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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION

In the Matter of)
)
Telecommunications Services) CS Docket No. 95-184
Inside Wiring)
)
Customer Premises Equipment)

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**REPLY COMMENTS OF THE
CONSUMER ELECTRONICS MANUFACTURERS ASSOCIATION**

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TABLE OF CONTENTS

	<u>Page</u>
SUMMARY OF POSITION	i
I. THE RECORD SUPPORTS THE UNBUNDLED AVAILABILITY OF CABLE CPE	2
II. THE RECORD SUPPORTS ADOPTING INDUSTRY-DEVELOPED TECHNICAL STANDARDS TO FACILITATE THE INTERCONNECTION OF COMPETITIVELY SUPPLIED CABLE CPE	4
III. THE RECORD SUPPORTS ALLOWING CABLE CUSTOMERS PRE- TERMINATION ACCESS TO THEIR CABLE HOME WIRING	6
IV. THE RECORD SUPPORTS CHANGING THE CABLE DEMARCATION POINT TO MIRROR THE TELEPHONE DEMARCATION POINT	11
V. CONCLUSION	14

SUMMARY OF POSITION

With the exception of certain incumbent cable operators and certain owners of multi-dwelling units ("MDUs"), the majority of commenters share CEMA's views and endorse the Commission's efforts to craft pro-consumer and pro-competitive rules for cable CPE and home wiring. These commenters correctly recognize that *the consumer* should be the Commission's top priority. They also recognize that providing consumers with control over cable home wiring and permitting them to use competitively-supplied CPE are essential to a vibrant, state-of-the-art National Information Infrastructure.

Unbundling of cable CPE is not only sound public policy, it is *mandated* by both the 1992 Cable Act and the Telecommunications Act of 1996 ("1996 Act"). Indeed, Circuit City does not exaggerate when it asserts that the 1996 Act is the "*magna carta* for unbundled competition in broadband devices." The only legitimate concern about unbundling is that it not facilitate signal theft. In its most recent order in ET Docket No. 93-7 (released Apr. 10, 1996), the Commission has already addressed such concerns by affirming the value of the Decoder Interface in protecting signal security. Furthermore, the Commission directed that everything other than cable-provided "descrambler modules" be unbundled and made available to consumers on a competitive basis.

Many of the commenting parties agree that industry-developed technical standards will expedite the introduction of low-cost, competitively supplied cable CPE. Minimum technical standards would serve the public interest by promoting the competitive provision of cable CPE. Most parties, however, oppose a strict Part 68-like regime of technical standards for cable connectors, preferring instead technical standards developed by industry (*e.g.*, EIA,

ANSI, SCTE, TIA). Standardized interfaces will allow all equipment manufacturers to compete on a level playing field and afford consumers the widest choice of high-quality and innovative products.

Except for cable companies and MDU owners, the majority of commenters agree that cable customers should be given pre-termination access to their cable home wiring. Moreover, even MDU owners support wresting control of cable home wiring away from cable operators; they simply want pre-termination access to be afforded to themselves rather than to their tenants. Pre-termination access will make consumers more likely to consider switching to a competing, or subscribing to an additional, video programming provider. The fact that telephone companies, which opposed the deregulation of inside wiring when it was first proposed, now support such action speaks volumes.

The vast majority of commenters favors a uniform demarcation point for telephone and cable services. Although these parties do not all recommend the same demarcation point, they agree that consumer confusion will be minimized if a common demarcation point is established. CEMA proposes that the Commission adopt a demarcation point that is located inside the consumer's premises.

In the MDU context, CEMA agrees with DirecTV and other alternative video providers that MDU buildings should have a uniform demarcation point located at the "minimum point of entry" inside or outside the MDU building where the service provider attaches to the building's common home wiring (*e.g.*, basement, street, or telephone pole). As is the case in the telephone context, the MDU owner would have the discretion to decide if there should be additional demarcation points for each tenant (*e.g.*, at lock boxes).

With the exception of certain incumbent cable operators and owners of multi-dwelling units ("MDUs"), the majority of commenters share CEMA's views and endorse the Commission's efforts to craft pro-consumer and pro-competitive rules for cable CPE and home wiring. These commenters correctly recognize that *the consumer* should be the Commission's top priority. They also recognize that providing consumers with control over cable home wiring and permitting them to use competitively-supplied CPE are essential to a vibrant, state-of-the-art National Information Infrastructure.

