video and audio signals throughout the service area of the cable company. These signals most often take the form of radio and television programming.

While cable system equipment has evolved substantially over the last four decades, the three major elements comprising each system have not changed. The typical cable system is composed of (1) a "headend" where television and FM radio signals are received, processed, and prepared for transmission to subscribers; (2) a distribution plant to carry these signals; and (3) subscriber interface equipment which permits interconnection of television receivers.

A Cable Headend

Programming for subscribers is gathered in a number of different ways at the cable headend. Locally broadcast programming is received via antennae, while more distant broadcast signals and cable programming are imported by satellite and microwave links. In addition, local cable-originated programming, advertising and public service programming may developed at facilities adjacent to the signal processing equipment, or brought to the headend for placement on cable system channels.

The received signals are each fed into processing units which adjust and amplify the aural and visual components of these program signals. Additional information is generated to control the operation of amplifier equipment in the distribution plant. These programming and control signals are then combined and fed onto the outgoing cable(s). It is often necessary to move the highest broadcast signals (i.e., UHF-TV) to cable channels operating at lower frequencies, to facilitate their transmission through the distribution plant.[5/] In addition, VHF-TV broadcast signals are often shifted to different cable channels to avoid interference,

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5/ While all signals will be "attenuated" or loose strength when moving through a medium such as a cable, the highest frequency signals will be subject to the most attenuation. By moving programming received on UHF-TV broadcast frequencies (470 MHz or larger) to lower frequency (up to 216 MHz) cable channels, operators can reduce attenuation and thereby, improve the transmission of programming through their distribution plant.

which may otherwise occur at the subscriber's television receiver.[6] The signal combiner puts all signals on a cable with minimum interaction among the channels.

Distribution Plant

The objective of the distribution plant is to carry the combined signals to the subscriber's premises in a form that a television receiver can decode. Special transmission plant, called "coaxial cable" has been traditionally used to convey these signals, because of its desirable electrical characteristics. Three different sizes of cable are used in a typical system. Trunk cables, which carry signals from the headend through the heart of a service area, are usually larger cables which are designed to minimize signal "attenuation" or loss. Feeder cables, connected to trunk cables with devices called bridging amplifiers, are smaller cables which carry signals along public "rights-of-way" to buildings. Smaller yet are drop cables which bring the signal from the street into the home. Such systems have commonly be described in terms of their "tree-like" structures.

Since signals attenuate or loose strength as they pass through a coaxial cable, it is necessary to compensate for the loss of signal strength by inserting amplifiers periodically within long cable spans. These amplifiers may also automatically compensate for signal attenuation differences from the highest to the lowest channel being carried and, attenuation due to temperature changes.

Each amplifier introduces both noise and distortion to the signals amplified. When amplifiers are "cascaded" or placed in series along a span of cable, noise and distortion will increase as a signal passes through each successive amplifier. To stay within the maximum allowable noise and distortion that will still produce a satisfactory picture at the subscriber's premises, it is necessary to limit the number of amplifiers cascaded in a cable span. Thus, there are practical limits in the length of a single cable run.[7]

The maximum allowable distance between amplifiers depends upon the cross-sectional size of the cable used, and

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6/ Without such channel shifting, carriage of the same programming on identical broadcast and cable channels may lead to interference at the television receiver.

7/ While current systems may have as many as 30 cascaded amplifiers, modern, low noise and distortion equipment makes even larger cascades possible.

the number of channels carried.[8] Using the larger trunk cables to cover sizable distances from the headend, operators can minimize the number of amplifiers required. Feeder cables can be made short enough to require only a few amplifiers (or "line extenders") to reach the most distant customers away from the serving trunk cable.[9] Drop cables, which connect to the feeder cable through "taps", are short enough to eliminate the need for amplification on those links.

The cable and other equipment which makes up the distribution plant can be installed throughout a service area either underground or on utility poles. Since entirely underground installations are very expensive, cable operators will often build a predominantly aerial system. Costs for construction of a 400 MHz aerial plant have been estimated at $10,000 per mile, while the costs for underground construction may range from $15,000 to more than $50,000 per mile depending upon factors such as the construction involved and "rights-of-way" costs.[10]

Subscriber Interface Equipment

There are at least three pieces of equipment commonly found inside the subscriber's premises, located between the drop cable and the subscriber's receiver. A device often found on the end of the drop cable, called a Balun transformer, matches the electrical characteristics of the cable and home receiver. In addition, many homes will also have set-top converters, which descramble premium programming, and also allow more than 12 channels to be received (described in the next section). These converters may have remote control channel changers. If a subscriber receives FM radio over the cable system, an "FM coupler" is often used to connect an FM receiver. This filtering device prevents television signals from being passed to the FM receiver.

8/ A one-inch diameter cable will lose 0.62 dB of signal per 100 feet, while a 1/2 inch diameter cable will lose 1.31 dB. A cable carrying 20 channels will require an amplifier every 2,000 feet, while that same cable carrying 40 channels will require one every 1,200 feet.

9/ Since trunk amplifiers and line extenders also require power supplies, there is added incentive, beyond noise and distortion concerns, to minimize their numbers.

10/ T. Baldwin and D. McVoy, Cable Communication 46-47 (1983).

Additional devices commonly used in the industry may be located within the customer premises or at the subscriber's tap. The customer may use an A/B switch to choose between receiving programs via a home antenna or via the cable. Other devices are designed to allow or prevent the viewing of particular channels or, specific programs on a pay-per-view basis. "Traps" are used to impair or inhibit the viewing of premium programming channels not bought by individual subscribers. Another type of device allows particular programs to be requested and viewed on a one time basis. These devices identify the viewer authorized to receive a specific program, instruct the cable equipment to allow viewing, and create a billing record of that viewing. Equipment has also been developed which allows cable operators to disconnect or reconnect service to a subscriber without dispatching field personnel.

System Channel Capacity

Maximum system channel capacity has grown with improvements in technology. Cable systems can carry 12 channels on a single cable which can be received by standard television equipment without the addition of special equipment. Systems can increase that capacity to 20 channels by running a parallel B or second cable with separate amplifiers. Those additional channels would be accessible by a switch under the subscribers' control.

An alternative way to increase channel capacity is to use the carrier frequencies between broadcast channel frequencies 6 and 7 and those above channel 13. In order to utilize these 56 additional channels, the signals carried by the cable system must be converted into a form that the television can receive. This process is usually accomplished with the use of a set-top converter, supplied by the cable system operator. In addition, to make the 41 channels above channel 13 available to subscribers, an operator will require high performance amplifiers and other components within the system. These higher bandwidth systems (with a downstream transmission bandwidth as high as 550 MHz) obviously cost more than simple 12 channel systems. With the use of dual cables and high bandwidth equipment, it is possible to build systems with more than 130 channels.

Interactive Systems

Two-way transmission cable systems have existed for quite some time. These systems tend to be asymmetric because they provide much more capacity in the direction of the subscriber (or "downstream") than away from the subscriber (or "upstream"). Two configurations are predominant. A

"sub-split" system uses the frequency band below the channel 2 carrier. In such an arrangement the band from 5-30 MHz is used for the upstream signals. In an alternative arrangement, called a "mid-split" system, the downstream signals are carried on channel 7 and above, while the upstream signal occupy the 5 to 108 MHz frequency band. A typical 300 MHz "institutional cable" system or I-net, carrying voice and or data traffic, may have 126 MHz downstream and 103 MHz upstream.

Two-way systems require amplification in the upstream direction. Filters must also be used to separate the signals moving in either direction. Upstream signals, like downstream signals, may consist of analog television signals or they may be digital in nature. Two-way systems can be used to provide impulse pay-per-view, home energy management, alarm services, electronic banking, home shopping, and data transmission.

In general, the institutional network concept has remained a highly specialized application of a broadband facility. Most I-nets have been constructed because communities require their construction as a precondition to a franchise award for the right to provide the local cable service. Some I-nets have also been constructed to offer businesses data and video services, a form of private network offering competition to the local telephone company network.[11/] A recent study of cable developments identifies 210 specialized two-way cable systems with about 12,000 miles of plant.[12/] Approximately 120 of these I-nets use some portion of the cable systems' general subscriber networks, while the remaining 90 are separate systems.[13/] Table 1 lists the largest I-nets in operation as of June 1985.

11/ See Competition in the Local Exchange Telephone Service Market, NTIA, Office of Policy Analysis and Development, NTIA Report 87-210, February 1987.

12/ "Cable's Back Burner Filling Up with Successful I-net Projects," Cablevision, July 21, 1986, at 50.

13/ Competition in the Local Exchange Telephone Market, NTIA, February 1987.

