

ORIGINAL

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

RECEIVED

MAY 16 1997

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )  
)  
Implementation of Section 304 of the )  
Telecommunications Act of 1996 )  
)  
Commercial Availability of )  
Navigation Devices )

CS Docket No. 97-80

DOCKET FILE COPY ORIGINAL

**COMMENTS OF**  
**THE NATIONAL CABLE TELEVISION ASSOCIATION**

Wendell H. Bailey  
Vice President, Science & Technology

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

May 16, 1997

Counsel for the National Cable  
Television Association, Inc.

No. of Copies rec'd 0811  
List A B C D E

## TABLE OF CONTENTS

INTRODUCTION AND SUMMARY .....	1
I. ANY “RIGHT TO ATTACH” PRINCIPLE MUST BE TEMPERED BY CONCERNS ABOUT SECURITY AND OTHER POTENTIAL HARMS TO THE NETWORK AS THE STATUTE AND THE CARTERPHONE CASE RECOGNIZE .....	4
II. THIS PROCEEDING SHOULD NOT APPLY ANY SEPARATION REQUIREMENT TO CABLE’S ANALOG SET-TOP BOX .....	8
III. ENTITIES AND EQUIPMENT COVERED BY SECTION 629 .....	14
A. All MVPDs, Including OVS Providers, Should Be Subject To Section 629 .....	15
B. In-Home Wiring and Network Interface Units Are Not Subject To Section 629 .....	18
IV. DEFINITIONS OF “AFFILIATE” AND “COMMERCIAL AVAILABILITY” .....	19
V. THE RIGHT TO ATTACH AND HARM TO THE NETWORK .....	21
VI. SEPARATION OF SECURITY FROM NON-SECURITY FUNCTIONS IN COMMERCIALY-AVAILABLE CPE .....	24
VII. THE INTERFACE STANDARD TO DISTINGUISH BETWEEN SECURITY AND CPE TO BE MADE AVAILABLE AT RETAIL SHOULD BE DEVELOPED ON A VOLUNTARY BASIS .....	30
VIII. PORTABILITY AND INTEROPERABILITY .....	35
IX. PROHIBITION ON SUBSIDIES .....	38
X. DEVELOPMENTAL WAIVERS .....	40
XI. SUNSET OF REGULATIONS .....	42
XII. PROPRIETARY TECHNOLOGIES .....	44
CONCLUSION .....	46

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

In the Matter of	)	
	)	
Implementation of Section 304 of the Telecommunications Act of 1996	)	CS Docket No. 97-80
	)	
Commercial Availability of Navigation Devices	)	

**COMMENTS OF  
THE NATIONAL CABLE TELEVISION ASSOCIATION**

The National Cable Television Association (“NCTA”) hereby submits its comments in response to the Notice of Proposed Rulemaking in the above-captioned proceeding.<sup>1</sup> NCTA is the principal trade association of the cable television industry in the United States, representing cable television operators serving over 80 percent of the Nation’s cable television households, over 100 cable programming networks, and manufacturers of cable set-top boxes, cable modems and other cable equipment.

**INTRODUCTION AND SUMMARY**

The Notice implements Section 629 of the Communications Act of 1934, as amended.<sup>2</sup> Section 629 directs the Commission to adopt regulations to assure the commercial availability of

---

<sup>1</sup> Implementation of §304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, Notice of Proposed Rulemaking, CS Docket No. 97-80, FCC 97-53, released February 20, 1997 (“Notice”).

<sup>2</sup> Section 629 was added by section 304 of the Telecommunications Act of 1996, Pub. L. 104-104, 110 Stat. 56 (1996) (the “1996 Act”).

set-top boxes and other “navigation devices” or customer premises equipment (collectively “CPE”) from manufacturers, retailers and other vendors who are not affiliated with a multichannel video programming distributor (“MVPD”). Significantly, Congress also instructed the Commission not to jeopardize the security of services offered over cable systems or impede the rights of a provider to prevent theft of service. As detailed in these Comments, NCTA supports the goal of Congress to make set-top boxes (and other CPE) available at retail so long as the legitimate security concerns of MVPDs are accommodated.

The Notice proceeds on the assumption that the “overarching goal of this proceeding will be to assure competition in the availability of set-top boxes and other CPE.”<sup>3</sup> Nevertheless, it cites the House Report’s cautionary language that the statute “specifically recognizes that cable and other telecommunications system operators have a valid interest, which the Commission should continue to protect, in system or signal security and in preventing theft of service ... and does not authorize the Commission to adopt regulations which would jeopardize the security of a telecommunications system.”<sup>4</sup> The Notice also acknowledges the congressional preference that any standards that may be required to implement Section 629 be market-driven and that technical innovation not be impeded.<sup>5</sup>

In implementing Section 629 the Notice seeks comment on numerous issues, including: (1) the entities covered by Section 629; (2) the scope of equipment covered; (3) how to define

---

<sup>3</sup> Notice at ¶3.

