

In contrast to the proven benefits of clustering, the Administration finds that the potential competitive harms are "largely conjectural, speculative, or de minimis."<sup>63</sup>

**B. Vertical Integration**

With regard to vertical integration in the cable industry, NCTA's analysis of recent data found little change from last year's study on cable company ownership or affiliation with programming networks. However, the IRS has recently approved the proposed acquisition of Viacom's cable systems by TCI. The removal of the last major regulatory hurdle to this transaction means that a substantial drop in the vertical integration of the cable industry is imminent. By the time the Commission submits the *1996 Competition Report* to Congress, the merger is sure to be completed. USA Network, which ranks first in prime time rating and fourth in subscribers, would leave the list of vertically integrated networks. (See Tables 7 and 8.) Nickelodeon, which ranks fourth in prime time rating and thirteenth in subscribers, would also drop from the list (see Tables 7 and 8), as would MTV, which ranks eighth in subscribers. (See Table 7.)<sup>64</sup>

NCTA has updated the following information from the *1995 Competition Report*, which are attached as tables in Appendix A to these comments:

Vertical Connection Between Major Cable Programming Networks and Cable System Operators	Table 6
Vertical Integration: Top Fifteen Major Cable Programming Networks (by Prime Time Ratings)	Table 7
National Programming Services with Cable Ownership	Table 8

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<sup>63</sup> Id.

<sup>64</sup> MTV ranks below the top fifteen networks in prime time rating.

Announced National Launches of Programming Services with Cable Ownership	Table 9
National Programming Services without Cable Ownership	Table 10
Announced National Launches of Programming Services without Cable Ownership	Table 11

**III. THE CABLE INDUSTRY IS TRANSFORMING ITS NEARLY UNIVERSAL NETWORK TO PROVIDE THE PUBLIC WITH NEW COMPETITIVE COMMUNICATIONS AND INFORMATION SERVICES**

The NOI seeks updated information on developments in the deployment of advanced technologies, such as digital compression and switched digital services, and how it may affect industry structure and competition in the market for delivery of video programming and other broadband services.

As described in Appendix D, over the next five years, the cable industry expects to spend at least \$14 billion in new technology investments that will enable cable systems to deliver telephone and other services in competition with existing service providers.<sup>65</sup> This level of capital expenditures will support both telephony and advanced services. The incremental revenue growth from advanced services, such as high speed data access, make the financial commitment to telephony an evolutionary next step in technology development.

In particular, cable companies are upgrading their plants with a mix of fiber optic and coaxial cable, which reduces noise, improves signal quality, increases channel capacity and increases reliability. Cable's hybrid fiber-coaxial cable (HFC) design improves cable service by increasing bandwidth, signal reliability and quality. In 1995, the cable industry increased

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<sup>65</sup> Telecommunications and Advanced Services Provided by the Cable Television Industry, National Cable Television Association, Inc., April 1996.

deployment of fiber optic lines by 18.4% over the previous year's total. Cable companies also are preparing to deploy digital set top equipment by the end of the year to speed the introduction of digital compression techniques and other advancements to their subscribers.

The industry is moving aggressively to obtain federal, state and local authorizations to enter new markets. Cable companies have been certified as Competitive Local Exchange Providers in 40 markets nationwide and more applications for local voice service are pending. More than 25 cable companies applied for and received experimental PCS licenses from the Commission in the early stages of the PCS rulemaking proceeding. Cable operators plan to overlay PCS architecture over existing HFC plant that has been upgraded with two-way electronics and wireline telephone equipment.

The cable industry's broadband platform makes it the optimal medium for transmitting vast amounts of information -- data, graphics, and video -- at high speed. Moreover, the evolution to two-way transmission capability for high speed data access facilitates the introduction of telephone service over a HFC architecture.<sup>66</sup>

The new telecommunications law and appropriate implementing rules (and the ending of price regulation within the next three years) are providing the cable industry with the regulatory certainty and flexibility it needs to compete with telephone companies and other providers of advanced services.