Table 1

Sixteen of the Largest I-nets
as of June 1985

City/Operator	Population	Subscribers	I-net Miles	Capacity	Start Date	No. Users	Video/ Data	Comments (Users, Uses)
Little Rock, AR Storer Cable	132,483	37,177	916	350 MHz	1980	NA	Both	Health Institutions
Irvine/Newport Beach, CA Community Cablevision	91,000	21,300	300	6 MHz *	1976	5	Video	School district uses; integrated with subscriber net; museum; college; government.
Mountain View, CA Viacom	60,000	5,041	8	54-450MHz 7 up/10 dn	1983	16	Data	Fire department.
Atlanta, GA Prime Cable	991,704	104,200	10	400 MHz 4 ch	1983	7,000+	Both	Several hotels, information transmitted to 7,000 rooms.
Indianapolis, IN ATC	700,087	52,200	100	7 ch	1982	NA	Video	City Gov't; high school; universities; libraries; fire stations.
Dubuque, IA Group W	84,000	26,300	23.72	18 up/35 dn	1982	3	Data	Parallel to subscriber cable. Local institutions are having drops installed. Currently no upstream use.
Kenton/Boone Co., KY Storer	244,630	39,241	150	108-330 MHz	1983	10+	Both	Schools, city agencies, police.
East Lansing, MI United Cable	71,355	14,487	22	22 MHz **	1979	6	Both	Dual cable. Access to community, government and education channels; hospitals; data, CAT scan; MSU, data.
Columbia Heights, MN Group W	22,000	3,257	12.78	174-220 MHz 16 ch	1983	7	Both	Users include local government libraries.

Table 1 (continued)

Sixteen of the Largest I-nets
as of June 1985

City/Operator	Population	Subscribers	I-net Miles	Capacity	Start Date	No. Users	Video/ Data	Comments (Users, Uses)
Omaha, NE Cable	311,681	64,724	183	400 MHz 27 up/dn	1982	4	Both	Voice program distribution; Cox college; city government; job service; high school.
Manhattan, NY (south half) ATC	379,880	187,900	17	300 MHz	1977	NA	Data	Banks; City of New York; data transmission point to point and multipoint.
Dayton/Miami Valley, OH Continental	263,500	36,313	60	20 up/dn	1975	1	Both	Dual cable. Return line for access operation.
Portland, OR Rogers Cablesystems	524,000	40,000	860	330 MHz 22 up/72 dn	1981	100+	Both	Satellite teleconferencing; banks; stockbrokers (Reuters); schools; county government.
Irving, TX Group W	120,000	17,197	43	400 MHz	1981	4	Both	Schools; governments; libraries.
Park Cities, TX Sammons	12,000	5,000	10	300 MHz 4 up/7 dn	1979	3	Both	Schools; governments; libraries.
San Antonio, TX Rogers Cablesystems	940,000	182,000	3,000	330 MHz	1985	NA	Both	Presently, in-house use.

Source: CTIC CableReports, July 1985, p. 6.

* There are 3, 6MHz channels.
** Have capability throughout entire system but it is not currently used.

Transmission Alternatives

Cable system operators may modify the basic system design in several different ways to reduce large amplifier cascades and resulting noise and distortion. Basically these modified designs impose an additional layer of signal transmission plant between the headend and the trunk plant. A service area can be subdivided into smaller areas, each served by a hub. Within each hub service area, the distribution plant is of conventional design as described above. But each of these hubs is connected with the headend (or system signal origination point) by low noise, low distortion transmission plant. These more hierarchical system designs are particularly effective for large service area operations, covering a radial area of greater than five miles.

The earliest application of this principle was called super-trunking. Large diameter, "low loss" coaxial cable (i.e., lower than trunk cable) and high performance amplifiers were used to interconnect hubs with the head end. In addition, television programming signals are often carried over this plant at frequencies below 50 MHz, with the use of frequency modulation (or FM) because of its noise reduction characteristics. The use of lower carrier frequencies took advantage of the reduced attenuation at those frequencies. The use of FM transmission techniques over super-trunk plant required initial processing of television signals at the headend and reconversion of signals at each hub, into a form receivable by subscriber's televisions. A typical super-trunk carries seven television signals, necessitating the use of multiple cables for systems with larger channel capacity.

An alternative to coaxial cable super-trunking is to interconnect the headend and hubs via microwave radio links. Since microwave systems are "line-of-sight" radio systems, they do not require terrestrial "rights-of-way". They are, however, vulnerable to rain and snow conditions. Early systems used FM equipment which required individual transmitter and receiver pairing for each channel transmitted. Microwave radio systems are now available which employ amplitude modulation (or AM), a transmission technique which simplified and lowered the cost of using microwave links for cable applications. Many large capacity systems currently use this type of equipment.

A third and much newer alternative for hub distribution is the use of lightwave transmission technology, including fiber optic cable, light sources, and detectors. This technology permits transmission of a large amount of signal bandwidth over many kilometers, with almost no distortion and noise. Repeaters may be needed for only the very greatest

distances. Lightwave systems may use both analog and digital transmission techniques.

Lightwave technology is being used to interconnect cable headends with hubs.[14] These systems use wideband FM transmission techniques which permit between eight and twelve television signals to be transmitted by each light source.[15] At each hub, these optical signals are detected and then reconverted into a form receivable by a standard television. Several cable companies are currently experimenting with AM transmission techniques, which may somewhat simplify the reception of signals by the subscriber equipment.[16]

It is also possible to digitize and digitally transmit television signals over lightwave systems. Again, optical signals must be detected and reconverted to a television receivable form. Digital transmission of television signals is potentially an attractive alternative because signal distortion can be minimized over large transmission distances with the use of regenerative repeaters. Demonstrations indicate that as many as 36 digital channels, carrying full-motion video, might be multiplexed onto a very large capacity lightwave system. However, even if such technology were available today, it would be cost prohibitive for most applications.

At the moment, digital transmission of television signals is quite expensive, and certainly more costly than FM lightwave systems. Reductions in the cost of digital lightwave components, will make such digital systems increasingly attractive during the next decade. Such components include optical sources, optical detectors, and equipment which converts optical signals into electrical signals, and vice versa.

It has been suggested that lightwave transmission technology will actually carry television programming into

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14/ A recent study of fiber backbone technology lists 11 fiber super-trunk installations from 1985 to the present.

15/ Several systems loading up to eight television signals per source are in operation today.

16/ For example, ATC expects to spend $100 million over the next few years to develop such technology. See "Fiber Technology Steals Cable-TV Show Spotlight," Lightwave, Jan. 1988, at 31.

the subscriber's premises.[17] The principal impediment at present is the cost of the components. Current applications of lightwave technology employ only a limited number of these expensive components, to interconnect headends with hubs. With the development of entirely optical transmission of signals to the home, each subscriber will need such components at the subscriber premises. At the moment this is an expensive proposition. Significant component cost reductions will make this idea ever more attractive for these applications.

Today, coaxial cable is the dominant medium used in the distribution portion of wired cable systems. Over 625,000 miles of coaxial cable is incorporated into the backbone of the wireline cable systems in the United States. Fiber optic cable, on the other hand, is only beginning to be incorporated into cable television networks, and initially, only in the trunk segment of the distribution system.

ATC, the second largest MSO, now plans to run fiber from its cable systems' headends to nodes interspersed throughout its networks. The company concluded that the reduction in the number of amplifiers in its systems could be reduced between 80 and 90 percent, thereby eliminating many costs associated with system maintenance and repair and reducing subscriber dissatisfaction. ATC also determined that it would be economically cost effective to install fiber backbones in its networks if the cost per subscriber fell below $30; ATC expects to spend $100 million over the next few years to make those improvements.[18]

Telephone Company Fiber-To-The-Home Experiments

Telephone companies are interested in increasing the capacity of their facilities such that video programming can be carried to the residential subscriber. At least five experiments involve deployment of fiber optic technology in telephone networks to provide services in the residential market. Table 2 lists these five experiments and the initial services planned to be offered. Only two of these experiments include the carriage of video programming, namely: Southern Bell's "Hunter's Creek" trial in Orlando, Florida, and GTE's trial at Cerritos, California.

17/ Indeed, several telephone company, including Southern Bell and GTE are experimenting or planning experiments with such applications.

18/ "Fiber Technology Steals Cable-TV Show Spotlight," Lightwave, January 1988, p. 31.

Table 2

Fiber-to-the-Home Operations

	BellSouth	GTE Corp.	BellSouth	Southwestern Bell
Operating Company	Southern Bell	General Tele. of California	Southern Bell	Southwestern Bell Telephone Company
Developer	Genstar Southern Development Inc.	None	Heathrow Development Corp.	
Cable Television Company	Hunter's Creek Cablevision, Genstar Southern Develop. Inc., and Scientific Atlanta Inc.	Apollo Cablevision	Heathrow Telecom. Inc.	None
Location	South Orlando, FL, exclusive subdivision	Cerritos, CA	North Orlando, FL, exclusive subdivision	Laewood, Kansas
Number of Residences	250 (targeted)	5,000 with fiber, more with other media	250	50-100
Switch	Separate system from telephone network	Not yet determined	Northern Telecom DMS-100	AT&T
Electronics	Scientific Atlanta Inc.	Not yet determined	Northern Telecom	AT&T DDM-1000 time-division multiplexers

Table 2 (continued)

Fiber-to-the-Home Operations

	BellSouth	GTE Corp.	BellSouth	Southwestern Bell
Transmission Medium	AT&T singlemode 48-fiber cable from head end to selector mode, 144-fiber multi-mode cables downstream from selector nodes, twisted pair up-stream to selector node	Not yet determined, possibly GTE Services Corp. will install	Northern Telecom residences to central offices; optical Cable Corp. within residences	AT&T singlemode fiber/twisted pair copper cable
Transmission Mode	Single-and multimode	Analog and digital	Singlemode, digital	AT&T digital subscriber loop carrier system
Sources	Light-emitting diodes	Light-emitting diodes and lasers	Light-emitting diodes and lasers	Lasers
When	CATV Nov. 1986, upgrade continue	Uncertain	June for ISDN service, March 1989 for CATV over fiber	1988/1989 for voice-only
Notes	CATV service only	Potentially voice, data, and video	Fiber within the homes; pay-per-view high-definition TV, teleconferencing, security planned	A&T& "standard" fiber-to-the-home system, voice only; Two other sites chosen from 1988/1989 fiber-to-the home deployment

Source: Lightwave, November 1987, p. 14.