<sup>4</sup> Id. at ¶4, citing H.R. Rep. No. 104-204, 104th Cong., 1st Sess. 112 (1995)(“House Report”).

<sup>5</sup> Id.

commercial availability; (4) portability and interoperability of CPE; (5) the definition of affiliate; (6) security and theft of service concerns; (7) “subsidy” issues; (8) developmental waivers; (9) sunset of the regulations; and (10) the FCC’s authority to impact proprietary technology. The Notice advances a number of proposals and options regarding these issues.

These proposals and options must be considered in light of a number of basic principles.

First and foremost, the Commission must recognize concerns about security in any rules mandating retail availability. Moreover, the Commission should:

- acknowledge that Carterfone’s “right to attach” principle also included concerns about security and other potential harms to the network which have even greater weight in the cable context than in the telephone context;
- apply rules adopted in this proceeding only to digital and not analog (or “hybrid” analog-digital) CPE because
  - ⇒ the embedded base of analog equipment is so great and diverse as to make application of a new rule impractical and unreasonable;
  - ⇒ making analog equipment commercially available creates too great a risk, given the history of theft of analog service;
  - ⇒ the FCC’s equipment compatibility rulemaking will accommodate the separation of security from non-security functions for analog equipment on a going-forward basis; and
  - ⇒ analog CPE will soon be replaced by digital CPE as all media roll out digital services;
- facilitate the separation of security and non-security functions in CPE such that CPE with non-security functions is made “commercially available,” but permit MVPDs to provide integrated CPE that includes both security and non-security functions; and
- rely on voluntary industry efforts to develop standards for the interface between CPE with the security functions and CPE with the non-security functions; but require that any separations standard for commercially available CPE include a common hardware platform so that consumers will be able to receive all applications an MVPD makes available to its customers.

In addition, these Comments call upon the Commission to:

- make all MVPDs, including OVS providers, subject to commercial availability rules;
- exclude in-home wiring, network interface units, so-called “residential gateways” and other network devices from the list of “equipment” covered by the rules because they are beyond the scope of the statute;

- in adopting definitions of “affiliate” and “commercial availability,” take no steps to inhibit the contractual relationships MVPDs must have with manufacturers to develop new and innovative CPE.
- recognize that the statute does not require that CPE be either portable or interoperable, but, in any event, defer to voluntary industry efforts to develop portability and interoperability standards;
- conclude that the current cable rate regulation rules protect against CPE subsidization and that MVPDs facing effective competition need not be subject to anti-subsidy rules;
- adopt rules providing for liberal grants of developmental waivers so innovation is not stifled;
- read the sunset provisions of the statute as liberally as possible, but do not conclude that the rules “sunset” before they are adopted or are made applicable to particular MVPDs (e.g., DBS) as suggested in the Notice; and
- acknowledge that the FCC’s ability to impact proprietary technologies is limited at best and decline to adopt any form of compulsory licensing of proprietary technologies.

**I. ANY “RIGHT TO ATTACH” PRINCIPLE MUST BE TEMPERED BY CONCERNS ABOUT SECURITY AND OTHER POTENTIAL HARMS TO THE NETWORK AS THE STATUTE AND THE CARTERPHONE CASE RECOGNIZE**

---

At the outset it is important to address a “basic principle” upon which all of the Commission’s proposals appear to rest: that “equipment that is not part of a MVPD’s network distribution plant may be acquired by subscribers and attached to the network, limited only by the requirement that any such equipment attached to a MVPD’s network not cause it any harm.”<sup>6</sup>

The Commission adopts this “right to attach” principle, asserting that it “parallels” the requirements adopted in the telephone context in the Carterfone<sup>7</sup> case and other cases: “devices that do not adversely affect the network and are privately beneficial without being publicly

---

<sup>6</sup> Id. at ¶11.

<sup>7</sup> Carterfone, 13 FCC 2d 420, recon. denied, 14 FCC 2d 571 (1968).

detrimental, may be attached to the network.”<sup>8</sup> In adopting rules in this proceeding, the Commission must recognize that neither the statute nor the Carterfone case can be construed to give consumers an absolute right to attach CPE to cable systems. That Congress did not intend to give consumers an absolute right to attach CPE to the cable network is evident from the statute itself where Section 629(a)’s direction to assure the commercial availability of CPE is tempered by Section 629(b)’s requirement that MVPDs’ security concerns must be accommodated in any FCC regulations implementing the statute. The legislative history is to the same effect.<sup>9</sup>

Similarly, the “right to attach” derived from Carterfone and its progeny rests on the condition that the network suffer no harm. This limiting principle is even more important in the cable context than it is in the telephone context. The reason that more severe adverse consequences can result from attachments to the cable network than from attachments to the telephone network is that there are significant differences between the cable and the telephone networks and services. These differences make potential harm to the cable network more of a possibility than was the likelihood of harm to the telephone network when Carterfone was decided.