I. THE RECORD SUPPORTS THE UNBUNDLED AVAILABILITY OF CABLE CPE

Many commenters, including telephone companies, alternative video providers, and equipment manufacturers, agree with CEMA that unbundling cable CPE will produce substantial public interest benefits.² The benefits of unbundling CPE in the telephone context are beyond dispute,³ and there is no reason to believe that these same benefits will not arise in the cable context.

² See, e.g., Comments of Circuit City Stores (*passim*); Comments of Compaq Computer at 10-24; Comments of DirecTV at 14; Comments of Information Technology Industry Council at 11-15; Comments of NYNEX at 20; Comments of Tandy Corp. at 2-4.

³ Indeed, the Commission recognized the benefits of equipment unbundling in the *CPE Notice* when it stated:

Since the Commission deregulated telephone CPE, the Commission's goals of promoting marketplace entry by communications equipment vendors, increasing competition among these vendors, and producing cost savings for both consumers and common carriers have largely been fulfilled.

CPE Notice at ¶ 70.

Whatever doubts there may have been about the wisdom of unbundling cable CPE were definitively resolved by Congress. As Circuit City has correctly pointed out, unbundling is not only sound public policy, it is *mandated* by both the 1992 Cable Act (47 U.S.C. § 544a) and the Telecommunications Act of 1996 ("1996 Act"). Indeed, Circuit City does not exaggerate when it asserts that the 1996 Act is the "*magna carta* for unbundled competition in broadband devices."⁴ The only legitimate concern about unbundling is that it not facilitate signal theft.⁵ Obviously, no party to this proceeding is advocating such a result. The Commission, moreover, has already addressed such concerns.

In its most recent order in ET Docket No. 93-7, the Commission has affirmed the value of the Decoder Interface in protecting signal security and has directed that everything other than cable-provided "descrambler modules" be unbundled and made available to consumers on a competitive basis. As the Commission explained:

[W]e reiterate our intention that the Decoder Interface serve as a means for promoting competition in the market for equipment used to receive cable service. *We believe it is important that participation in this market be open to all parties, including cable operators and consumer equipment manufacturers.* In order to ensure that this market is open to all parties, we conclude that it is necessary to require cable operators to offer component descramblers that perform only signal access control functions. . . . Our decision ensures that subscribers will have several

⁴ Comments of Circuit City at 2 (emphasis in original). *See also* Comments of Tandy Corp. at 3-4; Comments of Compaq Computer at 20-23.

⁵ Comments of General Instrument at 15; Comments of Time Warner Cable at 48-49. In alleging that unbundling will jeopardize signal security, Cox Communications ignores the value of the Decoder Interface, which will permit unbundling without jeopardizing signal security. Comments of Cox Communications at 32-33.

competitive alternatives in selecting component descrambler equipment.⁶

CEMA thus agrees with Circuit City that:

There is no reason -- indeed it would be contrary to [Section 304 of the 1996 Telecommunications Act] -- to grant an exception to maintain a system operator monopoly over more than the necessary security module.⁷

The Commission should therefore require the unbundling and competitive provision of cable CPE.

II. THE RECORD SUPPORTS ADOPTING INDUSTRY-DEVELOPED TECHNICAL STANDARDS TO FACILITATE THE INTERCONNECTION OF COMPETITIVELY SUPPLIED CABLE CPE

Many of the commenting parties agree that industry-developed technical standards will expedite the introduction of low-cost, competitively supplied cable CPE.⁸ As Ameritech aptly points out, minimum technical standards would serve the public interest by promoting the competitive provision of cable CPE:

⁶ *Implementation of Section 17 of the Cable Television Consumer Protection and Competition Act of 1992 -- Compatibility Between Cable Systems and Consumer Electronics Equipment*, Memorandum Opinion and Order, ET Docket No. 93-7, FCC 96-129, at ¶ 38 (released Apr. 10, 1996) (emphasis added). *See also id.*, First Report and Order, 9 FCC Rcd 1981, 1982 (1994) ("opening [the cable CPE] markets to competitive equipment providers will give product developers and manufacturers, as well as cable system operators, the ability and incentives to introduce new products and to respond to consumer demand. In return consumers will have greater access to technology with new features and functions.").

⁷ Comments of Circuit City at 8 (Section 304 refers to 47 U.S.C. § 629).