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<sup>66</sup> Cable plant is capable of transferring data at rates as high as 30 million bits per second in each 6 MHz television channel allocated to data transmission. This is a hundred times faster than ISDN lines.

#### **IV. RECOMMENDATIONS**

We urge the Commission to recognize the revolutionary changes in video delivery that have occurred in the past year, particularly in the months following the passage of the 1996 Act, which have brought significant new competitive pressures on cable television. As demonstrated above, DBS is enjoying phenomenal market success, and has become the fastest-growing consumer electronics product in history. Telephone companies have made huge financial investments in DBS, wireless cable and traditional wired cable systems. Companies such as AT&T and Bell Atlantic are now flexing marketing muscle the like of which has never before been seen in the marketplace for video delivery. While consumers now have an unprecedented number of alternative sources for video programming, the marketplace for telephone service remains a virtual monopoly.

##### **A. Interconnection**

As NCTA argued in its initial comments on interconnection, the 1996 Act compels the adoption of uniform national rules to fulfill the statutory goal of opening all telecommunications markets to competition. The approach to local competition that existed before enactment of the 1996 Act relied exclusively on private negotiations between parties with grossly disparate bargaining power. If uniform national rules for interconnection are not adopted, the 1996 Act will not have achieved its aim of changing the status quo.

The telephone monopolists advocate virtually no role for the Commission in interconnection matters. Clearly, the telephone monopolists are being given the right to compete on equal footing with cable companies in video services. Cable companies must reciprocally be given the right to compete on equal footing with telephone companies in telecommunications to

ensure fair and vigorous competition in both areas. In order for real facilities-based competition to develop from cable in the local telephone market, the Commission must adopt uniform national rules for interconnection.

The Commission's cost allocation rules for telco-provided video programming must be revised to reflect an era of integrated video and telecommunications networks. There is an unprecedented level of common costs arising from the joint provision of video and telephone services. Properly configured cost allocation rules will protect cable companies, telephone companies and consumers by assuring that telephone companies do not unfairly subsidize their competitive forays into video with telephone revenues

**B. Cable Reform-Effective Competition**

As video competition accelerates, as described, more cable operators are filing petitions to be exempted from regulation on the basis that they are subject to effective competition. Unfortunately, the Commission has not acted on these petitions nor has it adopted final rules to govern such filings. Meanwhile, these and other systems need relief from regulation so they can respond to competitive pressures. We urge the Commission to act promptly on the pending petitions and to adopt final rules on effective competition. These rules should not contain a pass or penetration test, because such tests would not accurately reflect the market impact of a competitor such as a telephone company offering digital MMDS.

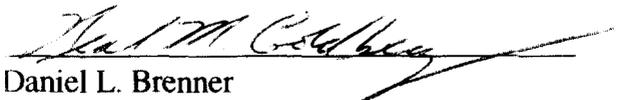
V. CONCLUSION

For the foregoing reasons, the Commission should report to Congress that a competitive marketplace for the delivery of video programming has arrived.

Respectfully submitted,

Cynthia B. Brumfield  
Vice President, Research and  
Policy Analysis

Daniel F. Basnight  
Legal Staff

  
Daniel L. Brenner  
Neal M. Goldberg  
Loretta P. Polk  
1724 Massachusetts Avenue, NW  
Washington, D.C. 20036  
(202) 775-3664

Counsel for the National Cable  
Television Association, Inc.

July 19, 1996

# **APPENDIX A**

**Table 1**  
**Current Cable Industry Statistics**

U.S. Television Households	95,828,460
Basic Cable Subscribers	63,494,570
Homes Passed by Cable	92,950,000
Basic Cable/TV Households	66.3%
Homes Passed/TV Households	96.64%*

\* Based on Kagan's estimate of Television Household

Source: U.S. Television Households and Basic Cable Subscribers, A. C. Nielsen, May 1996 estimates; Homes Passed: Paul Kagan Associates estimate.