The Notice recognizes three differences: (1) Unlike the case with attachments to a cable network, there are few, if any, security issues relating to the intellectual property distributed when a customer attaches CPE to the telephone network; (2) there is little potential for interference with other network users in the telephone context as a result of the attachment of

---

<sup>8</sup> Notice at ¶56.

<sup>9</sup> See House Report at 112.

faulty CPE -- the harm will be to only one line, whereas a defective device attached to a cable network, particularly when used to transmit upstream, could harm the entire network; and (3) the telephone network was a national monopoly with a well-developed set of technical standards at the time when customer ownership of CPE became an option.<sup>10</sup> In addition, unlike the case with the telephone network, the cable operator is responsible for ensuring that its network causes no harm from signal leakage and other possible consequences of faulty CPE, and relevant governmental agencies (e.g., the FAA) rely on cable operators to monitor these matters.

Moreover, telephone architecture and cable architecture are radically different. The telephone instrument itself does not grant consumers access to the service being sold by the telephone company. The telephone set is merely the instrument that consumers need to use the network. Access to telephone services is provided by a line that connects consumers to the telephone company's central office. In order to prevent consumers from using a service, such as dial tone, the telephone industry physically disconnects the consumer's wire at the central office. Owning a telephone set does not allow consumers to take advantage of a service to which they do not subscribe.

By contrast, cable companies must protect their services at the consumer's home, since the signals of all programming services are present at all times throughout a cable television system's distribution system. Cable operators scramble, or encrypt, program signals to prevent their unauthorized reception. In systems which require CPE, access to the scrambled program signals -- which are present in every home -- is given only to consumers who have purchased it

---

<sup>10</sup> Notice at ¶11.

by providing a set-top box containing the appropriate descrambling circuitry. Indeed, telephone companies entering the video-delivery business have recognized that the most efficient way to deliver video to consumers is to replicate cable television architecture and are deploying that approach in their new distribution networks. Scrambling of television signals is critical to protecting the intellectual property being distributed by all video networks.

For these reasons, the Carterfone “do no harm” condition is even more important in the cable context than it was in the telephone context. At a minimum, this means not only that the statutory security concerns must be accommodated, but also that signal leakage and other harms which may arise from non-MVPD attachments made available at retail must be recognized in the equation.

That said, a critical issue in this proceeding is how to separate the security from the non-security functions of CPE so that the security concerns of cable and other MVPDs can be accommodated while consumers can obtain CPE containing non-security functions at retail. In the sections which follow, we first discuss the different issues surrounding analog and digital equipment, including the relevance of the Commission’s equipment compatibility rulemaking to this proceeding. We conclude that this proceeding should be limited to adopting rules for digital, not analog, equipment because, among other things, the retail availability of CPE analog has been addressed in the equipment compatibility proceeding. Specifically, all new cable-ready equipment with the decoder interface connector must permit non-security functions to be

provided through competitive retail products.<sup>11</sup> We then address the other issues raised in the Notice as they apply to digital equipment.

## **II. THIS PROCEEDING SHOULD NOT APPLY ANY SEPARATION REQUIREMENT TO CABLE'S ANALOG SET-TOP BOX**

As the Commission recognizes, in this proceeding it must reconcile the “commercial availability” mandate of Section 629(a) with its duty under Section 629(b) not to jeopardize signal security or impede providers’ rights to prevent signal theft. The Notice concludes, and NCTA agrees, that the way to achieve the dual goals of the statute is to separate the security from the non-security functions of CPE used to access the services of MVPDs and to make only the latter “commercially available.” In the sections which follow, we discuss the numerous questions raised by the statute and the Notice but, at the outset, we address one fundamental issue: Any rules adopted in this proceeding should apply only to digital CPE, not to cable’s analog set top boxes.

There are several compelling reasons why any rules separating security from non-security functions of CPE (and any other rules arising out of this proceeding) should apply only to digital, and not analog, cable CPE. First, the Commission must take into account the fact that there is a huge embedded base of analog set-top CPE (estimated at almost 100 million boxes) in the market or in inventories ready to go to market. As a practical matter, putting aside the enormous financial consequences, it would be next to impossible to replace this equipment to comply with any new rules adopted in this proceeding.

