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

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

CS Docket No. 97-80

PEITITION FOR EXPEDITED RECONSIDERATION

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PETITION FOR EXPEDITED RECONSIDERATION

The National Cable Television Association (“NCTA”) hereby submits a Petition For Expedited Reconsideration relating to two discrete issues in the Order released on June 24 1998, in the above-captioned proceeding.¹ Specifically, we urge the Commission to reconsider its decisions (1) to adopt rules in this proceeding applicable to analog set-top boxes and (2) to prohibit cable operators from providing integrated set-top boxes -- those that combine both embedded security and non-security functions -- after January 1, 2005. As detailed below, both the Commission’s application of its rules to analog boxes and its prohibition on operator provision of integrated boxes fly in the face of the Commission’s statutory mandate and, in any event, will not serve the public interest.

¹ Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, CS Docket No. 97-80, FCC 98-116, Report and Order, released June 24, 1998, 63 Fed. Reg. 38095 (July 15, 1998) (“Report and Order” or “Order”). Section 304 added Section 629 to the Communications Act of 1934, as amended. We respectfully request that the Commission expedite its consideration of this Petition given the long lead times necessary to implement (or take into account) the rules for which reconsideration is sought. Expedited Commission action will also permit prompt judicial review if that is necessary.

INTRODUCTION AND SUMMARY

On June 11, 1998, the FCC adopted rules in its "Navigation Devices" proceeding implementing Section 629 of the Communications Act. That provision requires the Commission to adopt regulations to assure the commercial availability of set-top boxes and other "navigation devices" from manufacturers, retailers and other vendors not affiliated with a multichannel video programming distributor. At the same time, the statute directs the FCC not to jeopardize the security of services offered over cable systems or impede the rights of a provider to prevent theft of service.

The Commission has essentially taken a reasonable and balanced approach to implementing Section 629. As a general matter, its actions in this proceeding will allow a retail market to develop for a variety of new devices, while preserving cable operators' ability to protect the security and integrity of their services and products.

The cable industry supported the goals embodied in Section 629 and is working with the consumer electronics industry to translate those goals into reality. By relying on the OpenCable™ process now well underway, the FCC has ensured that consumers will have many exciting new digital services and real choices on where to obtain the equipment to receive those services. As we advised the Commission, to fulfill these goals, the cable industry is fully committed to having separate digital security modules available by September 2000. Since the FCC has set a more aggressive July 2000 date, we will work in good faith to meet this timeframe for digital security modules.

However, we must seek reconsideration of the Commission's decisions (1) to require separation of security for analog set-top boxes, and (2) to prevent cable operators from providing set-top boxes that incorporate embedded security after January 2005.

The Commission's decision to apply its rules to analog set-top boxes must be reconsidered because, contrary to the suggestion in the Report and Order, the statute does not require the FCC to apply its "separate security" rules to "all types of equipment"; analog scrambling systems raise more difficult security problems than do digital systems and the statute requires that the Commission "not prescribe regulations which would jeopardize" signal security; there are numerous practical and technical problems with separating analog security; the Report and Order itself recognizes that Section 629 does not apply to "all types of equipment"; and the record in this proceeding supports exclusion of analog boxes. For this reason, we propose a limited analog-related exclusion patterned in large part on a proposal made by Circuit City Stores earlier in this proceeding.

The Commission must also reconsider its decision to prohibit cable operator provision of integrated boxes as of January, 2005 because (1) Section 629 -- and other provisions of the statute -- do not permit the FCC to adopt such a ban and (2) it is in the public interest to permit operators to provide integrated boxes.

I. THE COMMISSION SHOULD NOT APPLY ANY SEPARATION REQUIREMENT TO CABLE'S ANALOG SET-TOP BOX

A. The Commission's Decision

In its Report and Order, the FCC determined that, in the future, the security functions of set-top boxes should be separated from the non-security functions. Separation allows unaffiliated manufacturers, retailers and other vendors to sell or lease navigational devices (e.g., decoder/tuner boxes, DVD players containing a decoder/tuner) without a security component. Cable subscribers will then lease the separate security component from their cable operator. The Report and Order requires that separate security modules -- both digital and analog -- be available from cable operators by July, 2000.