⁸ *See, e.g.*, Comments of Ameritech at 16-17; Comments of AT&T Corp. at 19; Comments of Compaq Computer at 28-29, 32-33; Comments of Circuit City at 19; Comments of NYNEX at 17-18; Comments of US WEST at 13-14.

[C]ommon technical standards for connection to cable and telephone networks would foster competition, lower costs, speed the installation of services and facilitate standardized testing of facilities at the point they enter a premises.⁹

Most parties, however, oppose a strict Part 68-like regime of technical standards for cable connectors, preferring instead technical standards developed by industry (*e.g.*, EIA, ANSI, SCTE, TIA). Indeed, as Compaq points out, the 1996 Act expressly directs the Commission to "consult[] with appropriate industry standard-setting organizations" to achieve the goal of commercially available cable CPE.¹⁰

At the other extreme, some cable operators argue that technical standards are totally unnecessary.¹¹ By maintaining proprietary interfaces for their networks, these operators would be able to maximize the sale of their own CPE. Standardized interfaces, by contrast, will allow all equipment manufacturers to compete on a level playing field and afford consumers the widest choice of high-quality and innovative products. Standardized interfaces will also benefit consumers by permitting manufacturers to achieve economies of scale in the production of equipment. These economies of scale will drive down the prices that consumers pay for cable CPE. Appropriate standardized interfaces should be formulated by industry committees, and would be designed so as not to restrict competitive design of cable CPE and networks.

Perhaps the most significant thing the Commission can do to promote competition in the provision of video-related equipment is, as the New Jersey Board of Public Utilities has

⁹ Comments of Ameritech at 16.

¹⁰ Comments of Compaq Computer at 32 (*citing* 47 U.S.C. § 629(a)).

¹¹ *See, e.g.*, Comments of Time Warner Cable at 31-36; Comments of National Cable Television Association at 35-36.

recognized, require cable operators to support the digital ATSC transmission standard ultimately adopted for over-the-air broadcasting.¹² Such action will ensure that cable customers have the broadest possible choice of video equipment at the lowest possible prices wherever they may live.

III. THE RECORD SUPPORTS ALLOWING CABLE CUSTOMERS PRE-TERMINATION ACCESS TO THEIR CABLE HOME WIRING

Except for cable companies and MDU owners, the majority of commenters agree that cable customers should be given pre-termination access to their cable home wiring.¹³ MDU owners face special circumstances (because they are responsible for the appearance and upkeep of their buildings) and thus their reluctance is understandable.¹⁴ Furthermore, MDU owners

¹² Comments of New Jersey Board of Public Utilities at 17. In the *First Report and Order* in ET Docket 93-7, the Commission recognized the importance of digital transmission standards. See 9 FCC Rcd 1981, 2005 (1994) ("Standards for digital cable transmission are necessary to avoid future compatibility problems when cable systems use digital transmission methods, and to allow the mass production of economical consumer equipment that is compatible with digital cable services."). See also Comments of Compaq Computer at 32-33 n.58.

¹³ See, e.g., Comments of Ameritech at 13-14; Comments of Circuit City at 14; Comments of Compaq Computer at 38-44; Comments of DirecTV at 12-13; Comments of Information Technology Industry Council at 11-13; Comments of Media Access Project and Consumer Federation of America at 14-16; Comments of NYNEX at 9-11; Comments of US WEST at 12-13.

¹⁴ See, e.g., Comments of John Hancock Mutual Life Insurance Company at 2 ("A building owner must have control over the space occupied by telephone lines and facilities, especially in a multi-occupant building, because only the landlord can coordinate the conflicting needs of multiple tenants and multiple service providers.").

support transferring control of cable home wiring away from cable operators; they simply want pre-termination access to be afforded to themselves rather than to their tenants.¹⁵

CEMA stated in its initial comments that it would await the comments of other parties to evaluate how best to promote competition in the MDU context.¹⁶ After carefully considering the comments that have been filed in this proceeding, CEMA has concluded that affording building managers pre-termination access to the cable wiring common to the entire MDU is just as critical to competition and consumer choice in the MDU context as it is in the context of single dwelling units.¹⁷

Pre-termination access to cable home wiring, in both the single dwelling and MDU contexts, will produce substantial benefits for consumers. As many commenters point out,

¹⁵ See, e.g., Joint Comments of Building Owners and Managers Association International et al. at 44 ("Commenters have no objection in principle to permitting a customer to install or maintain its own wiring or buy the wiring from a service provider for use in the demised premises, provided that the rights of the owner of the building and fellow-occupants are taken into account.").