The Hunter's Creek video transport trial excludes voice and data services because Southern Bell wants to isolate and resolve problems specific to digital, video transmission. The networks' basic elements "include a headend, which receives the CATV [video] signals; a single-mode fiber optic connection to a central selector node, which performs channel selection and is housed in an underground controlled environment vault; and a multimode fiber optic cable, which ties the selector node to an optical network interface on the customer's premises."19/

Southern Bell leases the facility to a cable television company at a rate of six dollars per fiber optic line. The monthly subscriber charge for cable television service is between twelve and fourteen dollars.20/

GTE's subsidiary, General Telephone of California, will conduct an experiment in Cerritos involving testing coaxial cable, fiber, and twisted pair wire transport of voice, data, and video signals. The plan calls for the construction of a coaxial cable television network to 16,000 homes and 2,000 businesses in Cerritos. GTE plans to install a 170-mile coaxial system and lease bandwidth to Apollo Cablevision, a franchised cable operator.

GTE Corporation will also lease bandwidth on the same coaxial system and install fiber optics to 5,000 of the Cerritos homes for testing purposes. GTE will compare the transmission of analog and digital video signals over lightwave facilities. Other tests will involve lightwave transmission of digital voice and data.

System Developments

With the array of new technical developments, such as those described above, cable operators are poised to improve their systems. Innovative super-trunking and hubbing arrangements can mitigate troublesome noise and interference problems. As cable plant becomes fully depreciated and requires replacement due to age, operators may be interested in increasing channel capacity, developing more addressability and impulse pay-per-view capabilities, and exploring the opportunities afforded by advanced television technologies such as high definition television. In

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19/ "Will Fiber Find Its Way Home?", Telephony, November 16, 1987.

20/ Id.

addition, cable operators will continue to work on signal leakage problems. With such improvements, cable systems with better signal quality and more capabilities will better serve the needs of their viewing public.

Telephone companies, too, appear to be increasingly interested in the possibility of carrying video programming to residential subscribers. The potential success of their experiments could stimulate this interest further and might result in new applications of technology that will only add to the competitiveness and diversity of viewer choice in the video marketplace.

APPENDIX C

Regulation of Cable Television

This appendix describes three regulatory and legal trends in cable television. First we describe the fundamental shift in the FCC's approach to cable television, from treatment as a service strictly ancillary to broadcast television to a full fledged competitor in the video distribution market. Second, we briefly outline the emergence of cable television as a "first amendment speaker." Third, we also consider the intent and effects of the Cable Act of 1984 with respect to certain aspects of the franchising process, a major part of the Act.

In its early development, regulation of cable television was limited to local control over use of the public rights-of-way by the cable system. Absent explicit state authority to grant cable franchises, local authorities have the authority to select the provider(s) of cable service and supervise the cable franchise. The Cable Act of 1984 "continue[d] reliance on the local franchising process as the primary means of cable television regulation"[1/] by stating as one of its purposes, to "establish franchise procedures and standards which encourage the growth and development of cable systems and which assure that cable systems are responsive to the needs and interests of the local community.[2/]"

Federal Regulation:

In 1956 a group of broadcasters petitioned the Federal Communications Commission to assert jurisdiction over cable systems as common carriers under Title II of the Communications Act of 1934.[3/] The FCC, however, found that cable was neither a common carrier nor a broadcast service, and refused to assert jurisdiction over it.[4/]

Immediately following its holding in Frontier Broadcasting, the FCC examined the impact of "auxiliary services," particularly cable television, on local

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1/ Cable Act Legislative History at 19, 1984 U.S. Code Cong. & Ad. News at 4656.

2/ 47 U.S.C. § 521(2) (Supp. III 1985).

3/ 47 U.S.C. §§ 201-224 (1982 and Supp. III 1985).

4/ Frontier Broadcasting Co. v. Collier, 24 F.C.C. 251 (1958).

broadcasting.[5] Broadcast groups contended in the proceeding that the importation of distant signals by cable systems adversely affected local broadcasting and thus the FCC should regulate cable. The FCC, however, reaffirmed its decision in Frontier Broadcasting that it did not have authority to regulate cable as a common carrier or broadcaster.[6] In addition, the FCC held that section 325 of the Communications Act did not protect the broadcasters signal from retransmission by a cable system.[5] Finally, the FCC found that it did not have enough evidence to conclude that importation of signals by cable systems harmed local broadcasting, so it continued to refuse to assert jurisdiction over cable.[6]

Having lost before both the FCC and the Congress,[7] the broadcasters took their case to the courts. Their initial approach was to seek control over the use of their broadcast signals, but this was rebuffed by the courts.[8] A lower court did rule that broadcasters had rights over the showing of their programming in the local area.[9] This victory was short-lived, however, as the appellate court reversed the decision, holding that a broadcaster had no such rights unless it could demonstrate a protectable interest by virtue of the copyright laws or bring themselves within the contemplation of some other recognized exception to the policy promoting free access to all matter in the public domain.[10]

While those cases worked their way through the courts, the FCC began to have a change-of-heart about regulating

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5/ See CATV and TV Repeater Services, 26 FCC 403, 404-5 (1959).

6/ Id. at 427-29.

5/ Id. at 429-430.

6/ Id. at 430-31.

7/ An unsuccessful attempt was made in 1959 to extend section 325 to cover cable retransmissions.

8/ Intermountain Broadcasting & Television Corp. v. Idaho Microwave Inc., 196 F.Supp. 315 (S.D. Idaho 1961).

9/ Cable Vision v. KUTV, 211 F.Supp. 47 (S.D. Idaho 1962), rev'd, 335 F.2d 348 (9th Cir. 1964).

10/ Cable Vision v. KUTV, 335 F.2d 348 (9th Cir. 1964). See discussion of cable copyright issues, infra.

cable. In 1962 the FCC, in a reversal of its previous findings, concluded that the importation of a distant signal had an adverse economic effect on a local broadcast station and denied a license for a microwave system to import television signals to a cable system as not being in the public interest.[11] This marked the beginning of comprehensive FCC cable regulation, for later that same year the FCC proposed to require cable systems using microwave links to carry all local television stations and to protect their programming from duplication on distant signals.[12] Around that same time many local governments began asserting jurisdiction over cable systems through franchising requirements.

In 1965 the FCC adopted its first rules regulating cable television.[13] The FCC claimed jurisdiction over cable based on the effects that cable television had on the local broadcast television system established by the FCC. The rules required microwave-served cable systems to carry the signals of all local stations and not to carry duplicating programming on other, distant signals for 15 days before or after such programming was shown on the local stations. The original rules applied only to microwave-served cable systems, but at the same time the rules were adopted the FCC proposed to extend them to all cable systems.[14] The next year the FCC made all cable systems, whether or not they used microwave links, subject to its rules.[15]

There were three basic regulations placed on cable systems in the FCC's original cable rules. First, a cable system had to carry all of the television stations which placed a Grade B contour over the cable community -- the original must carry rule. Second, a cable system could not show a program on a distant signal on the same day it was presented on a local station. Third, limitations were placed

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11/ Carter Mountain Transmission Corp., 32 FCC 459 (1962), aff'd, 321 F.2d 359 (D.C. Cir.), cert. denied, 375 U.S. 951 (1963).

12/ Notice of Proposed Rule Making in Docket No. 14895, 27 Fed. Reg. 12586 (1962).

13/ First Report and Order in Docket Nos. 14895 and 15233, 38 FCC 683 (1965).

14/ See Notice of Inquiry and Notice of Proposed Rulemaking in Docket No. 15971, 1 FCC 2d 453 (1965).

15/ Second Report and Order in Docket Nos. 14895, 15233 and 15971, 2 FCC 2d 725 (1966).

on the importation of signals.[16] The FCC premised its authority to regulate cable on the adverse effects cable might have on local television broadcasting.[17]

While the FCC was unable to get Congress to give it explicit authority over cable,[18] it did get the courts to uphold its implicit authority. In United States v. Southwestern Cable Co.,[19] the Supreme Court held that the Communications Act of 1934 granted the FCC the authority to regulate cable ancillary to its authority over broadcasting.

Shortly after, the FCC extended the most important of its broadcast content regulations to cable television, applying the fairness doctrine, the equal time rule, and sponsorship identification rules to cable systems.[20]

After the courts' affirmation of its authority over cable, the FCC began an inquiry on the long-range development of cable. The initial step in the inquiry was to place a "freeze" on distant signal importation until new rules could be developed.[21] The first rules adopted under this proceeding established program origination requirements for cable systems with 3,500 or more subscribers.[22] The second phase was to place ownership limitations on cable. In its

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16/ In order for a cable system to retransmit a television signal beyond its Grade B contour and into one of the top 100 markets there had to be a showing that such importation would be in the public interest, in other words, that it would not harm local UHF stations. Id. at 781-84.

17/ Id. at 728-34.

18/ Another unsuccessful attempt to amend the Communications Act specifically to include cable television was made in 1966 in reaction to an FCC request contained in its Second Report and Order on cable. See 2 FCC 2d at 787-88.