In establishing this deadline, the FCC relied "heavily" on the timetable that NCTA supplied for completion of the ongoing CableLabs OpenCable™ digital cable initiative.² The FCC's deadline, as it applies to digital equipment, is more aggressive than NCTA's proposed deadline of September, 2000. As the Commission was informed, however, the OpenCable™ process and timetable applied to only digital equipment.³ For analog equipment -- which was not covered by the OpenCable™ timetable and which presents more serious practical and technical security problems -- requiring separation at all, and, in any event, by July, 2000, is arbitrary, unrealistic and inconsistent with the statutory command that the FCC rules not jeopardize signal security.

Because analog delivery of signals presents a substantially greater security risk than digital delivery, NCTA and others urged the FCC to apply its new rules only to digital devices.⁴ The Commission apparently concluded that, since the statute does not explicitly distinguish among different types of set-top boxes, it should apply its rules -- including the requirement to separate security from non-security functions -- not only to digital boxes, but also to analog-only boxes and "hybrid" boxes.⁵ The Report and Order discounted concerns regarding analog security, noting that

² Id. at ¶8.

³ See Letter from Neal M. Goldberg, General Counsel, NCTA, to William Johnson, Deputy Chief, Cable Services Bureau, June 3, 1998 at 2. ("The attached timetable applies only to the digital security module and digital host box interface -- it does not apply to analog security modules or interfaces for an analog or hybrid box. The applicability of a commercial availability rule to an analog or hybrid box may well, at a minimum, result in further delays in the attached timetable and, in any event, creates a myriad of practical implementation problems.") ("June 3, 1998 NCTA ex parte") (emphasis in original).

⁴ See Comments of the National Cable Television Association, filed May 16, 1997 at 8-14; Reply Comments of the National Cable Television Association, filed June 23, 1997, at 12-15. See also comments cited in notes 31-35 infra.

⁵ Order at ¶27 ("Section 629 applies to all types of equipment, including analog, hybrid analog/digital and digital equipment.").

“to the extent that analog, or other equipment presents concerns regarding security, our rules accommodate such concerns.”⁶ But, in fact, they do not appear to do so.

First, the Order does not adequately explain how the new rules accommodate such security concerns, other than to note that “[t]he rules we adopt protect MVPDs by allowing them to disconnect service to subscribers using a navigation device which assists in the unauthorized reception of service .”⁷ According to the Order, this provision is found in Section 76.1209 of the new rules.⁸ But, in fact, that section merely states that nothing in the new rules “shall be construed to authorize or justify any use, manufacture, or importation of equipment that would violate [the signal theft laws] or any other provision of law intended to preclude the unauthorized reception of multichannel video programming service.” Nothing in that section either provides for such self-help by cable operators, or explains the circumstances in which it might be exercised.

Second, the Commission apparently relies upon the decoder interface standard as a means of separating analog conditional access from other functions.⁹ Although the Commission recognizes that the decoder interface was “intended for a somewhat different purpose,”¹⁰ and is fraught with potential legal complications,¹¹ it nevertheless endorses that standard as the means to segregate analog security from non-security functions.

⁶ Id.

⁷ Id. at ¶42.

⁸ Id. at n.75.

⁹ Id. at ¶¶51-58, 70-73.

¹⁰ Id. at ¶52.

¹¹ Id. at ¶¶71-73.

Third, conceding that there may still remain some situations where separating analog security functions “is not possible or would be unduly risky,” the Commission created an “exception” for such situations, but one so narrow as to be no exception at all. For instance, it would not apply to “any equipment that it was contemplated might be separated out using the ‘decoder interface’ standard approach....”¹²

Finally, with no discussion at all, the Commission mandated cable operator provision of analog separate security modules by July, 2000. It did so without taking into account the differences between the problems raised by digital security separation and those raised by analog security separation and the fact that the OpenCable™ project -- upon which the July, 2000 date was premised¹³ -- applied only to the availability of digital separate security modules. This decision is inexplicable given the fact that the industry repeatedly advised Commission staff that the OpenCable™ project and timetable applied only to separation of security for digital set-top boxes¹⁴ -- a fact implicitly recognized elsewhere in the Order.¹⁵

¹² Id. at ¶73.