---

<sup>11</sup> Implementation of §17 of the Cable Television Consumer Protection and Competition Act of 1992: Compatibility Between Cable Systems and Consumers Electronics Equipment, ET Docket No. 93-7, First Report and Order, 9 FCC Rcd 1981, 1988-89 (¶42) (1994).

Second, given the ingenuity of cable pirates and the experience of the cable industry to date, it is unrealistic to think that the Commission can fulfill its mandate -- to establish the regulatory framework for the retail availability of customer premises equipment in a manner that does not harm the integrity and security of the multichannel video signal -- by making analog CPE widely available. The cable industry has battled a pervasive and well-organized piracy problem that is estimated to cost \$5.1 billion in lost revenue each year.<sup>12</sup> Indeed, history has shown that with every advancement in cable set top technology and the widespread deployment of the equipment, cable pirates have found new ways to defeat the security.

The huge embedded base of analog equipment is vulnerable to attack through tampering or the attachment of illegal devices because many of the scrambling or encryption techniques used are relatively unsophisticated. Even addressable analog boxes have been compromised by thieves well-versed in the electronic circuitry, forcing operators to institute electronic countermeasures and other methods to fight piracy.<sup>13</sup> In the worst case, a wide scale security breach results in the costly replacement of the scrambling technology at the headend and a change-out of each descrambling unit in the customer's home. In the face of these attacks, as

---

<sup>12</sup> NCTA Office of Cable Signal Theft 1995 Survey. The survey was distributed in July 1995 to a random stratified sample of 400 cable systems. A total of 90 systems (23%) reported statistical data based on 1995 data. The systems responding represent 12.7 million homes passed and 7.6 million subscribers. Projected into the cable universe as a whole in each system-size category produces estimates of over 10.5 million illegal non-premium and 5.9 million illegal premium users. Using estimated monthly average rates, the piracy loss translates into over \$5.1 billion in unrealized revenue annually (not including unauthorized reception of pay-per-view programming), or almost 20% of gross industry revenue in 1995.

<sup>13</sup> See e.g. "Five Arrested in Raids on Alleged Cable TV Theft Ring," Los Angeles Times, February 14, 1997; "Cablevision Rounds-Up Pirates," Broadcasting and Cable, February 17, 1997; "A Public-Private Prosecution Prevails," New Jersey Law Journal, February 17, 1997; "Gunmen Rob 300 Boxes in New York," Multichannel News, May 6, 1996.

well as the costs to subscribers and copyright owners, operator control over every link in the chain of security -- from the headend to the CPE -- is a critical weapon to ameliorate rampant theft-of-service in the system at least until the digital era arrives.

Given the history of theft with analog service, it would be far too risky -- and would be contrary to the statute -- to make analog equipment containing the widely defeated security element commercially available. As the Commission acknowledges, "if analog decoders were readily available for purchase, existing security methods would become completely ineffective."<sup>14</sup> But even if the security element were separated from the non-security functions of analog set-top CPE, there is a risk that some proprietary functions in such CPE (e.g., program guides) could be compromised, as the history of theft of analog services demonstrates. And there is no assurance that security protections would not be adversely affected as a consequence of the massive in-flow of CPE into the market. In fact, in one recently reported incident, the scheme was based on modifying stolen "plain Jane" (non-security) CPE, which was not otherwise available to the perpetrators in bulk. Were the FCC to require retail availability of such CPE, it would seriously aid and abet this type of thievery.<sup>15</sup>

---

<sup>14</sup> Notice at ¶29. See also First Report and Order in ET Docket No. 93-7, supra, 9 FCC Rcd at 1986 (¶29) (when the Commission first expressed its support for separation of cable access control functions from other non-security functions it recognized that "[w]hile we are aware that there have been advancements in encryption technology, we also understand that it is most important to cable operators that they be able to control the means used to access their programming. Moreover, signal thieves have been notoriously successful at defeating security systems for video programming services.")

<sup>15</sup> See "Crossed Wires: Cable Pirates Sought Plunder but Blundered Into a Major FBI Sting," Wall St. J., May 12, 1997 at A1, c.6.

In any event, on a going forward basis, the “separation” issue for analog CPE will be resolved by the outcome of the Commission’s equipment compatibility proceeding. In that proceeding, NCTA demonstrated, even before passage of the 1996 Act, its commitment to competitively-supplied equipment through its ongoing work with the Cable-Consumer Electronic Advisory Group (“C3AG”).

The C3AG, which was established in 1993 in response to section 624A of the 1992 Cable Act,<sup>16</sup> has advised the Commission on both short-term and long-term solutions to instances of incompatibility between cable systems, television receivers and VCRs. In fulfilling its mandate, the C3AG developed a decoder interface connector to be incorporated into all future cable-ready equipment that will accomplish the dual goals of enabling consumers to utilize the features of their consumer electronic equipment while accommodating scrambling technologies designed to protect against unauthorized reception of cable service.<sup>17</sup> As the Notice points out, this interface has the capability to separate the signal access control function from other features and functions -- and thereby facilitate the connection of multiple competitively-supplied devices.