19/ 392 U.S. 157 (1968).

20/ First Report and Order, 20 FCC 2d 201, 223-25 (1969).

21/ Notice of Proposed Rulemaking and Notice of Inquiry in Docket 18397, 15 FCC 2d 417, 437-49 (1968).

22/ First Report and Order in Docket No. 18397, 20 FCC 2d 201 (1969). The Supreme Court narrowly upheld these rules as being within the FCC's ancillary jurisdiction. United States v. Midwest Video Corp., 406 U.S. 649 (1972).

Second Report and Order the FCC proclaimed that television networks could not control cable systems, nor could a television station have an ownership interest in a cable system within the station's Grade B contour.[23] In the same period, but in another proceeding, the FCC held that telephone companies could not operate cable systems in their service areas.[24]

While the Commission was exploring the possibilities for a comprehensive scheme of cable regulation, it was increasingly evident that the 1909 Copyright Act could not be used to find liability for cable retransmission of broadcast signals.[25] Copyright owners and policy makers began to put pressure on the Congress to create some form of copyright liability for cable systems.

Finally, in August 1971, the Commission outlined its proposed cable regulations in a letter to Congress.[26] Following the release of the letter there were intensive negotiations by the affected parties -- cable interests, broadcasters, and copyright owners -- under the leadership of the Office of Telecommunications Policy. In November 1971 a consensus was reached on how cable was to be regulated. Under the Consensus Agreement (1) limited importation of distant signals was permitted (the extent of which was determined by the market size of the cable community), (2) cable systems were required to carry all local and significantly viewed broadcast stations, and (3) syndicated exclusivity was established.[27] In addition, all parties agreed to support legislation creating a compulsory license for secondary retransmissions by cable systems.

In the Report and Order adopting the rules developed in the Consensus Agreement, the FCC also established numerous

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23/ Second Report and Order in Docket No. 18397, 23 FCC 2d 816 (1970).

24/ Section 214 Certificate, 21 FCC 2d 307, recon., 22 FCC 2d 746 (1970), aff'd sub nom. General Tel. of the Southwest v. United States, 449 F.2d 846 (5th Cir. 1971).

25/ Teleprompter Corp. v. Columbia Broadcasting System, Inc., 415 U.S. 394 (1974); Fortnightly Corp. v. United Artists Corp., 392 U.S. 390 (1968).

26/ Cable Television Proposals, 31 FCC 2d 115 (1971).

27/ The text of the Consensus Agreement can be found at 36 FCC 2d 284-86.

other regulations for cable.[28] Included in these rules were standards for the franchising of cable systems by local governments. For instance, the FCC limited the franchise fee that local governments could charge to 3 percent of gross subscriber revenues, 5 percent with a special showing. The rules also required cable systems to get certificates of compliance to begin construction. Cable systems located in major television markets had to have a minimum capacity of 20 channels, have capability of two-way communication, and provide access channels and facilities for their use. The rules also maintained the program origination requirements adopted in 1969.[29] Technical standards for cable systems were also established. This marked the high-water point of cable regulation.

The new statutory treatment of copyright liability for cable retransmission of broadcast programming was codified in the 1976 Copyright Act.[30]

In its continuing effort to protect local broadcasting from cable television, the FCC adopted a series of regulations concerning premium cable service in 1975.[31] The FCC was concerned that cable would harm broadcasting by "siphoning" popular programming -- feature films and sporting events -- away from broadcast television and onto premium cable services. To prevent this, the FCC restricted the sports programming that could be shown by premium cable services, and limited these services to showing movies only within three years after release or after ten years from release, if they had not been shown on broadcast television within three years. This time, however, the courts found that the FCC had gone beyond their ancillary authority to regulate cable, and overturned the rules.[32] In HBO, the court treated the first amendment rights of cable operators differently from those of broadcasters, noting that cable television is not limited by spectrum scarcity.

28/ Cable Television Report and Order, 36 FCC 2d 143 (1972).

29/ See note 22, supra.

30/ 17 U.S.C. § 111 (1985).

31/ First Report and Order in Docket Nos. 19544 and 18893, 52 FCC 2d 1 (1975).

32/ Home Box Office, Inc. v. FCC, 567 F.2d 9 (D.C. Cir.), cert. denied 434 U.S. 829 (1977).

In 1977, the FCC began to deregulate cable. The first action it took was to greatly lessen its regulation of franchising by local governments.[33] It also undertook a detailed inquiry into the economic relationship between cable television and television broadcasting.[34] When the inquiry was completed two years later, the FCC found that the impact of deregulation of cable on broadcasting would be negligible, and that the public would be better off due to increased viewing options from the greater availability of expanded cable services.[35] Based on these findings, the FCC eliminated the syndicated exclusivity and distant signal rules.[36]

During this period the courts also helped further cable deregulation by holding that the FCC had exceeded its ancillary authority over cable. This time the Supreme Court struck down the minimum channel capacity and leased access requirements as beyond the FCC's authority.[37]

In 1984 the Congress finally gave the FCC explicit authority over cable. In the Cable Communications Policy Act of 1984 Congress established, for the first time, a national policy for cable television.[38] The Act placed reliance on the franchising process as the primary means of regulating cable. It established national, uniform procedures for

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33/ Report and Order in Docket No. 21002, 66 FCC 2d 380 (1977).

34/ Notice of Inquiry in Docket No. 21284, 65 FCC 2d 9 (1977).

35/ Economic Relationship Between TV Broadcasting and CATV, 71 FCC 2d 632 (1979).

36/ CATV Syndicated Program Exclusivity Rules, 79 FCC 663 (1980), aff'd sub nom. Malrite TV of New York v FCC, 652 F.2d 1140 (2d Cir. 1981), cert denied, 454 U.S. 1143 (1982). In 1987, the FCC began a reexamination of the need for syndicated exclusivity rules. Notice of Inquiry and Notice of Proposed Rulemaking in Docket No. 87-24, 2 FCC Rcd 2393 (1987). It recently decided to create a new syndicated exclusivity rule, to become effective in 1989. See FCC Rep. No. DC-1171, Mimeo 3035 (released May 18, 1988).

37/ FCC v. Midwest Video Corp., 440 U.S. 689 (1979).

38/ Pub. L. No. 98-549, 98 Stat. 2779 (1984), codified at 47 U.S.C. §§ 521-559 (Supp. III 1985). See Cable Act Legislative History.

franchising and renewals in order to encourage the growth and development of cable and to assure that cable systems would be responsive to the needs and interests of their communities.[39] Under the terms of the Act cable systems may be required to provide access channels for public, educational and government use and also to provide leased access channels.[40] Franchise fees are limited to 5 percent of gross revenues,[41] and cable systems are free from rate regulation, unless the system does not face "effective competition."[42] The Act also codified the FCC cross-ownership rules -- prohibiting ownership of a cable system by a telephone company or a broadcast station with a Grade B contour over the cable community[43] -- and formally extended equal employment opportunities requirements to cable.[44]

Current FCC regulations over cable service include: cross-ownership;[45] technical standards;[46] use of

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39/ 47 U.S.C. §§ 541-547 (Supp. III 1985). See Cable Act Legislative History at 19, 1984 U.S. Code Cong. & Ad. News at 4656.

40/ 47 U.S.C. §§ 531, 532 (Supp. III 1985).

41/ Id. § 542.

42/ Id. § 543. The FCC defined "effective competition" as the availability of any three over-the-air broadcast signals in the cable community. Signals were considered available if they placed a Grade B contour over any part of the cable community. Implementation of the Provisions of the Cable Communications Policy Act of 1984, 50 Fed. Reg. 18637 (1985), amended, 51 Fed. Reg. 21770 (1986), aff'd in part and rev'd in part sub nom. ACLU v. FCC, 823 F.2d 1554 (D.C. Cir. 1987), cert. denied, 108 S.Ct. 1220 (1988). Upon review, the appellate court upheld the three signal standard, but remanded the definition of "availability." The FCC amended its availability standard to require that a signal's Grade B contour encompass the entire community. Second Report and Order in MM Docket No. 84-1296, FCC 88-128 (released Apr. 28, 1988).

43/ Id. § 533.

44/ Id. § 554.

45/ 47 C.F.R. §§ 63.54-63.58, 76.501 (1986).

46/ Id. § 76.605.

aeronautical frequencies;[47] signal leakage;[48] cable television relay service;[49] origination cablecasting;[50] lotteries;[51] sports program blackouts;[52] network program nonduplication;[53] record keeping and reporting;[54] and, equal employment opportunity.[55]

There is no requirement that cable system owners be U.S. citizens in contrast to broadcast and common carrier services.[56]

First Amendment Cases:

For the first twenty years, as cable regulations came before various courts, constitutional claims were not held to be dispositive. Some courts, however, addressed the status of cable television as a first amendment speaker.

To the extent the constitutional issues were raised by cable operators, the court quickly disposed of them, finding the Commission was within its authority to regulate cable television.[57]

In Home Box Office, Inc. v. FCC,[58] the tide began to turn. The Commission had promulgated "anti-siphoning" rules,

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47/ Id. § 76.616.

48/ Id. § 76.611.

49/ Id. Part 78.

50/ Id. § 76.205.

51/ Id. § 76.213.

52/ Id. § 76.67.