¹³ Id. at ¶8 (“Our rules rely heavily on the representations of the various interests involved that they will agree on relevant specifications, interfaces, and standards in a timely fashion....”), ¶¶76-78, 81.

¹⁴ See June 3, 1998 NCTA ex parte.

¹⁵ See, e.g., Order at ¶62 (“We reiterate the consensus of several cable operators, as well as two equipment manufacturers, that the separation of security from non-security functions in the digital context is possible”), ¶75 (We believe that the NRSS (EIA-679) and the related CableLabs/ OpenCable™ efforts, when the standards process is complete, will provide a usable standard for digital communications and our rule reflects this premise”), ¶76 (“The completion of the design and the effective introduction of this equipment is not only important in terms of the goals of this proceeding and the introduction of digital cable television service but will be critical to the delivery and deployment of digital broadcast television generally) (emphasis added to each quote).

B. The Statute Would Permit Exclusion of Analog Boxes

As noted above, the Commission rejected suggestions to exempt analog set-top boxes on the ground that the statute applies “to all types of equipment, including analog. . . .”¹⁶ But, in fact, the statute itself belies such a sweeping reading of Section 629. The Commission recognized that it had to 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 Order concludes, and NCTA agrees, that a way to achieve the dual goals of the statute as far as digital devices are concerned is to separate the security from the non-security functions of equipment used to access the services of MVPDs and to make only the latter “commercially available.”

But, analog boxes raise different concerns; concerns recognized in Section 629(b), and which justify the exclusion of analog boxes from the scope of the Commission’s rules.

1. Analog Signal Security Concerns Justify An Exemption

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 set-top boxes in a manner that does not harm the integrity and security of the multichannel video signal -- by making analog equipment widely available. The cable piracy problem is well-documented in this proceeding and is estimated to cost \$5.1 billion in lost revenue each year.¹⁷ Indeed, history has shown that with every advancement in cable set-top

¹⁶ Id. at ¶ 27.

¹⁷ 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

(Footnote cont'd.)

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. 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.¹⁸ 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 well as the costs to subscribers and copyright owners, operator control over every link in the analog chain of security -- from the headend to the set-top -- is a critical weapon to ameliorate rampant theft-of-service in the system.

Contrary to the suggestion in the Order, Section 629 is not an absolute, all-encompassing provision. In fact, not only does nothing in Section 629 prohibit the Commission from adopting an "analog exclusion," but also Section 629(b) can be read to require that the Commission take affirmative steps, including adoption of an "analog exclusion," to protect against theft of cable service.

Section 629(b) requires that the Commission be sensitive to cable's theft of service concerns and "not prescribe regulations ... which would jeopardize security" of cable programming or other

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.

¹⁸ 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

(Footnote cont'd.)

services or "impede the legal rights of a provider of such services to prevent theft of service."

Given the history of theft with analog service, it is far too risky -- and is contrary to the statute -- to require separation of the analog security element from the non-security functions of analog set-top boxes. And there is no assurance that security protections would not be adversely affected as a consequence of the massive in-flow of even non-security analog boxes into the market. In fact, in one recently reported incident, the scheme was based on modifying stolen "plain Jane" (non-security) set-top boxes, which were not otherwise available in bulk to the perpetrators.¹⁹ If the FCC requires retail availability of analog boxes, it would seriously aid and abet this type of thievery. For this reason alone, the Commission would be justified under section 629(b) in excluding analog set-top boxes from its navigation device rules.