**Table 2**

**SYSTEMS AND SUBSCRIBERS  
BY SYSTEM CHANNEL CAPACITY**

<b>Channel Capacity</b>	<b>Systems</b>	<b>Percent of Total Systems</b>	<b>Basic Subscribers</b>	<b>Percent of Total Basic Subscribers</b>
54 or More	1,558	14.00	27,694,550	46.711
30-53	6,376	57.31	28,556,594	48.165
20-29	1,104	9.92	1,195,938	2.017
13-19	353	3.17	125,697	0.212
6-12	588	5.28	219,744	0.371
5	10	0.09	2,732	0.005
Less Than 5	4	0.04	517	0.001
<u>Not Available</u>	<u>1,133</u>	<u>10.18</u>	<u>1,492,754</u>	<u>2.518</u>
<b>TOTAL</b>	<b>11,126</b>	<b>100.00</b>	<b>59,288,526</b>	<b>100.000</b>

Source: Warren Publishing, Inc., *Television & Cable Factbook, Services Volume No. 64*, 1996, p. I-81. Data as of October 1, 1995. Percents adjusted to equal 100. Reprinted with permission.

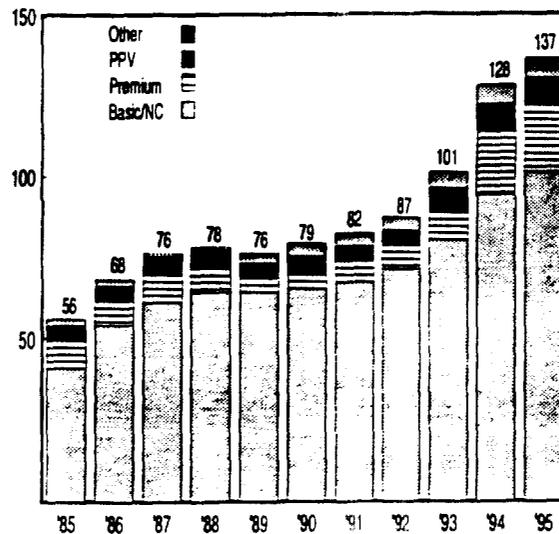
**Table 3**

**NATIONAL CABLE VIDEO NETWORKS  
BY TYPE OF SERVICE:  
1976-1995**

Year	Basic/NC	Premium	PPV	Other	Total
1976	2	2	-	-	4
1977	3	2	-	-	5
1978	6	2	-	-	8
1979	14	5	-	-	19
1980	19	8	-	1	28
1981	29	9	-	-	38
1982	30	11	1	-	42
1983	31	11	1	-	43
1984	37	10	1	-	48
1985	41	9	4	2	56
1986	54	8	4	2	68
1987	61	9	5	1	76
1988	64	8	5	1	78
1989	64	5	4	3	76
1990	65	5	5	4	79
1991	67	7	4	4	82
1992	71	8	4	4	87
1993	80	9	7	5	101
1994	94	20	8	6	128
1995	102	21	8	6	137

**Types of Service - Basic/NC:** Basic or No Charge;  
**Premium:** includes Pay or Mini-Pay; **PPV:** Pay-Per-View;  
**Other:** Networks that fall under more than one service category. See p. 28 for more detailed descriptions of service types.

Source: NCTA "Directory of Cable Networks."



As of year-end. Revised figures reflect new entries in the "Directory of Cable Networks" (Superstations included.)

**Table 4**

**1995 Cable Industry Revenue Sources**  
**\$ million**

<b>Source</b>	<b>Revenue</b>
Basic Cable Programming	\$16,900
Pay Revenue	\$5,063
Video Games	\$15
PPV/NVOD/VOD	\$813
Local Advertising	\$1,281
Home Shopping	\$144
Cable to Business (video)	\$326
Cable Phone	\$222
<u>Miscellaneous</u>	<u>\$585</u>
<b>Total</b>	<b>\$25,349</b>

Source: Paul Kagan Associates, *Cable TV Investor*, May 21, 1996, p.6.