As a narrow technical standard, the decoder interface will not only facilitate seamless and transparent consumer access to scrambled services but will stimulate competition in all analog equipment on a going forward basis. As the Commission stated in its First Report and Order in ET Docket 93-7, “this capability will allow non-security functions to be provided through new

---

<sup>16</sup> 47 U.S.C. §544a.

<sup>17</sup> See Summary of Final Agreement on Cable Ready Television Receivers by the Cable-Consumer Electronics Compatibility Advisory Group, Notice of Ex Parte Presentation, ET Docket No. 93-7, March 11, 1997.

products offered by retail vendors or to be incorporated into TV receivers and VCRs, thereby promoting competition in the market for equipment used to receive cable service.”<sup>18</sup> The Commission reiterated in its Reconsideration Order in that proceeding “that it is our intention that the Decoder Interface serve as a means for promoting competition in the market for equipment used to receive cable service.”<sup>19</sup>

Once new cable ready equipment is available, consumers will have the choice of (1) purchasing a feature-rich device from a retailer and using it in conjunction with an MVPD-supplied descrambler; (2) leasing or purchasing a descrambler from the service provider or (3) as is done today, purchasing a basic “plain Jane” converter box to tune unscrambled services. Therefore, the Commission need not deal in this proceeding with “commercial availability” rules for analog cable set tops since Congress’ concerns in that area will be resolved in the equipment compatibility proceeding.

Finally, application of any new cable CPE rules to the analog world would be unwise, because, as is often the case, technological developments are likely to overtake any regulatory actions in this area. In fulfilling its mandate to “encourage the provision of new technologies and services to the public” under Section 7 of the Communications Act,<sup>20</sup> the Commission must consider the effect of adopting burdensome rules applicable to a technology that may soon be

---

<sup>18</sup> First Report and Order in ET Docket No. 93-7, *supra*, 9 FCC Rcd at 1988-89.

<sup>19</sup> Implementation of Section 17 of the Cable Television Consumer Protection and Competition Act of 1992: Compatibility Between Cable Systems and Consumer Electronics Equipment,” ET Docket No. 93-7, Memorandum Opinion and Order, 11 FCC Rcd 4121 (1996).

<sup>20</sup> 47 U.S.C. §157.

obsolete which could adversely affect the deployment of new and advanced technologies.

Specifically, the digital world is at hand -- analog CPE will soon be replaced by digital CPE as cable and other MVPDs roll out their digital services over the next several years. In this regard, the C3AG has designed the decoder interface to accommodate new technological developments and to provide a migration path to digital cable service.

This proceeding is likely to be a lengthy one as the Commission, the affected industries and other affected parties, as well as private standards-setting bodies, address the complex issues raised by Section 629. By the time those issues are resolved, the analog world may be a relic. To spend precious government and private time and resources developing rules and standards for that world makes little sense, especially in the cable context where any congressional concerns should be accommodated by new equipment compatibility rules.

The same reasoning which compels the conclusion that analog CPE should not be subject to any commercial availability requirements dictates that so-called "hybrid" CPE (*i.e.*, set-tops with both analog and digital capabilities) be similarly exempt during the relatively brief transition period when they will be provided by MVPDs. To the extent that such a hybrid set-top has an analog capability, it is subject to the same concerns about security and signal theft as are pure analog boxes. Moreover, to the extent some degree of portability is required by the Commission (although it is not mandated by Section 629), it could not be accomplished for the analog portion of any hybrid CPE sold at retail, given the differences in analog delivery methods among cable systems throughout the country. Finally, to the extent hybrid CPE is not exempted from Section 629 at the outset, it seems a prime candidate for waiver of any rules under the authority given the Commission by Congress to grant developmental waivers "to assist the

development or introduction of a new or improved multichannel video programming ... service.”<sup>21</sup>

For these reasons, both analog and hybrid (analog-digital) CPE should not be subject to the commercial availability rules.

### **III. ENTITIES AND EQUIPMENT COVERED BY SECTION 629**

The Notice seeks comment on the entities and equipment covered by Section 629. The Commission concludes that the statute’s terms are broad in their coverage and proposes to include in its rules the statutory definitions of entities and equipment covered.<sup>22</sup> It also proposes to use the definition of affiliate contained in Section 3 of the Communications Act to define affiliation for purposes of Section 629’s affiliation requirement.<sup>23</sup> The Commission tentatively concludes that both active and passive ownership interests should be attributable for purposes of determining affiliation status.<sup>24</sup> We support the definitions of entities and equipment covered as discussed in the Notice, with minor exceptions.