2. Practical Concerns Justify An Analog Exemption

In addition to the security problems posed by applying its separation rules to analog boxes, numerous practical problems exist. There are over 15 different analog scrambling systems in use today, including systems provided by General Instrument, Scientific-Atlanta, and Zenith. Many were developed by companies such as Hamlin, Tocom and Oak that are no longer in existence. If cable operators were required to have separate security modules for their analog systems many would find that cost prohibitive because the modules for rarely used security systems could not be mass produced as opposed to the case with digital modules. And that assumes that the rights to

Prevails," New Jersey Law Journal, February 17, 1997; "Gunmen Rob 300 Boxes in New York," Multichannel News, May 6, 1996.

¹⁹ See "Crossed Wires: Cable Pirates Sought Plunder but Blundered Into a Major FBI Sting," Wall St. J., May 12, 1997 at A1, c.6.

license the particular analog scrambling technology to produce those modules can be obtained from defunct companies or their successors.²⁰

Application of the Commission's new navigation device rules to the analog world is unwise for another compelling reason. 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,²¹ the Commission must consider the effect of adopting burdensome rules applicable to a technology that may soon be obsolete which could adversely affect the deployment of new and advanced technologies. Indeed, the Order itself appears to focus on the importance of the introduction of digital navigation devices into the marketplace which, it concludes, "will be critical to the delivery and deployment of digital broadcast television...."²² Requiring analog-only boxes to have separate security components will, at best, distract the industry from achieving this goal, and at worst, will help to perpetuate a soon-to-be outdated service to the detriment of consumer acceptance of digital services.

The Report and Order discounts these and other legal and practical concerns and suggests that the EIA-105 decoder interface standard can serve as a model for a standard for the separation of analog security.²³ Putting aside the legal complications which might arise from basing such a

²⁰ Under the Commission's new rules, a system relying on "extinct" scrambling technology will have to pay a third party to reverse engineer a decoder or will be forced to replace its analog scrambling technology (both infrastructure and set-tops).

²¹ 47 U.S.C. §157.

²² Order at ¶76 (emphasis added).

²³ Id. at ¶71.

standard on the decoder interface,²⁴ as a practical matter that standard was designed and developed for different purposes than the “commercial availability” of set-tops.²⁵ As a result, the Commission’s assumption that the decoder interface can achieve that goal -- let alone whether the OpenCable™ digital timetable will suffice for the separation of analog security -- is misplaced.

The decoder interface was designed to do an adequate job of solving concerns about cable compatibility with TVs and VCRs. However, additional specifications would be needed to make it useful with the more advanced set-top box features in the market or being developed, which are not included in the current standard. While theoretically possible to utilize the decoder interface to isolate descrambling functions out to a separate set-back device, there are a number technical and business related issues that make this approach impractical.

Given the level of feature sophistication of today’s analog set-top, it is very difficult to separate security functions from the feature functions. This is because in many cases these two technical areas often share the same in-band and/or out-of band delivery resources. In other words, the signaling resources used for delivering conditional access information are also used by the feature functions.²⁶

²⁴ *Id.* at ¶¶71-73.

²⁵ The decoder interface was designed to work with set-back devices connected to new cable-ready TVs, not with set-top devices connected to all TVs, both old and new. In fact, the Commission previously addressed the question of extending the decoder interface to set-top devices, and specifically declined to do so, because “[w]e do not have sufficient information and comment before us to support a decision on this proposal at this time.” 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, 4127 (1996) (“Equipment Compatibility Reconsideration Order”). Nothing has changed since that decision, and little, if any, significant new information was provided to the FCC as part of this proceeding regarding the applicability of the decoder interface to set-top boxes.

²⁶ Assuming these feature functions, as well as the security functions, must continue to reside in the separate security device, the application of the Commission’s “separate security” requirements to analog boxes would result in a consumer’s nightmare. The commercially available navigation device would be connected to the separate security

(Footnote cont’d.)

Many of these feature functions are built into the advanced analog set-top at the factory and are not software applications that can be simply downloaded. Further, many of these features involve proprietary technology, in conjunction with a business arrangement between the set-top box vendor and the third party. Therefore, in a world where there exists a commercially available navigation device, these functions still must reside in the operator's set-back device. In other words, these devices are set-top boxes without tuners.