**Table 5**

**CABLE SYSTEMS'  
PROGRAMMING EXPENDITURES:  
1984-1995**

<b>Year</b>	<b>Expenditures (in millions)</b>
1984	\$ 1,740.0
1985	1,859.0
1986	2,030.0
1987	2,289.0
1988	2,599.0
1989	2,918.0
1990	3,195.0
1991	3,463.0
1992	3,811.8
1993	4,000.0
1994	4,370.0
<u>1995</u>	<u>4,963.0</u>

**Source:** Estimates of NCTA, based on Paul Kagan Associates, Inc. data and US Copyright Office data.

**Table 6**

**Vertical Connection Between Major Cable Programming Networks and Cable System Operators**

<u>Programming Network (Top 20)</u>	<u>Subscribers (millions)</u>	<u>MSOs with Ownership/Equity Interest in Network</u>	<u>Date Began</u>
ESPN	67.9	None	9/79
CNN	67.8	TCI (21.27%, Time Warner (17.96%), R.E. Turner (25.94%). Sale pending to Time Warner.	6/80
TBS	67.6	TCI (21.27%, Time Warner (17.96%), R.E. Turner (25.94%). Sale pending to Time Warner.	12/76
USA Network	67.2	Viacom (50%) (Systems being acquired by TCI)	4/80
The Discovery Channel	67.0	TCI (49%), Cox (24%), Newhouse (Time Warner) (24%)	6/85
TNT	66.6	TCI (21.27%, Time Warner (17.96%), R.E. Turner (25.94%). Sale pending to Time Warner.	4/88
C-SPAN	66.1	Cable Affiliates provide 95% of funding, but have no ownership or program control interests.	3/79
MTV	65.9	Viacom (100%) (Systems being acquired by TCI)	8/81
A & E Network	65.0	None	2/84
The Nashville Network	64.8	None	3/83
The Family Channel	64.0	TCI /Liberty Media (20.3%)	4/77
Lifetime	64.0	None	2/84
Nickelodeon/Nick at Night	64.0	Viacom (100%) (Systems being acquired by TCI)	4/79, 7/85
The Weather Channel	61.7	None	5/82
Headline News	60.2	TCI (21.27%, Time Warner (17.96%), R.E. Turner (25.94%). Sale pending to Time Warner.	1/82
American Movie Classics	60.0	Cablevision Systems (75%), NBC (25%)	10/84
CNBC	56.0	None	4/89
QVC	54.6	TCI (42.6%), Comcast (57%)	11/86
VH-1	54.0	Viacom (100%) (Systems being acquired by TCI)	1/85
Home Shopping Network	47.9	TCI (41.5%) (80% Voting Power)	7/85

Source: Ranking of Cable Networks as reported in *Cable Television Development*, Spring 1996. Ownership Interest: primarily as reported in Paul Kagan Inc., *Cable TV Programming*, various issues and *Cablevision*.