53/ Id. § 76.92.

54/ Id. §§ 76.305, 76.403.

55/ Id. §§ 76.71 et seq.

56/ 47 U.S.C. § 310(a), (b).

57/ See, e.g., Black Hills Video Corp. v. FCC, 399 F.2d 65 (8th Cir. 1968); Buckeye Cablevision, Inc. v. FCC, 387 F.2d 220 (D.C. Cir. 1967).

58/ 567 F.2d 9 (D.C. Cir.), cert. denied, 434 U.S. 829 (1977).

limiting the number of sports and movies the cable programming service could air each week. For the first time, the court determined that cable television had a unique status as a first amendment speaker, different from broadcast licensees as well as newspapers. The court found that the regulations at issue impermissibly intruded on the content determinations of cable operators.

The decade following HBO v. FCC was marked by cable deregulation by the FCC which reduced some of the need for cable to seek redress in the courts. The cities and franchising authorities, meanwhile, had increased their cable regulatory activities and began to find themselves in lawsuits. Three separate courts, to some extent, rejected first amendment claims by cable operators.59/

The mandatory carriage rules, originally part of the FCC's initial cable regulations adopted in 1965 -- required a cable system to carry all local or significantly viewed broadcast stations, up to the channel capacity of the system. Upon review the appellate court held the rules needlessly impinged on the editorial discretion of the cable operator and thus violated the First Amendment.60/ The court found that the FCC had never demonstrated that cable television harmed local broadcasting and thus had not demonstrated a substantial government interest in the rules. In any event, the rules were held to be excessive. The FCC crafted new,

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59/ See Omega Satellite Products v. City of Indianapolis, 694 F.2d 119 (7th Cir. 1982); Community Communications v. City of Boulder, 660 F.2d 1370 (10th Cir. 1981), cert. dismissed, 456 U.S. 1001 (1982); Berkshire Cablevision of Rhode Island, Inc. v. Burke, 571 F.Supp. 976 (D.R.I. 1983), vacated as moot, 773 F.2d 382 (1st Cir. 1985).

60/ Quincy Cable TV, Inc v. FCC, 768 F.2d 1434 (D.C. Cir. 1985), cert. denied, 476 U.S. 1169 (1986).

less stringent must carry rules,[61] but these were also found to violate the First Amendment.[62]

The Cable Act of 1984 "continue[d] reliance on the local franchising process as the primary means of cable television regulation..."[63] by stating as one of its purposes, to "establish franchise procedures and standards which encourage the growth and development of cable systems and which assure that cable systems are responsive to the needs and interests of the local community."[64] Recent court challenges have resulted in some decisions, mostly by U.S. district courts, holding that various aspects of the franchising process violate the first amendment rights of cable operators.[65]

Exclusive Franchising:

In Preferred Communications v. Los Angeles,[66] Preferred, a would-be competitor to the cable franchise

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61/ The new must carry rules limited the number of channels a cable system had to devote to must carry to 25 percent of the cable system's channel capacity, with cable systems of under 20 channels entirely exempted from the rule. The cable operator was able to choose which local stations to place on its system from a pool of qualified stations, based on a viewing standard. In addition, systems were required to carry the unduplicated signal of local noncommercial stations. Must Carry Rules, 61 RR 2d 792 (1986), modified 62 RR 2d 1251 (1987).

62/ Century Communications Corp. v. FCC, 835 F.2d 292 (D.C. Cir. 1987), clarified, 837 F.2d 517 (D.C. Cir.), cert. denied, 56 U.S.L.W. 3816 (May 31, 1988).

63/ Cable Act Legislative History at 12.

64/ 47 U.S.C. § 521(2) (Supp. III 1985).

65/ An important issue in all of these cases is the question of which "test" to apply. As noted below, if a government regulation is determined to be "content-related," a more stringent constitutional threshold must be passed. If a regulation is determined to be only "incidental" to speech, a less stringent test will apply. The status of the publisher or speaker is also important. It is notable in the following discussion that courts vary in the test applied and analysis followed.

66/ 754 F.2d 1396 (9th Cir. 1985), aff'd, 476 U.S. 488 (1986).

holder in a portion of Los Angeles, attempted to lease excess space on poles and underground conduits to construct a competing cable system. The city defended its right to issue a single exclusive franchise and lost on appeal. The court held that because there was excess capacity on poles and in conduits, the city could not limit the number of franchises to one. The Supreme Court granted review, but remanded for trial. The case is again in the District Court.

A jury in another California case,[67] made several findings of fact, including that cable service in Sacramento was not a natural monopoly and that the regulatory purposes of the franchising process were invalid. The court balanced the interests of the city against the burdens imposed on the cable operator, using an O'Brien analysis,[68] and found the franchising process impermissibly kept out a competitor to the incumbent cable operator. While the case was in its final stages in the District Court, the city passed a new law permitting any operator to build a cable system upon a minimal showing of financial responsibility and compliance with certain construction rules and use of rights-of-way. The City has petitioned the court to dismiss the case as moot in light of this legislation.

Among the several issues raised in Group W Cable, Inc. v. Santa Cruz,[69] the court followed Preferred in holding that the city could not limit access to a single provider.

Access Channels:

The typical franchise requirement that a cable system set aside certain channels for public, educational, and government access has been successfully challenged by cable operators asserting first amendment claims in two California

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67/ Pacific West Cable Co. v. City of Sacramento, 672 F. Supp. 1322 (E.D. Cal. 1987).

68/ United States v. O'Brien, 391 U.S. 367 (1968), applies where government regulations incidentally or indirectly affect speech. Government regulations will not be found to violate the First Amendment if (a) they further an important or substantial governmental interest; and (b) the incidental restrictions on the exercise of First Amendment rights are no greater than essential to the furtherance of that interest. The O'Brien test is less stringent than other tests applicable to content-based regulation.

69/ 669 F. Supp 954 (N.D. Cal. 1987).

district courts.[70] On the other hand, access requirements were found not to violate first amendment rights in Pennsylvania,[71] where the court found the public's right to access to programming outweighed the burden placed on the cable operator in the form of access channels.

Franchise Fees:

On appeal in the Third Circuit Court of Appeals, Erie Telecommunications, Inc. v. City of Erie,[72] addresses the constitutionality of franchise fees and access requirements. Applying the O'Brien test, the U.S. District Court held the significant government interest of the city in regulating a natural monopoly and insuring viewers' access to programming outweighed the minimal burden placed on the cable operator in the form of fees and access requirements.

Similarly, a California district court recently held that the city could require payment of fair market franchise fees.[73] In a third case,[74] the district court has asked for further briefing on the issue of franchise fees.

"State of the Art" Technical Requirements:

In two recent California cases, state of the art technical requirements have been found to be content-based restrictions and have been invalidated. The court applied a newspaper-like analysis in Century Federal v. City of Palo Alto.[75] There, the city did not attempt to limit the number of cable franchisees, but imposed four basic requirements for all cable operators: access channels, universal service, state-of-the-art technical requirements, and financial assurances, bonds and deposits. The District Court struck down the first two as content-based restrictions, and did not

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70/ Group W Cable, Inc. v. Santa Cruz, 669 F. Supp. 954 (N.D. Cal. 1987); Century Federal, Inc. v. City of Palo Alto, 648 F. Supp 1465 (N.D. Cal. 1986).

71/ Erie Telecommunications Inc. v. City of Erie, 659 F. Supp 580 (W.D. Pa. 1987).

72/ Id.

73/ Group W Cable, Inc. v. Santa Cruz, 669 F. Supp 954 (N.D. Cal., 1987).

74/ Century Federal v. City of Palo Alto, 648 F. Supp. 1465 (N.D. Cal. 1987).

75/ Id.

use an O'Brien balancing approach. On the issues of technological requirements and franchise fees, the court applied the O'Brien test, invalidated the technological requirements, and asked for further briefing on the issue of franchise fees.

A second suit in the Northern District of California, Group W Cable, Inc. v. Santa Cruz,[76] involves a cable operator denied renewal by the city. The court applied O'Brien to some of the city's regulations it judged were not content-based, but applied the print model to other content-based requirements. Among other things, the court held the city could not limit access to a single provider, that channel access requirements and technical requirements were invalid, and that the city could require payment of fair market franchise fees.

Conclusion: The FCC, having recognized the public benefits which could flow from encouraging full competition among all media, established policies which were, to a large extent, codified by the Congress in the Cable Act. Moreover, the local franchising process was maintained in the Cable Act as the basic regulatory control. The emergence of cable operators as first amendment speakers, however, a process that began well before adoption of the Cable Act, has cast doubt on the ability of franchising bodies to exercise the authority conferred by Congress. The law is very uncertain in this area and will only be settled when one or more cases are decided by higher courts, which is likely to take years.

76/ 669 F. Supp. 954 (N.D. Cal. 1987).

CABLE

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OFFICE OF TELECOMMUNICATIONS POLICY
EXECUTIVE OFFICE OF THE PRESIDENT
WASHINGTON, D.C. 20504

DIRECTOR

January 14, 1974

The President
The White House
Washington, D. C.

Dear Mr. President:

I am pleased to submit to you the report of the Cabinet Committee on Cable Communications. As you requested, the Committee has developed proposals for a new policy that will allow cable to be integrated into our nation's communications media in an orderly way that is consistent with the principle of the free flow of information so deeply imbedded in our national traditions.