One of the key objectives of the OpenCable™ specification is to allow device manufacturers to develop retail devices that will be portable across cable systems. The ability to download software into the OpenCable™ retail device is critical for achieving portability. OpenCable digital devices will support this function. The OpenCable™ process has not developed a standard method for downloading software into an all-analog device. Doing so will be complicated by the number of different analog systems and devices in place in cable systems today. Most likely, the decoder interface module will be forced to support any custom interface software adding cost to the module.

Finally, even assuming the intellectual property rights underlying the analog security equipment from defunct companies is available to others, serious questions arise regarding royalties, patents, etc. Given the above complications, it is possible -- if not probable -- that these set-back devices could cost as much or more than a new advanced analog set-top or even the commercial navigation device to which they would be connected.

device via the decoder interface, which looks like an umbilical cord. There may be some features in the commercial navigation device that the customer might use, but for all practical purposes, its primary function will be to tune the desired cable channel and pass the analog signals to the operator's separate security device for its use. In short, the end result is not, to say the least, consumer friendly.

3. **The Report and Order Itself Recognizes Section 629
Need Not Apply to “All Equipment”**

The rationale that analog equipment must be covered by the Commission’s new separation rules because Section 629 “applies to all types of equipment” is belied by the action the Commission took in its Report and Order. First, the Order focused virtually exclusively on set-top boxes, to the exclusion of over a dozen of the categories of equipment listed in the Notice of Proposed Rulemaking.²⁷

Second, even for set-top boxes, the Order found ingenious ways of exempting set-top boxes provided by DBS providers²⁸ despite the fact that when consumers purchase equipment from one DBS provider it cannot be used to access the services of other DBS providers.

Third, even where addressing the analog set-top requirements, the Commission itself adopted a rule embodying exceptions where “(1) it is not reasonably feasible to prevent such devices from being used for the unauthorized reception of service; or (2) it is not reasonably feasible to separate conditional access from other functions without jeopardizing security.”²⁹

²⁷ Implementation of §304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, Notice of Proposed Rulemaking, CS Docket No. 97-80, 12 FCC Rcd 5639, 5647-48 (1997).

²⁸ Order at ¶¶64-66. DBS providers were exempted on the theory that “a particular provider’s equipment is already portable as to that provider across the continental United States because DBS operators offer services nationally.” Id. at ¶66. The Commission ignores the fact that the receivers of a particular DBS provider cannot be used to obtain services provided by a different DBS provider. Even more arbitrary is the decision that “a device that is usable on all systems of one particular cable multiple system operator only . . . would not be considered portable throughout the continental United States” and therefore would not be exempt as DBS equipment is. Id. (emphasis added). That arbitrary decision is ripe for reversal. See Melody Music v. FCC, 345 F.2d 730 (D.C. Cir. 1965).

²⁹ §76.1204(d).

While, on its face, these provisions could be read to exclude analog devices from the scope of the general rule, the Order suggests otherwise when it states that “equipment that it was contemplated might be separated out using the ‘decoder interface’ standard approach” would not come within the exception.³⁰ Since security functions of cable’s analog set-top boxes were to be separated out using the decoder interface, presumably they cannot benefit from the exception. Nevertheless, because the Commission created such an exception it recognized that the applicability of the separation rule need not be absolute.

4. The Record In This Proceeding Supports Exclusion Of Analog Boxes From The Scope Of The Commission’s Rules

Most commenters in this proceeding who addressed the “analog-digital” issue echoed the concerns listed above. As Scientific-Atlanta concluded: “The retail sale or commercial availability of navigation devices in the analog market is not feasible technically, logistically or economically,” citing, among other things, the seventeen or more basic scrambling methods developed by equipment manufacturers as a means of improved security as well as product differentiation.³¹ General Instrument made similar policy arguments as well as concluding that analog equipment is exempt as a matter of law from the Section 629 requirements because the Commission’s decisions on the decoder interface in the equipment compatibility rulemaking constitute “prior

³⁰ Order at ¶73.