**Table 7**

**Vertical Integration: Top Fifteen Major Cable Programming Networks (by Primetime Ratings)**

<u>Rank</u>	<u>Service</u>	<u>Date Began</u>	<u>MSOs with Ownership/Equity</u>
1	USA Network	4/80	Viacom (50%) {Systems being acquired by TCI}
2	TBS	12/76	TCI (21.27%), Time Warner (17.96%), R.E. Turner (25.94%) Sale Pending to Time Warner
3	TNT	4/88	TCI (21.27%), Time Warner (17.96%), R.E. Turner (25.94%) Sale Pending to Time Warner
4	Nickelodeon	4/79	Viacom (100%) {Systems being acquired by TCI}
5	Lifetime	2/84	None
6	The Family Channel	4/77	TCI/Liberty Media (20.3%)
7	WGN	11/78	None
8	Arts & Entertainment Network	2/84	None
9	ESPN	9/79	None
10	The Discovery Channel	6/85	TCI (49%), Cox (24.6%), Newhouse [Time Warner] (24.6%)
11	The Cartoon Network	10/92	TCI (21.27%), Time Warner (17.96%), R.E. Turner (25.94%) Sale Pending to Time Warner
12	The Nashville Network	3/83	None
13	CNN	6/80	TCI (21.27%), Time Warner (17.96%), R.E. Turner 25.94% Sale Pending to Time Warner
14	BET	11/78	TCI (22%), Time Warner (15%)
15	The Learning Channel	11/80	TCI (49%), Cox (24.6%) Newhouse [Time Warner] (24.6%)

Source: First Quarter 1996 Ranking for Primetime as reported in Paul Kagan Associates, *Cable TV Programming*, May 20, 1996 at 10.

**Table 8****National Programming Services**

With Ownership Interests Held By Cable Operators

<b>Network</b>	<b>Date Began</b>
Action Pay Per View	9/90
All News Channel	11/95
AMC (American Movie Classics)	10/84
Animal Planet	6/96
BET (Black Entertainment Television)	1/80
BET on Jazz: The Cable Jazz Channel	1/96
BOX , The (formerly The Jukebox Network)	12/85
Bravo Cable Network	12/80
C-SPAN	3/79
C-SPAN 2	6/86
c/net: The Computer Network	4/95
Cartoon Network	10/92
Cinemax	8/80
Classic Sports Network	5/95
CNN (Cable News Network)	6/80
CNNfn	12/95
CNNI (CNN International)	1/95
Comedy Central	4/91
Courtroom Television Network (Court TV)	7/91
Discovery Channel	6/85
E! Entertainment Television (formerly Movietime 7/87)	6/90
ENCORE	7/91
ENCORE Thematic Multiplex	9/94
ENCORE+	10/94
Faith & Values Channel (formerly Vision Interfaith Satellite Network)	6/84
Family Channel, The	4/77
FIT TV (formally Cable Health Club)	10/93
Flix	8/92
fX	6/94
GEMS International Television	4/93
Golf Channel, The	1/95
Great American Country	12/95
HBO (Home Box Office)	11/72
Headline News	1/82
Home & Garden Television	12/94
Home Shopping Network (HSN)	7/85
Home Shopping Spree! (Spree!)	7/85
Independent Film Channel, The	9/94
International Channel	7/90
INTRO TELEVISION (formerly tv!)	9/94
Jones Computer Network	9/94
Kaleidoscope: America's Disability Network	9/90
Learning Channel, The	11/80
Mind Extension University: The Education Network	11/87
Movie Channel, The	12/79
MTV Latino	10/93

**Table 8 (Continued)**

MTV: Music Television	8/81
MuchMusic USA	7/94
NewSport	2/94
NICK at Nite	7/85
NICK at Nite's TV Land	4/96
Nickelodeon	4/79
Outdoor Life Network	7/95
Ovation: The Fine Arts Network	4/96
Prime Deportiva	3/95
Prime Network	1/93
Product Information Network (PIN)	4/94
Q2	9/94
QVC	11/86
Request Television: Request 1	11/85
Request Television: Request 2	7/88
Request Television: Request 3-5	9/93
Sci-Fi Channel	9/92
Showtime	7/76
Speedvision Network	2/96
STARZ!	2/94
Sundance Channel	2/96
TBS	12/76
TNT (Turner Network Television)	10/88
Turner Classic Movies (TCM)	4/94
TV Food Network (TVFN)	11/93
USA Network	4/80
UVTV/KTLA	3/88
UVTV/WGN	11/78
UVTV/WPIX	5/84
VH1 (First Music)	1/85
Viewers Choice	11/85
Viewers Choice: Continuous Hits 1,2,3,4	2/93
Viewers Choice: Hot Choice (formerly Viewers Choice 2)	6/86