During the Committee's deliberations, we heard the views of a wide range of industry groups and nonprofit and public interest organizations, and we also examined the extensive research on cable communications. On the basis of the views we heard, the research we examined, and our own study and deliberations, the Committee has recommended a comprehensive, new national policy for cable communications.

Our goal was to insure that cable would develop as a communications medium open and available to all Americans free of private or governmental barriers to its use. Under such a policy, we believe that cable can be a communications medium that allows the great creativity of the American people to express itself.

Sincerely,

Clay T. Whitehead

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CHAPTER VI

SUMMARY OUTLINE OF RECOMMENDATIONS

"The Committee has concluded that programming, advertising, and other information and services on cable channels can be allowed to develop on a free and competitive basis, with no more regulatory power exercised over the content of this communications medium than is exercised over the print or film media."

CHAPTER VI

SUMMARY OUTLINE OF RECOMMENDATIONS

The following sections A–E constitute a summary outline of the Committee's long-range recommendations (Chapter III) as they affect cable operators, channel users, telephone common carriers, the FCC, and the franchising authorities. The exceptions to those recommendations, which would apply during the transition period (Chapter IV), are summarized in section F.

A. Policies Affecting Cable System Operators

1. Operators should be **required** to:

a. Offer their channels, or time on their channels, for lease to others for any lawful purpose, and without discrimination among comparable uses and users (pp. 29–30, 44–45),[1] with the exception of the channels used for retransmission of the broadcast signals authorized for carriage by the FCC's cable rules, plus one or two additional channels. The FCC's rules regarding broadcast signal carriage will apply to channels used for retransmission of the broadcast signals (note 2, pp. 29–30).

b. Comply with Federal and franchising authority requirements to construct cable systems with adequate channel capacity (p. 44).

c. Comply with the minimum technical standards established for cable distribution by the FCC (p. 41).

d. Offer customers a selective means to control or prevent reception of programming or information services which the customer does not wish to receive, and to prevent interception of personal or confidential information distributed over cable (pp. 38, 41).

2. Operators should be **allowed** to:

a. Own and operate other media outlets such as newspapers, magazines, or broadcast stations or networks including those within the same market area as the cable system (p. 32).

3. Operators should be **prohibited** from:

a. Having any financial or ownership interest in, or any control of, the production, selection, financing or marketing of the program or information services supplied by channel users leasing the operators' distribution facilities (pp. 29–30); with the exception noted in section A.1.a.

[1] All page references are to Chapter III except where otherwise indicated.

b. Participating in the joint ownership or control of cable systems, interconnection facilities, and program supply services (p. 31).

B. Policies Affecting Program Retailers and Other Channel Users

1. Channel users should be **required** to:

a. Adhere to all applicable provisions of copyright laws and accept full liability for any program materials or information services they may supply (p. 39).

2. Channel users should be **allowed** to:

a. Lease channels or obtain other distribution services from any cable system with which they have no financial relationship or other form of common interest or control—with the exception noted in section A.1.a.—and offer to the public any lawful program materials or information services via such system (pp. 29–30, 37–39).

b. Establish such charges as they consider appropriate for the programming or information services they supply, without regulation by Federal, state, or local authorities (pp. 38–39).

c. Have legal recourse against any cable system operator: (1) who denies access or discriminates against the channel user by reason of the content of the user's message or the user's race, religion, nationality, or beliefs; or (2) who otherwise engages in practices that violate the requirement of non-discriminatory channel lease rates (p. 44).

3. Channel users should be **prohibited** from:

a. Providing any information or taking any action in violation of relevant laws and statutes protecting privacy and governing dissemination of obscene, libelous, or otherwise illegal material, as well as material the cable customer has indicated he does not wish to receive (p. 38).

b. Requiring viewers to pay a fee for professional sports programming unless consistent with the FCC's anti-siphoning restrictions (p. 37).

C. Policies Affecting Telephone Common Carriers

1. Common carriers should be **required** to:

a. Provide pole, conduit, or other right-of-way access to any franchised cable system operator at reasonable rates and without discrimination among users or uses (p. 34).

2. Common carriers should be **allowed** to:

a. Offer local cable distribution service on a "lease-back" basis to any franchised cable system operator (p. 34).

b. Obtain franchises to operate as cable system operators outside

of any area in which they have exclusive authority to provide telephone service (p. 34).

3. Common carriers should be **prohibited** from:

a. Owning, controlling or operating any cable system within their telephone service areas, i.e., performing any function not associated with actual signal distribution, such as the operation of cable system "head-ends" used for information origination, reception, conversion, switching, or other processing functions (p. 34).

D. Policies Affecting the Federal Communications Commission (FCC)

1. FCC shuld be **permitted** only to:

a. Establish minimum technical standards for cable distribution systems, only as needed to ensure compatibility, interoperability, privacy and security of cable systems (p. 41).

b. Require that cable systems be constructed with adequate channel capacity (p. 44).

c. Apply restrictions to the presentation for a fee of professional sports programs (pp. 37, 41).

2. FCC should **not be permitted** to:

a. Regulate in any way the information content of any services carried by cable systems including any regulations as to the balance or "fairness" of such information (p. 38).

b. Require minimum channel capacity to be leased to others; designate special purpose channels; require expansion of channel capacity or construction of two-way capacity (Chapter IV, pp. 9–10).

c. Regulate the rates or earnings of cable operators or channel users, or require any free service (pp. 38–39).

d. Limit, by regulation or policy, the ownership of cable systems by broadcast stations or networks, or by newspapers, magazines, or other media outlets, or limit the number of cable systems to be owned by one firm or the number of customers to be served by one firm (p. 32).

E. Policies Affecting Franchising Authorities

1. Franchising authorities should be **required** to:

a. Award non-exclusive franchises for the use of public rights-of-way by cable systems, and collect franchise fees for such use to the extent the fees merely compensate for the costs of regulation or costs incurred in the use of the public rights-of-way (p. 43).

b. Require that the rates, terms, and conditions, for channel leasing, not unreasonably discriminate among comparable channel uses and users (pp. 44–45).

c. Require that the cable operator make available one channel to be used for public access purposes (note 9, p. 44).

d. Require, through negotiations with prospective cable operators, that cable systems be constructed with adequate channel capacity (p. 44).

2. Franchising authorities should be **permitted** to:

a. Set maximum limits on the rates or charges imposed on customers for cable installation (p. 45).

b. Establish franchising conditions dealing with the cable system operator's qualifications; construction timetables; extension of service to all portions of the franchise area; handling of service complaints; and other conditions not expressly forbidden to franchising authorities (p. 45).

3. Franchising authorities should **not be permitted** to:

a. Regulate the information content of any service carried by a cable operator including any regulation as to the balance or "fairness" of such information (p. 38).

b. Award exclusive franchises for cable systems or require dedicated free channels for special purposes (pp. 43–44).

c. Impose franchise fees on cable systems, when the primary purpose is to raise revenues (p 43).

d. Regulate the rate of return or earnings of cable operators or the rates charged by program or information suppliers to their subscribers (pp. 42–43).

F. Transition Policies

The following exceptions to the long-range policy recommendations would apply during the transition period, which would end when 50 percent of the nation's households were connected to cable systems (p. 52).

1. Cable operators would be exempt from the prohibition on offering programming directly or having financial or other interests in the programming and other services offered over their systems (p. 53).

2. Franchising authorities would have to require cable operators to:

a. Make available for lease to others at least one equivalent channel for every channel used by the cable operator for retransmission of broadcast signals or for program originations (p. 53).

b. Establish a pattern of gradual lessening of the cable operator's control of channels by increasing the proportion of channels to be leased to others (p. 53).

3. The Federal Communications Commission would continue to:

a. Prohibit future ownership of cable systems by television broadcast networks and by television broadcast stations in their station service areas (p. 53).

b. Apply restrictions on the type of entertainment programming that can be offered to cable system customers for a fee and adapt such restrictions to changing conditions in the broadcast, cable, and programming industries (p. 54).

Attachment 2

TOP 20 CABLE MSOs: 1983-1987

1983

Company	Subscribers	Market share (%)
1. TCI	2,766,000	9.1
2. ATC	2,400,000	7.9
3. Group W	1,950,921	6.4
4. Cox	1,414,147	4.7
5. Storer	1,371,000	4.5
6. Warner Amex	1,362,000	4.5
7. Times-Mirror	918,244*	3.0
8. Newhouse Broadcasting	788,125	2.6
9. Continental	748,000	2.5
10. Viacom	730,318	2.4
11. United	619,750**	2.0
12. Sammons	575,619*	1.9
13. Rogers	487,243	1.6
14. Cablevision Systems Development	427,500*	1.4
15. Telecable	388,473	1.3
16. Heritage	367,736	1.2
17. Capital Cities	349,892	1.2
18. UA Cablesystems	341,300	1.1
19. Comcast	336,100	1.1
20. General Electric	321,216	1.1
TOTAL		61.5

Total Cable Subscribers: 30,300,000 (Source: Cablevision, Jan. 18, 1988, at 64)

Source: Cablevision, June 4, 1988,at 57; May 21, 1984, at 57; Apr. 23, 1984, at 64; Feb. 6, 1984, at 56 (subscribership figures are for December 1983)

* est.; source: Cablevision, May 21, 1984, at 57; Feb. 6, 1984, at 56.