---

<sup>21</sup> 47 U.S.C. §549(c).

<sup>22</sup> Notice at ¶55.

<sup>23</sup> §629(a) requires that navigation devices be commercially available from manufacturers, retailers, and other vendors “not affiliated with any multichannel video programming distributor.” 47 U.S.C. §549(a). §3 states that, for purposes of Title VI of the Communications Act, “the term ‘affiliate,’ when used in relation to any person, means another person who owns or controls, is owned by or controlled by, or is under common ownership or control with, such person...” and goes on to state that affiliation can be established through an equity interest “or the equivalent thereof” of ten percent or more. 47 U.S.C. §153(1).

<sup>24</sup> Notice at ¶27.

**A. All MVPDs, Including OVS Providers, Should Be Subject To Section 629**

As to the entities covered, the Notice asks whether the Commission has the discretion “to differentiate between the various systems for providing multichannel video programming based on the technologies used, the competitiveness of the specific markets involved, and the maturity of the technology, as well as its capability to function subject to a common set of rules.”<sup>25</sup>

While the Commission may have some discretion to adopt different rules for plainly different technology or equipment (e.g., modems vs. set top boxes), it does not have absolute discretion to exempt certain MVPDs from the statutory mandate. As discussed below, for example, the current state of the competitive marketplace may not be used as an excuse to exempt DBS providers from the Act’s requirements while continuing to apply them to cable. Similarly, when and if broadcasters begin transmitting multiple streams of programming using their newly-awarded digital television licenses, they too must be included among the entities covered.

The Notice asks for comment on the conclusion that Open Video System (“OVS”) operators are not subject to the commercial availability requirements of Section 629 because Section 629 is one of the Title VI provisions not applicable to OVS.<sup>26</sup> This is a strained reading of the two relevant statutory provisions. Contrary to the Commission’s tentative conclusion, the requirements of Section 629 apply to open video system operators to the same extent they apply to other multichannel video programming distributors. Creating an exemption for OVS operators

---

<sup>25</sup> Id. at ¶14.

<sup>26</sup> Id. at ¶15.

would enable them to prevent their customers from obtaining navigation devices from third-party vendors for use with OVS systems, a result fundamentally at odds with the goals and plain language of Section 269.

Section 629 requires the Commission to make sure that customer premises equipment used to access “multichannel video programming and other services offered over multichannel video programming systems”<sup>27</sup> is commercially available. In choosing such broad language, Congress clearly intended to ensure that subscribers of any multichannel video programming distributor would have the widest choice of equipment vendors, consistent with the limitations contained in subsection (b).<sup>28</sup> Congress did not limit the scope of Section 629 to only certain distributors, and Section 629 contains no exemption for OVS operators.

Nor does Section 653(c)(1)(C) establish an exemption from the requirements of Section 629 for OVS operators. The intent of Section 653(c)(1) is to delineate which cable-specific requirements of Title VI apply to OVS operators and which do not. The words of the statute make this clear: Section 653(c)(1) exempts certified OVS operators from requirements that “appl[y] to a cable operator.”<sup>29</sup> Congress streamlined the regulation of OVS operators by, among other things, exempting OVS operators from cable operators’ rate regulation and local franchising obligations. Congress did not, however, intend to exempt OVS operators from

---

<sup>27</sup> 47 U.S.C. §549(a).

<sup>28</sup> See 47 U.S.C. §522(13) (defining “multichannel video programming distributor” as “ person ... who makes available for ... purchase multiple channels of video programming”); see also Notice at ¶15 (indicating that §629 “appears to be jurisdictionally broad in terms of the entities to which it applies.”).

<sup>29</sup> 47 U.S.C. §573(c)(1).

requirements, such as those in Section 629, that apply to all MVPDs. To the contrary, by exempting OVS operators only from provisions that apply to a “cable operator” rather than those applicable to any “multichannel video programming distributor,” Congress limited the scope of regulatory relief available to OVS operators under Section 653(c)(1).

For the Commission to create an exemption to Section 629 solely for OVS operators would confer the unfair competitive advantage that the provision is intended to preclude and would potentially deprive OVS subscribers of a choice of equipment vendors. Nothing in the language or legislative history accompanying the creation of open video systems or the adoption of Section 629 suggests such an anomalous result. If Congress had intended to remove open video systems from the class of MVPDs subject to Section 629, it would have said so plainly in the statute.<sup>30</sup> The fact is, Congress did not choose to do so. Subjecting OVS operators to Section 629 is consistent with the broad goals of that provision and with Congress’s decision to apply the provisions of that section to all MVPDs. The Commission should not select a favored class from this category of providers.<sup>31</sup> To do so here would be to undermine Congress’ intent to establish a level playing field for competition in the delivery of video programming.