¹⁶ CEMA Comments at 4 n.5.

¹⁷ Alternative video providers uniformly support allowing pre-termination access for cable home wiring. See, e.g., Comments of Wireless Cable Association International at 15 ("WCA requests that the Commission adopt a rule providing that ownership of wiring not designated as 'cable home wiring' in a multiple dwelling unit transfers automatically to the property owner immediately upon installation."); Comments of Multimedia Development Corp. at 17-18 ("To prevent 'ownership' from being used as an artificial impediment to competition, the Commission should modify its inside wiring rules to require that title to cable home wiring vest with the subscriber (or the property owner in the case of common wiring in MDU buildings) upon installation."); Comments of DirecTV at 12 ("DirecTV supports maximizing the right of each and every individual subscriber to choose who will provide each of their services on a service-by-service basis. The disposition of ownership and control of the inside wiring is very important in this regard.").

customer access to telephone inside wiring has been an unqualified success. Similar benefits should accrue to consumers in the cable context. For example, Ameritech states:

The Commission's deregulation of telephone inside wire represented good public policy when that action was taken years ago and it continues to represent good public policy now. It benefitted individual customers by giving them more choices with respect to the installation and maintenance of their telephone inside wire and produced cost savings. It benefitted society generally because it encouraged technological innovation and facilitated the development of a multi-provider/multi-service marketplace by promoting market entry. Extending the telephone inside wire rules to cable home wire could have the same beneficial effects with respect to broadband services.¹⁸

The fact that telephone companies, which opposed the deregulation of inside wiring when it was first proposed, now support such action speaks volumes. Pre-termination access also allows the tenant to construct "smart" networks that will allow the CPE to interact with the external network and with each other.

Of course, pre-termination access should not allow consumers to cause harm to the network. Similarly, consumers should not be allowed to modify their wiring to facilitate theft of service. The Commission, however, should not let such concerns deter it from establishing rules that are pro-consumer and pro-competitive.

As CEMA pointed out in its initial comments, pre-termination access will make consumers more likely to consider switching to a competing, or subscribing to an additional, video programming provider.¹⁹ DirecTV agrees. It notes that incumbent cable operators will

¹⁸ Comments of Ameritech at 13. *See also* Comments of NYNEX at 9-11; Comments of US WEST at 12-13.

¹⁹ CEMA Comments at 7. *See also* Comments of Media Access Project and Consumer Federation of America at 15 ("In a manner analogous to telephone service, cable wiring

only face effective competition if consumers have the right to provide alternative video programming providers with access to the existing cable plant:

The DBS provider must be able to reuse existing cable, or use a portion of the available bandwidth on the existing cable plant, to be able to compete effectively with the incumbent service provider without subjecting the landlord or tenants to unnecessary installation burdens. . . . The cost and inconvenience of the redundant, overbuilt cable plant backbone provides a serious barrier to entry for the new competitor and therefore creates an impediment to competition²⁰

The Commission should not be deterred by arguments that pre-termination access constitutes an unconstitutional taking of cable company property.²¹ Similar arguments were raised when telephone inside wiring was deregulated. The Commission rejected those arguments then;²² it should do so now. In most buildings, cable operators, like telephone companies, may have fully expensed the costs of their home wiring and therefore have been fully compensated for their investment. Furthermore, the salvage value of inside wiring (after taking into account

access will allow subscribers to tailor the configuration of wiring inside their homes in a manner which gives them the most personal utility, yet which will not harm the network. . . . Moreover, and perhaps more importantly, competition will be enhanced because the subscriber will be less likely to perceive a large financial cost or practical difficulty to switching providers.").

²⁰ Comments of DirecTV at 5. *See also* Joint Comments of Riser Management Systems, Wright Rustad & Company, Rudin Management Company at 4 ("The solution that *is* feasible in these cases is straightforward: access to multiple providers over a common backbone cable distribution system within a building.") (emphasis in original).

²¹ *See, e.g.*, Comments of National Cable Television Association at 36-38; Comments of Time Warner Cable at 26-29.

²² *See Detariffing the Installation and Maintenance of Inside Wiring*, Second Report and Order, 59 R.R.2d 1143 at ¶ 48, *recon. on other grounds*, 1 FCC Rcd 1190 (1986).

the costs of removal) is zero.²³ In those cases where cable operators have not fully expensed the home wiring, the Commission should ensure that cable operators are fully compensated.²⁴ Control of the wiring, however, should be transferred to the consumer and MDU owner immediately, without regard to whether the wiring has been fully expensed.²⁵

The Commission should therefore afford consumers pre-termination access to their cable home wiring.