** est.; source: Cablevision, June 4, 1984, at 57; Feb. 6, 1984, at 56.

1984

Company	Subscribers	Market share (%)
1. TCI	3,500,000	10.6
2. ATC	2,500,000	7.6
3. Group W	2,009,000	6.1
4. Cox	1,537,778*	4.7
5. Storer	1,467,000*	4.4
6. Warner Amex	1,196,000	3.6
7. Times-Mirror	1,001,848	3.0
8. Continental	971,000**	2.9
9. Newhouse Broadcasting	881,063**	2.7
10. Viacom	790,000***	2.4
11. United	780,000	2.4
12. UA Cablesystems	699,113*	2.1
13. Sammons	652,400	2.0
14. Rogers	595,766	1.8
15. Cablevision Systems Development	574,720***	1.7
16. Comcast	474,634***	1.4
17. Heritage	439,946***	1.3
18. Telecable	434,107***	1.3
19. Jones Intercable	431,672	1.3
20. Capital Cities	378,500*	1.1
TOTAL		64.4

Total Cable Subscribers: 32,994,000 (Cablevision, Jan. 18, 1988, at 64)

Source: Cablevision, May 27, 1985, at 45; Mar. 18, 1985, at 45; Feb. 18, 1985, at 49; Jan. 7, 1985, at 37. (subscribership figures are for December 1984)

* est.; source: Cablevision, Feb. 18, 1985, at 49; Jan. 7, 1985, at 45

** est.; source: Cablevision, May 27, 1985, at 45; Feb. 18, 1985, at 49

*** est.; source: Cablevision, May 27, at 45; Jan. 7, 1985, at 45

1985

Company	Subscribers	Market share (%)
1. TCI	3,900,000	11.7
TCI-Taft (Partner)	171,287	
TKR Cable (Partner)	170,342	
TOTAL	4,241,629	
2. ATC	2,700,000	7.5
3. Group W	2,162,000*	6.0
4. Storer	1,533,000	4.2
5. Cox	1,443,680*	4.0
6. Warner	1,183,841**	3.3
7. Continental	1,100,000	3.0
8. United	984,000	2.7
9. Newhouse	952,587*	2.6
10. Times-Mirror	893,374	2.5
11. Viacom	829,000	2.3
12. UA Cablesystems	728,451***	2.0
13. Sammons	708,609	2.0
14. Heritage	629,915*	1.7
15. Cablevision Development	596,534****	1.7
16. Jones Intercable	582,754	1.6
17. Rogers	576,351**	1.6
18. Comcast	513,920	1.4
19. Telecable	453,094	1.3
20. McCaw Communications	381,022****	1.1
TOTAL		64.2

Total Cable Subscribers: 36,120,000 (Cablevision, Jan. 18, 1988, at 64)

Source: Cablevision, Oct. 13, 1986, at 87; June 23, 1986, at 89; May 5, 1986, at 57; Apr. 7, 1986, at 57; Feb. 10, 1986, at 57; Jan. 5, 1987, at 63 (subscribership figures are for December 1985)

* est.; source: Cablevision, June 23, 1986, at 89; May 5, 1986, at 57

** est.; source: Cablevision, Oct. 13, 1986, at 87; June 23, 1986, at 89

*** est.; source: Cablevision, Oct. 13, 1986, at 87; Feb. 10, 1986, at 57

**** est.; source: Cablevision, June 23, 1986, at 89; Feb. 10, 1986, at 57

1986

Company	Subscribers	Market share (%)
1. TCI	4,189,000	11.2
TKR Cable (principal)	186,139 (1/87)	
TCI-Taft (principal)	181,318 (1/87)	
Bresnan Communications (50% owned)	104,136	
TOTAL	4,660,593	
2. ATC	3,300,000*	9.2
Paragon Cable (50% owned)	550,000 (1/87)	
TOTAL	3,850,000	
3. Storer	1,389,000	3.3
4. Continental	1,376,000*	3.3
5. Cox	1,353,865	3.2
6. Warner	1,301,000*	3.1
7. Comcast	1,168,841**	2.8
8. United	1,085,324**	2.6
9. Newhouse	1,013,644**	2.4
10. Heritage	978,547	2.3
11. Viacom	954,000**	2.3
12. Times-Mirror	841,543***	2.0
13. Jones Intercable	829,155*	2.0
14. Sammons	817,842	2.0
15. UA Cablesystems	753,363	1.8
16. Cablevision Systems Development	687,000	1.6
17. Century Communications	600,000	1.4
18. Rogers Cablesystems	545,398***	1.3
19. Daniels & Associates	472,876	1.1
20. Telecable Corp.	457,077	1.1
TOTAL		60.0

Total Cable Subscribers: 41,772,000 (Cablevision, Jan. 18, 1988, at 64)

Source: Cablevision, May 18, 1987, at 155; Apr. 27, 1987, at 55; Mar. 30, 1987, at 73; Mar. 2, 1987, at 65; Jan. 5, 1987, at 73 (subscribership figures are for December 1986, except as noted)

* est.; source: Cablevision, Mar. 30, 1987, at 73; Jan. 5, 1987, at 63

** est.; source: Cablevision, May 18, 1987, at 155; Mar. 30, 1987, at 73

*** est.; source: Cablevision, May 18, 1987, at 155; Jan. 5, 1987, at 63

1987

Company	Subscribers		Market share (%)
1. TCI	5,200,000		20.8
United (23.5% owned)	1,155,638		
Heritage (82% owned)	1,026,224		
UA Cablesystems (65% owned)	780,593	(10/87)	
TKR Cable (principal)	235,204	(11/87)	
TCI-Taft (principal)	193,808	(11/87)	
Marcus Communications (50% owned)	135,766	(11/87)	
Bresnan Communications (50% owned)	113,783		
Kansas City Cable Partners (50% owned)	62,165		
TOTAL	8,903,181		
2. ATC	3,695,000		10.3
Paragon Cable (50% owned)	651,000	(10/87)	
Kansas City Cable Partners (50% owned)	62,165		
TOTAL	4,408,165		
3. Continental	1,556,000		3.6
4. Storer	1,453,000		3.4
5. Cox	1,438,057		3.4
6. Warner	1,405,349		3.3
7. Comcast	1,200,000		2.8
8. Newhouse	1,060,224		2.5
9. Viacom	1,058,000		2.5
10. Cablevision Systems Development	988,000		2.3
11. Jones Intercable	978,526		2.3
12. Times-Mirror	918,480		2.1
13. Sammons	826,819		1.9
14. Century Communications	680,400		1.6
15. Cooke Cablevision	618,900		1.4
16. Cablevision Industries	591,428		1.4
17. Daniels & Associates	590,618		1.4
18. American Cablesystems	535,038		1.3
19. Telecable	533,256		1.3
20. Rogers Cablesystems	529,708		1.2
TOTAL			70.8

Total Cable Subscribers: 42,725,000 (Cablevision, Jan. 18, 1988, at 64)

Source: Cablevision, Feb. 15, 1988, at 91 (subscribership figures are for December 1987, except as noted)

1987 (adjusted to include announced acquisitions)

Company	Subscribers		Market share (%)
1. TCI	5,200,000		23.4
United/UA (52% owned)	1,936,231		
Daniels & Assoc.	380,000		
Heritage (82% owned)	1,026,224		
Storer (50% owned)	726,500		
TKR Cable (principal)	235,204	(11/87)	
TCI-Taft (principal)	193,808	(11/87)	
Marcus Communications (50% owned)	135,766	(11/87)	
Bresnan Communications (50% owned)	113,783		
Kansas City Cable Partners (50% owned)	62,165		
TOTAL	10,009,681		
2. ATC	3,695,000		10.3
Paragon Cable (50% owned)	651,000	(10/87)	
Kansas City Cable Partners (50% owned)	62,165		
TOTAL	4,408,165		
3. Continental	1,556,000		4.9
American Cablesystems	535,038		
TOTAL	2,091,038		
4. Comcast	1,200,000		4.5
Storer	726,500		
TOTAL	1,926,500		
5. Cox	1,438,057		3.4
6. Warner	1,405,349		3.3
7. Newhouse	1,060,224		2.5
8. Viacom	1,058,000		2.5
9. Cablevision Systems	988,000		2.3
10. Jones Intercable	978,526		2.3
11. Times-Mirror	918,480		2.1
12. Sammons	826,819		1.9
13. Century Communications	680,400		1.6
14. Cooke Cablevision	618,900		1.4
15. Cablevision Industries	591,428		1.4
16. Telecable	533,256		1.2
17. Centel	521,428		1.2
18. Rogers Cablesystems	529,708		1.2
19. Scripps-Howard	430,990		1.0
20. Wometco Cable TV	395,679		0.9
TOTAL			73.3

Total Cable Subscribers: 42,725,000 (Cablevision, Jan. 18, 1988, at 64)

Source: Cablevision, Feb. 15, 1988, at 91 (subscribership figures are for December 1987, except as noted)

Measurements of Concentration

In order to measure concentration levels within particular industries, antitrust enforcement agencies have developed various concentration indexes. The most frequently used such indexes are the 4-firm concentration ratio and the Herfindahl-Hirschman Index ("H-index"). The 4-firm concentration ratio simply sums up the market shares held by the four largest firms within an industry. Available studies suggest that concentration starts to become problematic when the four-firm ratio lies above a range of concentration between 45 and 59 percent.[1/]

While the four-firm ratio is a satisfactory tool in most cases, it has one critical limitation. The competitive performance of an industry is a function not only of the number of firms within the industry and their individual market shares, but also the relative size of each firm.[2/] Because the four-firm concentration ratio simply sums the market shares of the firms involved, it is not sensitive to disparities in the market shares of those firms. For example, an industry in which the four largest firms each have market shares of 12.5 percent would produce a four-firm concentration ratio of 50 percent. If the four firms' shares were 35-5-5-5, however, the four-firm ratio would be the same, even though the largest firm's predominant market share may mean that the second hypothetical industry will be substantially less competitive than the first.