The Commission also seeks comment on “whether a different conclusion is warranted with respect to programming distributors making use of an OVS system.”<sup>32</sup> Again, the plain

---

<sup>30</sup> Cf. EEOC v. Arabian American Oil Co., 499 U.S. 244 (1991) (“expressio unius es exclusio alterius”).

<sup>31</sup> The Commission should not create exceptions in addition to those specifically created by Congress. United States v. Smith, 499 U.S. 160, 166-67 (1991).

<sup>32</sup> Notice at ¶15.

language of the 1996 Act does not exempt those distributing programming over an OVS facility from any of the requirements of Title VI. Section 653(c)(1) exempts solely “operator[s] of open video systems” certified by the Commission.<sup>33</sup> OVS programmers, including any programmer affiliated with an OVS operator, were not exempted by Congress from the requirements of Section 629.<sup>34</sup> A capacity lessee, no less than the OVS operator itself, is a multichannel video programming distributor and must be made subject to Section 629 to the same extent as other such distributors. There is no statutory basis for an exception. Indeed, a different conclusion would create a favored class of program providers who could deprive their customers of the competitive equipment options established pursuant to Section 629.

**B. In-Home Wiring and Network Interface Units Are Not Subject To Section 629**

As for the equipment covered by Section 629, the list at paragraph 18 of the Notice includes at least two categories of items which go beyond the scope of the statutory command: In-home wiring used with an MVPD system and what the Notice calls “‘network interface modules,’ ‘residential gateways,’ or other electronic devices performing some of the same security or access control functions as devices listed above but that are physically located at the point of entry (either outside or inside) the consumer’s residence.” With respect to in-home wiring, Section 629 -- captioned “Competitive Availability of Navigation Devices” -- speaks in terms of “converter boxes, interactive communications equipment, and other equipment used by

---

<sup>33</sup> 47 U.S.C. §573(c)(1) (emphasis added).

<sup>34</sup> Cf. In the Matter of Implementation of Section 302 of the Telecommunications Act of 1996, Third Report and Order and Second Order on Reconsideration, CS Docket No. 96-46 (rel. Aug. 8, 1996) at ¶204 (concluding that the non-discrimination requirements of §653(b)(1)(E) “apply to the open video system operator’s affiliate”).

consumers to access multichannel video programming and other [MVPD] services ....”<sup>35</sup>

Nothing in the statute or its legislative history suggests that the Commission’s mandate extends to home wiring. In any event, the status of in-home wiring is being considered in a separate rulemaking proceeding.<sup>36</sup>

The Notice’s inclusion of network interface units and the like, in CPE subject to Section 629 is incorrect; these are network devices, not within the scope of Section 629’s mandate. Since the Commission’s guiding principle in this proceeding is to permit consumers to obtain at retail and attach to the network CPE “that is not part of the MVPD’s network distribution plant,”<sup>37</sup> the Commission should not extend the scope of the equipment covered to include network interface units and other equipment listed in the Notice which are part of the MVPD’s network. In particular, for obvious security reasons, “residential gateways” should not be construed to include the wires running from the cable taps to the home; there should be no unbundling of the local drop. Finally, while it may seem obvious, consistent with Section 629(b), the equipment covered by the retail availability rules must not include any security cards, “smart cards,” or similar security equipment.

#### **IV. DEFINITIONS OF “AFFILIATE” AND “COMMERCIAL AVAILABILITY”**

The definitions of “affiliate” and “commercial availability” are important to the statute. As the Notice points out with respect to the latter, “[t]he basic issue here is the degree of

---

<sup>35</sup> 47 U.S.C. §549(a).

<sup>36</sup> See Notice of Proposed Rulemaking in CS Docket No. 95-184, 11 FCC Rcd 2747(1995).

<sup>37</sup> Notice at ¶11.

separation that Congress intended to mandate between the video service provider and the equipment manufacturers and retailers.” It asks: “[T]o what extent may the retail outlet involved function as a practical matter as an agent for the service provider and to what extent may the service provider retain control over or the ability to influence technology and manufacture of the products involved?”<sup>38</sup>

We support use of the Section 3 definition of affiliation for purposes of Section 629. That definition should not be construed, however, to encompass contractual relationships between a manufacturer and a cable operator or other MVPD. As long as there are retailers who have access to the CPE and make it commercially available to the public, the MVPD should be permitted to have any manner of relationship with manufacturers of the CPE. For example, where security is involved, it is imperative that the MVPD retain control over the ability to influence the technology used in the CPE.