**Table 9**

**Announced National Launches of Programming Services for Cable Distribution**

Programming Services With Ownership Interests Held by Cable Operators

**Network**

Applause Network

CNN

Jones Health Network

Jones Language Network

M2: Music Television

Parents Channel, The

Prime Sports Showcase

Soap TV

Television Shopping Mall

TV Macy's

Women's Sports Network (TX)

**Table 10****National Programming Services**

Without A Cable Operator Holding an Ownership Interest

<b>Network</b>	<b>Date Began</b>
A&E Television Network (A&E)	2/84
Access Television Network	3/94
Adam & Eve Channel	2/94
Adultvision	7/95
America's Health Network	3/96
American Independent Network	3/94
ANA Television	12/91
Asian American Satellite TV	1/92
Bloomberg Information Television	1/95
Cable Video Store	4/86
Canal de Noticias NBC	3/93
Canal Sur	8/91
Channel America Television Network	6/88
Children's Cable Network	5/95
Cine Latino	12/94
Classic Arts Showcase	5/94
CMT: Country Music Television	2/83
CNBC	4/89
Consumer Resource Network	12/94
Crime Channel, The	7/93
Deep Dish TV	1986
Disney Channel, The	4/83
DRAGnet (Direct Response Advertising Group Network)	12/95
Ecology Channel, The (formerly the ECO Channel)	1/94 (part time)
ESPN	9/79
ESPN2	10/93
Ethnic- American Broadcasting Co.	1992
EWTN: Global Catholic Network	8/81
Filipino Channel, The	4/94
FoxNet	7/91
FREE SPEECH TV (fromally the 90's Channel)	6/95
FXM: Movies from Fox	11/94
Galavisión	10/79
Game Show Network	12/94
Gay Entertainment Television	12/95
GRTV (Guthy-Renker Television)	1/96
History Channel, The	1/95
Idea Channel, The	1/92
Inspirational Network (INSP), The	4/78
Jewish Television Network	1981
Ladbroke Racing Channel/Meadows Racing Network	11/83
Lifetime Television	2/84
MOR Music TV	8/92
Music Zone, The	4/95
NASA Television	7/91
National & International Singles Network	4/95

**Table 10 (Continued)**

National Access Television	3/94
NET - Political NewsTalk Network (formerly National Empowerment TV)	12/93
Network One	12/93
NewsTalk Television	10/94
NewsWorld International	9/94
Nostalgia Television	2/85
Outdoor Channel, The	5/93
Planet Central Television	5/96 (part-time)
Playboy TV	11/82
Popcorn Channel	11/95
SCOLA	8/87
Shop at Home	10/95
SingleVision	6/94
Spice	5/89
Telemundo	1/87
TNN: The Nashville Network	3/83
Total Communication Network	11/95
Travel Channel, The	2/87
Trinity Broadcasting Network	5/73
Trio	9/94
TV Asia	4/93
TV JAPAN	4/91
U Network	10/89
Univision	9/61
ValueVision	10/91
Via TV Network	8/93
Video Catalog Channel	10/91
Weather Channel, The	5/82
WorldJazz	7/95
Worship Network, The	9/92
WSBK	2/88
WWOR/ EMI Service	4/79
Z Music Television	3/93