The H-index avoids this flaw by squaring the market shares of each firm within an industry before adding the shares together. The squaring process introduces an explicit weighting mechanism that captures differences in market shares, particularly with respect to the largest firms. As a result, the H-index is more sensitive than the four-firm ratio to disparities in the market shares of the firms considered.[3/] The Department of Justice currently uses the

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1/ F. Scherer, Industrial Market Structure and Economic Performance, 286 (2d 3d. 1980).

2/ Owen and Baseman, A Framework for Economic Analysis of Electronic Media Concentration at 30, citing Scherer at 56, submitted as an appendix to the Comments of the National Cable Television Ass'n, Inc., CT Docket No. 82-434 (filed Dec. 14, 1982).

3/ One can demonstrate this by repeating the foregoing example. Assume that the four-firm ratio is again 50 percent and that the remainder of the market is divided

H-index when reviewing proposed mergers within a particular industry. Under the Department's 1984 Merger Guidelines, an H-index below 1000 reflects a relatively unconcentrated industry.[4] In the Department's view, concentration begins to raise competitive concerns when the H-index exceeds 1000, with the most serious concerns arising when the index rises above 1800.[5]

Table 1 provides four-firm concentration ratios and H-indexes for the cable industry for each year since 1983.[6] It also sets forth adjusted data for 1987 which indicates the concentration levels that would have prevailed if the major

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evenly among 16 other companies. If the four largest firms' market shares are each 12.5 percent, the H-index for the industry will be 781. If the largest firms' shares are 35-5-5-5, the H-index will be 1456. The H-index would cause policymakers to view the industry differently in the two cases posited, whereas the four-firm concentration ratio would not.

4/ 1984 Merger Guidelines, 49 Fed. Reg. 26823, 26831 (1984). The Department will not contest a merger that produces a post-merger H-index below 1000, except in extraordinary circumstances. An H-index of 1000 corresponds roughly to a four-firm concentration of 50 percent. Id. The H-Index has other important shortcomings, however, (which also plague four-firm ratios,) namely that one must use relatively precise market definitions (which may be unavailable) and its accuracy may be affected if estimates of all market shares are unavailable or incorrect.

5/ An empirical study by the Department of the size dispersion of firms within markets indicated that the critical H-index thresholds of 1000 and 1800 correspond roughly to four-firm concentration ratios of 50 percent and 70 percent, respectively. Id.

6/ Because of the difficulties in generating an H-index for an industry composed of hundreds of firms, we have calculated the cable industry H-index as follows: we first used market share data for the 20 largest firms and then assumed the remainder of the market was equally divided among 35 other companies. This process will produce an H-index somewhat, though not significantly higher than would be obtained if we calculated an index using market share data for all firms within the industry.

acquisitions announced or completed since December 1987 were included.[7]

To generate these concentration indexes, we have expressed market shares for each MSO in terms of the number of subscribers served by that MSO. We believe this appropriate because, in the cable industry, subscribership levels determine cable service revenues, the prices a cable operator pays for programming, his ability to attract advertising, and the value of his system to prospective purchasers. For the following discussion, therefore, an MSO's market share will equal the percentage of all cable subscribers that firm serves.

We have also used the FCC's cable ownership attribution rules[8] to penetrate the rather byzantine ownership structure of the cable industry and determine the number of subscribers served by each MSO. Thus, an MSO was deemed to own or control another firm (and its subscribers) if that MSO (1) has a partnership interest in the second firm or (2) owns at least 5 percent of the voting stock of the second firm, provided the second firm does not have a single majority stockholder.[9]

7/ TCI and Comcast recently completed an agreement to acquire and divide equally the approximately 1.5 million subscribers served by Storer Communications. Multichannel News, May 2, 1988, at 1. In February, United Artists Communications (65 percent owned by TCI) agreed to acquire the systems (and 380,000 subscribers) owned or managed by Daniels and Associates, the 21st ranked MSO. Multichannel News, Feb. 1, 1988, at 1. In the same month, shareholders approved the merger of Continental Cablevision and American Cablesystems, the third and 23rd ranked MSOs, respectively, thus increasing Continental's subscribership base by some 500,000. Communications Daily, Feb. 5, 1988.

8/ See 47 C.F.R. Sec. 76.501 (1987).

9/ See id. Sec. 76.501, Note (a), (b). Under these rules, for example, TCI was deemed to control United Cable in 1987 because TCI owned some 23 percent of United's stock and no other person appeared to hold more than 3 percent. See 1987 Television & Cable Factbook at B-1259. In contrast, TCI was not considered to own Lenfest Communications, even though TCI owns 43 percent of Lenfest's stock, because the remaining stock is owned by a single individual. Id. at B-1245. The lowest level of ownership included in our application of the FCC's attribution rules was TCI with 23.6 percent of the

TABLE 1

1983

Company	Subscribers	Market Share (%)
1. TCI	2,766,000	9.1
2. ATC	2,400,000	7.9
3. Group W	1,950,921	6.4
4. Cox	1,414,147	4.7

Four-Firm Concentration Ratio: 28.1 percent
H-index 339

1984

Company	Subscribers	Market Share (%)
1. TCI	3,500,000	10.6
2. ATC	2,500,000	7.6
3. Group W	2,009,000	6.1
4. Cox	1,537,778	4.7

Four-Firm Concentration Ratio: 29.0 percent
H-index 357

1985

Company	Subscribers	Market Share (%)
1. TCI	4,241,629	11.7
2. ATC	2,700,000	7.5
3. Group W	2,162,000	6.0
4. Storer	1,533,000	4.2

Four-Firm Concentration Ratio: 29.4 percent
H-index 369

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stock in United Cable. The question of whether TCI's interest in United Cable gives TCI "control" over the latter company has been mooted by recent developments. United Cable recently merged with UA Communications, which is 65 percent owned by TCI. TCI owns 52 percent of the merged company, United Artists Entertainment. Communications Daily, Mar. 10, 1988, at 1.

For a more complete description of the FCC's ownership attribution rules, see Attribution of Ownership Interests, 97 FCC 2d 997 (1984).

TABLE 1 (cont.)

1986

Company	Subscribers	Market Share (%)
1. TCI	4,660,593	11.2
2. ATC	3,850,000	9.2
3. Storer	1,389,000	3.3
4. Continental	1,376,000	3.3

Four-Firm Concentration Ratio: 27.0 percent
H-index: 352

1987

Company	Subscribers	Market Share (%)
1. TCI	8,903,181	20.8
2. ATC	4,408,165	10.3
3. Continental	1,556,000	3.6
4. Storer	1,453,000	3.4

Four-Firm Concentration Ratio: 38.1 percent
H-index: 662

1987 (adjusted)

Company	Subscribers	Market Share (%)
1. TCI	10,009,681	23.4
2. ATC	4,408,165	10.3
3. Continental	2,091,038	4.9
4. Comcast	1,926,500	4.5

Four-Firm Concentration Ratio: 43.1 percent
H-index: 784

The data in Table 1 indicate that levels of ownership concentration within the cable industry do not appear excessive, if viewed solely under prevailing antitrust standards. The highest four-firm concentration ratio for the industry, 43.1 percent for 1987 (adjusted), is below the range above which concentration begins to become problematic (i.e., 45 to 59 percent). The largest H-index, 784 for 1987 (adjusted), is also well below the threshold that would trigger Justice Department scrutiny under the merger guidelines (i.e., 1000).

Although existing levels of concentration within the industry may not exceed acceptable antitrust law measures of concentration, two developments are troubling. First, both concentration indexes increased sharply between 1986 and 1987, after having been relatively stable during the preceding four years. The H-index increased nearly 300 points; the four-firm concentration ratio by 10 percentage points. Moreover, the disparity in the market shares of the largest firms has also grown significantly. TCI's market share nearly doubled between 1986 and 1987, and the gap between TCI and the second largest MSO, ATC, increased from 2.2 percentage points to more than 11. At the same time, the market share differential between ATC and the next largest MSO more than quadrupled between 1985 and 1987.

The growth of the largest MSOs and the increased gap between the two largest firms and the remainder of the industry is significant because one study has suggested that the exercise of market power within a particular industry depends upon the market shares of the two largest firms.[10/] Specifically, the study indicated that market power is evident when the two-firm concentration ratio exceeds 35 percent, and persists until the third largest firm's market share approaches 16 percent. The combined market shares of TCI and ATC are approaching the 35 percent threshold; in contrast, the third largest MSO's market share is less than 5 percent. The sharp increase in the concentration indexes over the past year, coupled with the growing disparity in market shares within the industry, suggest that while current levels of concentration may be reasonable, concentration may become more of a problem in the future.

10/ See Kwoka, The Effect of Market Share Distribution on Industry Performance, 61 Rev. of Econ. and Stat. 101 (1979).