For this reason, the Commission should reject the suggestion in the Notice that, “[i]f the MVPD has developed the equipment involved, has patent or other proprietary rights in the equipment or its critical components, or selects a technology that has only a single source supplier through a contractual process,” an affiliation relationship might arise.<sup>39</sup> As the Commission itself observes, after citing the Videocipher II and DBS antenna examples, “the legislative history of Section 629 does not appear to reflect any concern with this mode of operation.”<sup>40</sup>

---

<sup>38</sup> Id. at ¶20.

<sup>39</sup> Id. at ¶27.

<sup>40</sup> Id. at ¶22.

As to how to determine “commercial availability,” so long as the CPE is available to the public from at least one unaffiliated vendor, the statutory command should be deemed met. There should be no minimum number of vendors required to meet the statutory mandate. The statute’s use of the plural “manufacturers, retailers and other vendors,” is not dispositive since the structure of the sentence necessitates that plural reference. Otherwise the statute would read that the CPE could only be available from a single manufacturer, retailer or vendor.<sup>41</sup> As for “agency” relationships, the Notice cites the availability of Primestar’s CPE through electronic retail outlets which may be agents of Primestar but are unaffiliated entities. Such a distribution approach should constitute the “commercial availability” of that equipment. Those outlets should not be deemed affiliates of the MVPD for purposes of Section 629.<sup>42</sup>

**V. THE RIGHT TO ATTACH AND HARM TO THE NETWORK**

The Commission discusses other issues in the section of the Notice in which it makes its proposals regarding “commercial availability.” First, it discusses the “right to attach” derived from the Carterfone case, which it deems applicable to this proceeding. As discussed earlier, because of the differences between the cable and telephone networks, the Carterfone concern about harm to the network caused by attachments is even more pronounced in the MVPD context than it is in the telephone context. In particular, the Commission correctly observes that, in implementing Section 629, it must “be concerned with assuring that CPE does not cause harm to

---

<sup>41</sup> It is enough that CPE is made commercially available from one or more vendors; there should be no requirement that it be made available through “any vendor wishing to distribute the [CPE].” See Notice at ¶23 (emphasis added).

<sup>42</sup> Id. at ¶21.

the network to which it is physically attached and that the technical integrity of the network is maintained.”<sup>43</sup> In this regard, the Notice discusses signal ingress, signal leakage and signal quality concerns.

While the Notice suggests that there may come a time when the Commission may need to develop rules that preclude subscriber-owned CPE from causing harm to the system, it concludes that “[u]ntil such time as this issue can be addressed more completely, we believe network service providers must have the ability to establish and enforce their own standards on what can be attached to the system.”<sup>44</sup> The Commission recognizes that “any solution reached in this area will require extensive industry technical input and [it] tentatively conclude[s] that voluntary industry activities by the affected industries would best promote the goals of the 1996 Act.”<sup>45</sup>

We concur. As discussed below, where possible, voluntary industry standards will better serve the public interest than government-mandated standards which can stifle innovation and competition and have other detrimental effects. Concurrent with the rulemaking, the cable industry, through the Society of Cable Telecommunications Engineers (“SCTE”) is in the process of considering standards that will facilitate commercially available CPE, not merely for the attachment of CPE to cable networks, but also for its portability and interoperability. This process should be permitted to proceed without government intervention.

---

43 Id. at ¶57.

44 Id. at ¶59.

45 Id.

As for signal leakage concerns, the Notice asserts that the Commission's Part 15 certification Rules should adequately address those issues.<sup>46</sup> The existing Part 15 Rules may well address the signal leakage concerns regarding CPE sold at retail, since they limit the signals radiated from retail CPE. However, there is currently a proposal before the Commission to repeal many of the Part 15 Rules albeit not those directly related to signal leakage from subscriber-owned CPE.<sup>47</sup> The Commission must take care in that proceeding not to eliminate any rules upon which it relies to protect against signal leakage and other harms from subscriber-supplied CPE.

In that same proceeding, the Commission proposes to require certification for cable system terminal devices "to ensure against marketing of such devices for theft of cable service."<sup>48</sup> By the same token, in considering potential changes to its Part 15 Rules, we urge the Commission to strengthen existing certification requirements where appropriate to guard against the ever-increasing threat of cable piracy.

Finally, the Notice points out that currently only cable operators are subject to rules addressing the quality of the signals they transmit to their customers. It suggests that for other MVPDs, the marketplace should suffice to address signal quality issues.<sup>49</sup> We note that Section

---

<sup>46</sup> Id. at ¶61.

<sup>47</sup> See Amendment of Parts 2, 25, 18 and Other Parts of the Commission's Rules to Simplify and Streamline the Equipment Authorization Process for Radio Frequency Equipment, Notice of Proposed Rulemaking, ET Docket No. 97-94, released March 27, 1997.

<sup>48</sup> Id. at ¶18a.

<sup>49</sup> Notice at ¶62.