**Table 11**

**Announced National Launches of Programming Services for Cable Distribution**

Programming Services Without a Cable Operator Holding an Ownership Interest

**Network**

Air & Space Network, The  
American West Network  
AnimalVision: The Animal Channel  
Anti-Aging Network, The  
ARENA: The Classic Music Channel  
Arts & Antiques Network  
Auto Channel, The  
Axon  
Benefit Network  
Biography Channel, The  
Black Shopping Network  
Boating Channel, The  
Booknet  
Cable Consortium, The  
Career & Education Opportunity Network  
Catalouge TV  
CEO Channel, The  
Channel 500  
CHOP TV  
Collectors Channel  
Conservative Television Network  
Dream Network, The  
Enrichment Channel, The  
Entertainment Prosperity Insight Channel  
Epic, The  
ESPNews  
Eurocinema  
FAD TV (Fashion & Design Television)  
FASHION Network  
Fitness Interactive  
Fox News Channel  
FXTV, Fitness and Exercise Television  
Gaming Entertainment Television  
Global Entertainment Television  
Global Village Network  
Golden American Network  
Gospel Network, The  
Health Channel, The  
Hobby Craft Network  
Home Improvement TV Network  
Horizons Cable Network  
Jackpot Channel, The  
Kid City  
Las Vegas Television Network  
Love Network, The  
MBC Movie Network, The

**Table 11 (Continued)**

Merchandise Entertainment Television  
Military Channel, The  
MSNBC  
My Pet Entertainment Network  
Native American Nations Program Network (NAN)  
New Science Network  
ORB TV  
Outlet Mall Network, The  
Parent Television  
Parenting Satellite Television Network  
Pet Television Network, The  
Premiere Horse Network  
Prime Life Network  
Real Estate TV Network  
Recovery Network, The  
Rock TV  
S-TV The Surfing Channel  
Science Network, The  
Seminar TV Network  
Sewing and Needle Arts Network  
Share TV  
Space Network, The  
Success Channel, The  
Talk TV Network  
Technology Channel, The  
Telecompras Shopping Network  
Theater Channel, The  
TRAX Television Network  
TV5  
URU TV/The EarthCast Network  
WBIS+  
Wingspan  
World African Network

# **APPENDIX B**

## TELEPHONE COMPANY INVOLVEMENT IN VIDEO

Jul-96

Telephone Company	Cable TV Company	Nature of Deal	Value of Deal (\$millions)	Ownership Percent	Subscribers (millions)
AT&T Corp.	DirecTV <sup>1</sup>	Investment	137	2.5%	1.2
Bell Atlantic Nynex	CAI Wireless Systems Inc. <sup>2</sup>	Investment	100	45.3%	0.11
	CS Systems Inc.	Investment	n/a	10%	n/a
Bell South	Prime Cable	Investment	100	22%	0.5
	QVC	Investment	500	14%	7.6
BCE	Jones Intercable <sup>3</sup>	Investment	400	30%	1.5
Nynex	Viacom <sup>4</sup>	Investment	1,200	0%	1.1

<sup>1</sup>AT&T acquired 2.5% of GM Hughes subsidiary, DirecTV, a DBS provider with 1.2 mil. subs for \$137.5 mil.

<sup>2</sup>The deal comprises two phases; the first phase involves a \$30 mil. loan to reduce existing CAI debt and securing the purchase of ACS Enterprises Inc., another wireless cable system operator. The second phase, which is contingent upon the acquisition of ACS Enterprises, has Bell Atlantic and Nynex investing \$70 mil. in CAI in 14% convertible preferred stock. Upon completion, Bell Atlantic and Nynex will together own 45% of CAI equity. In addition, CAI is in the process of acquiring systems in Washington, D.C.; Baltimore and Pittsburgh.

<sup>3</sup>BCE invested \$400 mil. in Jones Intercable for a 30% ownership stake. The renegotiated deal decreases the front-end payment of \$275 mil. to \$261 mil. and increases the closing payment from \$125 mil. to \$139 mil. In addition, BCE will pay \$52 mil. for an option, that will result in 75% control of the Board of Directors, the original cost of the option was \$55 mil.

<sup>4</sup>Nynex will invest \$1.2 bil. in Viacom for a dividend on convertible preferred stock and an exclusive right to negotiate new business relationships.