²³ *See id.*, 59 R.R.2d 1143 at ¶¶ 46, 49. *See also* Comments of Wireless Cable Association International at 19-20 ("It is well settled that the cost of cable inside wiring lies primarily in installation and not in the wiring itself, and that salvage value of coaxial cable pales in comparison to the cost of removing the wiring and restoring the premises to its former condition.").

²⁴ Pursuant to 47 C.F.R. §§ 76.922 and 76.923(a), cable companies are permitted to recover the costs of cable home wiring. *See also* Comments of Wireless Cable Association International at 20.

²⁵ In the telephone context, the Commission permitted telephone companies to maintain ownership of inside wiring until it had been fully expensed, but transferred control of the wiring to the customer immediately. *See Detariffing the Installation and Maintenance of Inside Wiring*, 1 FCC Rcd 1190, 1195-96 (1986); Comments of Multimedia Development at 16-17 & n.27.

IV. THE RECORD SUPPORTS CHANGING THE CABLE DEMARCATION POINT TO MIRROR THE TELEPHONE DEMARCATION POINT

The vast majority of commenters favors a uniform demarcation point for telephone and cable services.²⁶ Although these parties do not all recommend the same demarcation point,²⁷ they agree that consumer confusion will be minimized if a common demarcation point is established. In its initial comments, CEMA urged the Commission to adopt a uniform demarcation point for cable and telephone service *inside* the customer's premises. Not only would such a demarcation point protect the integrity and security of electronics equipment from vandalism and natural elements, but it would also promote efficient interconnection with home automation and other consumer electronics equipment.²⁸

In the MDU context, CEMA agrees with DirecTV and other alternative video providers that MDU buildings should have a uniform demarcation point located at the "minimum

²⁶ *See, e.g.*, Comments of Ameritech at 7-8; Comments of AT&T at 4-5; Joint Comments of Building Owners and Managers Association International et al. at 37-38; Comments of California Public Utilities Commission at 2-3; Comments of Cincinnati Bell at 1-3; Comments of Circuit City at 14-15; Comments of Media Access Project and Consumer Federation of America at 5; Comments of US WEST at 3-6.

²⁷ *Compare, e.g.*, CEMA Comments at 4; Comments of Cincinnati Bell at 2; Comments of Compaq Computer at 36; Comments of Multimedia Development Corp. at 10-11; Comments of California Public Utilities Commission at 3 (recommending a common demarcation point up to twelve inches inside the premises) *with* Comments of AT&T at 6; Comments of Circuit City at 15; Comments of Media Access Project and Consumer Federation of America at 6; Comments of NYNEX at 5 (recommending placement of the demarcation point 12 inches outside the premises).

In the MDU context, MDU owners favor one uniform demarcation point for commercial buildings and a different uniform demarcation point for residential buildings. *See, e.g.*, Joint Comments of Building Owners and Managers Association International et al. at 37-38.

²⁸ CEMA Comments at 5-6.

point of entry" inside or outside the MDU building where the service provider attaches to the building's common home wiring (*e.g.*, basement, street, or telephone pole).²⁹ As is the case in the telephone context, the MDU owner would have the discretion to decide if there should be additional demarcation points for each tenant (*e.g.*, at lock boxes).³⁰

CEMA agrees with Multimedia Development that affording MDU owners control over common wiring up to the minimum point of entry is very important. Space limitations in MDUs require that a backbone of common wiring be available for use by multiple video providers; there simply is not enough space to permit or require each video service provider to install its own wiring.³¹ Obviously, if an MDU's common wiring is in the hands of the cable operator, alternative video providers could be denied access. In contrast, it is in the MDU owner's interest to attract tenants with a package of competing video services. Furthermore, MDU owners acting as representatives for their entire buildings can negotiate lower rates for video services than tenants could negotiate themselves.³² In summary, by providing MDU

²⁹ *See, e.g.*, Comments of DirecTV at 7-8; Comments of Multimedia Development at 13-14; Comments of Wireless Cable Association International at 21-22. In the telephone context, Section 68.3 of the Commission's rules defines "minimum point of entry" as:

either the closest practicable point to where the wiring crosses a property line or the closest practicable point to where the wiring enters a multiunit building or buildings.