³¹ S-A at 12.

determinations” which, under Section 629(d)(1), fulfill the requirements of the commercial availability mandate.³²

It is not only the equipment manufacturers who presented persuasive arguments against applying any rules adopted in this proceeding to analog set-top boxes. The Ad Hoc Computer Coalition whose members include Apple Computer, Netscape Communications, 3Com Corp. and a host of others from the computer and high technology communities, asserted that the “Commission should not promulgate any technical standards for commercial availability of analog converters, set-top boxes or other navigation devices [since] [t]his equipment is the last of its generation, and will be replaced over the next decade with digital devices....”³³ Similar sentiments were expressed by MVPDs who are closest to the consumers who are currently using the embedded base of analog boxes and programmers whose programming is more susceptible to piracy from analog boxes.³⁴

³² GI at 39-40. GI and other equipment manufacturers also argued that analog CPE should not be subject to commercial availability rules for public policy reasons as well. GI at 40-41 (analog about to give way to digital); Zenith at 4, 6, 8, 13 (emerging digital standard); TIA at 9, 14 (same).

³³ Ad Hoc at 11. See also Eschelon at 11, 15 (“One thing is certain, all the current technological breakthroughs and product development are focused forward on the new digital environment. Analog is the technology of the past, and it cannot, and should not, survive in a progressive digital world.”).

³⁴ See TWE at 11, 34 (any portability or interoperability requirements should apply only to digital); U S WEST at 3-8 (“The high potential for theft of service makes the commercial availability of enhanced analog-only CPE untenable”); Ameritech at 8-10 (focus on digital; “analog segment of the MVPD industry is characterized by the use of multiple access technologies, even within a single distribution architecture,”; digital will supplant analog); GTE at 5-7; PacBell at 2 (digital will replace analog, “there is no justification for forcing the video industry to incur the significant development and production costs necessary to develop standardized, commercially available navigation devices for analog systems”); Viacom at 14 (“the only way to control piracy of today’s analog set-top boxes is to control access to the boxes themselves”).

5. Certain Boxes With Analog Security Should Be Exempt From The Separation Requirement

Representatives of the consumer electronics community also acknowledged that this proceeding should focus on digital set-top boxes. For example, late in the proceeding, Circuit City proposed what it termed “a limited exception” governing analog boxes. Its goals were “to offer as much flexibility to MVPD operators as is possible, yet still address circumstances in which the use of hybrid analog and digital conditional access and scrambling technologies would frustrate the effective use of a purely digital security interface.”³⁵

Circuit City argued that, for MVPD systems that choose to deliver scrambled analog and digital programming to the same subscriber, “an interface for analog security” should be required. However, Circuit City went on to say that separate analog security modules should not have to be provided to subscribers by cable operators in other instances.³⁶ NCTA respectfully requests that the Commission adopt a similar limited exemption from the separation rules for set-top boxes in instances where:

- (a) Only analog services are provided to the particular subscriber;
- (b) The analog services provided to the subscriber in conjunction with digital services have not been scrambled or otherwise encrypted in a way that would impede reception and display through circuitry now in use by consumer electronics and computer manufacturers;
- (c) The analog services, whether or not originally scrambled or otherwise protected, arrive at the subscriber’s set-top “in the clear” (e.g., through interdiction or multichannel descrambling); or

³⁵ Circuit City ex parte presentation, June 4, 1998.

³⁶ See Circuit City Proposed Rule Section 76.1608, filed with Circuit City June 4, 1998 ex parte presentation (proposing exemptions similar to those proposed herein).

- (d) The subscriber has the option of receiving any scrambled analog programming as digital programming also offered by that MVPD.