## TELEPHONE COMPANY INVOLVEMENT IN VIDEO

Jul-96

Telephone Company	Cable TV Company	Nature of Deal	Value of Deal (\$millions)	Ownership Percent	Subscribers (millions)
<b>Pacific Telesis</b>	<b>Cross Country Wireless Inc.</b> <sup>5</sup>	Acquisition	120	100%	0.04
	<b>Wireless Holdings Inc.</b> <sup>6</sup>	Acquisition	175	100%	0.01
	<b>Videotron Bay Area, Inc.</b> <sup>7</sup>	Acquisition	---	100%	----
<b>MCI</b>	<b>Interactive Cable Systems</b> <sup>8</sup>	Investment	30	20%	0.1
	<b>News Corp.</b> <sup>9</sup> / <b>DBS Licensee</b> <sup>10</sup>	Investment	682	100%	0.0
<b>SBC Communications</b>	<b>Hauser Communications</b> <sup>11</sup>	Acquisition	650	94.6%	0.2
	<b>DirecTV</b> <sup>12</sup>	Joint Venture	n/a	0%	0.0

<sup>5</sup>PacTel will swap \$120 mil. of Pactel stock and warrants outstanding along with the assumption of Cross Country debt for a 100% equity ownership interest.

<sup>6</sup>PacTel will swap about \$120 mil. in stock and assume about \$55 mil. in debt. The deal also includes rights to about 2 mil. homes in Seattle, Spokane, Tampa and Greenville, S.C.

<sup>7</sup>Wireless Holdings Inc. and Videotron Bay Area Inc. are both joint ventures of Transworld Telecommunications Inc. and Le Groupe Videotron of Montreal.

<sup>8</sup>Interactive Cable Systems Inc. is a privately held telecommunications company that provides wireless cable television and local telephone service to MDUs.

<sup>9</sup>MCI acquired 13.5% of News Corp. for \$2 bil. in May 1995. The companies also invested \$200 mil. each to establish a separate online-based company.

<sup>10</sup>MCI won control of Advanced Communications former DBS slot at 110 degrees West in January 1996 FCC DBS license auction.

<sup>11</sup>Hauser Communications cable systems include Cable TV Arlington, Arlington, VA., and Montgomery Cable, Montgomery Co., MD. Southwestern Bell Media Ventures sold 5.4% of the Hauser systems to Prime Cable for \$20 mil. and turned over management of those systems to Prime Cable.

<sup>12</sup>Southwestern Bell will sell, install and service DirecTV equipment all under the Southwestern Bell brand for \$599 in Austin and San Antonio, Texas.

**TELEPHONE COMPANY INVOLVEMENT IN VIDEO****Jul-96**

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<b>Telephone Company</b>	<b>Cable TV Company</b>	<b>Nature of Deal</b>	<b>Value of Deal (\$millions)</b>	<b>Ownership Percent</b>	<b>Subscribers (millions)</b>
<b>US West</b>	<b>Time Warner Ent.<sup>13</sup></b>	Investment	2,500	25%	7.1
	<b>Wometco Cable Co.<sup>14</sup> Georgia Cable TV</b>	Acquisition	1,040	100%	0.4
	<b>Continental Cablevision<sup>15</sup></b>	Acquisition	10,800	100%	4.2

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<sup>13</sup>US West invested \$2.5 bil. in Time Warner Entertainment for a 25% ownership stake, with an option to purchase an additional 8% later. Time Warner Entertainment is a subsidiary of Time Warner Inc., with holdings in Time Warner Cable, Warner Brothers, and Home Box Office.

<sup>14</sup>US West acquired both Atlanta cable systems from the Robert M. Bass Group for \$1.04 bil. in stock and cash, plus the assumption of \$160 mil. in debt.

<sup>15</sup>US West acquired 100% of Continental Cablevision for \$10.8 bil. and assumed \$5.5 bil. of Continental debt. US West will issue preferred stock, convertible to common, and cash up to \$1.5 bil. to complete the deal.