47 C.F.R. § 68.3 (1995).

³⁰ *See* 47 C.F.R. § 68.3 ("The multiunit premises owner shall determine whether there shall be a single demarcation point location for all customers or separate such locations for each customer.").

³¹ *See* Comments of Wireless Cable Association International at 13; Comments of Multimedia Development at 15 & n.23.

³² *See* Comments of Multimedia Development at 15.

owners with pre-termination access and by establishing demarcation points at easily accessible locations, the Commission will ensure that video service competition and consumer choice are maximized.

Certain commenters do not fully recognize the importance of harmonizing the demarcation points for cable and telephone service. The New Jersey Board of Public Utilities, for example, suggests that the disparity in demarcation points is not currently a problem for consumers and need not be harmonized until the "competitive broadband needs of the future" warrant.³³ Cox Communications similarly alleges that a uniform demarcation point is not currently needed because the provision of both telephony and video services over a single wire is not technically feasible.³⁴ Such views are shortsighted at best.

Moreover, the assertion that a broadband wire cannot be used to accommodate multiple video providers or to provide both local telephony and video services is demonstrably false. As CEMA stated in its initial comments, CEMA members are *currently* developing equipment that will allow multiple uses of a single broadband wire, including the potential for simultaneous use,³⁵ and the high-speed, real-time transport of digitally encoded information to the customer premises. Furthermore, DirecTV's comments describe its plans to place its DBS signal onto the unused frequency band of the existing MDU cable plant.³⁶ The shared use of

³³ Comments of New Jersey Board of Public Utilities at 3.

³⁴ Comments of Cox Communications at 11-12 & n.15.

³⁵ CEMA Comments at 5 n.7.

³⁶ Comments of DirecTV at 9 ("It is technically possible for providers to share wires.").

wiring will maximize consumer choice; it also negates the argument of some cable operators³⁷ that changing the cable demarcation point in MDUs would merely replace one monopoly video provider with another.³⁸ The Commission should harmonize cable and telephony demarcation points *now* in order to prepare for these fast-approaching technological developments.

The Commission should therefore modify its wiring rules as set forth above and clearly indicate where subscribers' rights begin and terminate. Confusion and complexity will frustrate competition. As the Media Access Project correctly points out, "a subscriber's enthusiasm for competing services will quickly dissipate as his or her perceived expense and difficulty in making the transition [to a new service provider] mounts."³⁹ A common demarcation point will foster competition by reducing the possibility that overlapping property rights will discourage consumers from connecting competitively supplied CPE or from switching to or adding an alternative or additional service provider.⁴⁰

V. CONCLUSION

For all of the reasons set forth above, as well as those set forth in CEMA's initial comments, the Commission should:

- (1) implement the mandate of the 1996 Act by ordering the immediate unbundling of all cable CPE and by giving consumers the right to use and connect competitively supplied CPE to cable operator facilities;

³⁷ See, e.g., Comments of Cox Communications at 5.

³⁸ See Comments of DirecTV at 9 ("The cable operators' argument that loss of control of the wire would restrict their ability to compete for telephone and Internet services can be answered by requiring sharing of the wiring.").

³⁹ Comments of Media Access Project and Consumer Federation of America at 6.

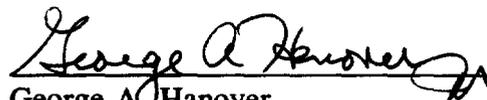
⁴⁰ See *CPE Notice* at ¶ 12; CEMA Comments at 4.

- (2) adopt industry-developed technical standards to facilitate the interconnection of competitively supplied cable CPE;
- (3) give consumers the right to provide and install their own cable home wiring and to obtain access to cable operator-owned home wiring on their premises prior to service termination; and
- (4) harmonize the demarcation points for cable home wiring and telephone inside wiring based on the current telephone demarcation point.

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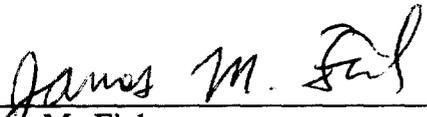
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CERTIFICATE OF SERVICE

I, James M. Fink, hereby certify that a copy of the foregoing "Reply Comments of The Consumer Electronics Manufacturers Association" in CS Docket No. 95-184 was served by First-Class United States mail, postage prepaid, upon the parties appearing on the attached service list this 17th day of April, 1996.



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