NCTA believes this proposal strikes a reasonable balance between the needs of the consumer electronics industry and the security concerns of the cable industry while permitting the public to benefit from rapid deployment and commercial availability of digital set-top boxes. Certainly the exclusion of analog-only boxes (as well as the other limited exclusions) are justified by the legal and practical security concerns cited above. Accordingly, MVPDs should be exempt from the separate security module requirement for their subscribers who receive only analog signals or who fall within the other categories enumerated in the proposal described above. We urge the Commission to adopt it in lieu of its current per se rule applicable to analog boxes.³⁷

II. THE FCC SHOULD NOT PROHIBIT CABLE OPERATORS FROM PROVIDING INTEGRATED SET-TOP BOXES

A. The Commission's Order

The rules adopted in this proceeding prohibit cable operators and other multichannel providers from placing in service "new" integrated navigation devices that combine security and non-security components after January 1, 2005.³⁸ The rule applies only to the sale, lease or use of new boxes, and the FCC's Order makes clear that it does not apply to "equipment which has already been placed in service by the MVPD" before January 1, 2005. Therefore, boxes placed in service prior to January 1, 2005 may continue to be deployed (or redeployed) by the operator, even

³⁷ If the Commission declines to adopt this "analog exclusion," it should reconsider the timetable it has adopted for separation of analog security since that timetable was premised on the OpenCable™ digital timetable.

³⁸ Order at ¶69. The text of the Order also states that operators cannot provide integrated boxes to subscribers after July, 2000 unless they also provide separate security modules. Id. at ¶¶49, 62. ("As of July 1, 2000, therefore, MVPDs covered by Section 629 who wish to distribute devices using integrated security may do so only if they also make available the security modules separately.") This condition is not reflected in the text of the rule adopted

(Footnote cont'd.)

if they had been returned to inventory. Presumably, if the equipment had been deployed prior to January 1, 2005, it is no longer a “new” box, and it may be redeployed to other subscribers after the “phase-out” date. The rule does not appear to allow unused integrated boxes in an operator’s inventory to be leased after January 1, 2005, even if the box is still in its useful life.

In a separate statement, Commissioner Powell dissented from the rule prohibiting the provision of integrated boxes, finding “nothing in the statute that requires this result and no persuasive policy reason to interfere with the market in this way.”³⁹

The purported rationale for the prohibition is that continued provision of integrated boxes is “likely to interfere with the statutory mandate of commercial availability” and “integration is an obstacle to the functioning of a fully competitive market for navigation devices by impeding consumers from switching to devices that become available through retail outlets.”⁴⁰ Not only will this rationale not withstand scrutiny, but the rule itself is contrary to the statute, exceeds the Commission’s authority, and is not in the public interest. It must be reconsidered.

B. Section 629 Does Not Permit the FCC to Prohibit Cable Operator Provision of Integrated Boxes

The prohibition on operator provision of integrated boxes exceeds the Commission’s jurisdiction. Indeed, it does so on multiple grounds.

First, Section 629 does not require that the cable operator must separate out security from non-security functions in equipment it makes available to subscribers. It only requires that

by the Commission requiring the availability of security modules by July 2000. See, Order at A-1 (47 C.F.R. §76.1204(a)).

³⁹ Statement of Commissioner Michael K. Powell, Dissenting In Part (“Powell Dissent”).

⁴⁰ Order at ¶69.

equipment that does not jeopardize security must be made “commercially available.” Indeed, Congress contemplated operator provision of integrated boxes in Section 629 by providing explicitly that FCC “regulations shall not prohibit any multichannel video programming distributor from also offering converter boxes, interactive communications equipment, and other equipment used by consumers to access multichannel video programming and other services offered over multichannel video programming systems, to consumers, if the system operator’s charges to consumers for such devices and equipment are separately stated and not subsidized by charges for any such services.”⁴¹

Some would argue that this mandate is met by permitting operators to provide features boxes just as retail outlets may do. But when the statute was written, Congress presumably was not contemplating separate security modules and “features-only” boxes but instead must have been considering the same type of integrated boxes then in use by cable operators.⁴² The statutory command that the FCC should not prohibit cable operators from providing navigation devices applied to these boxes.

Second, in Section 629(b), Congress required the Commission to take into account means to protect the security of cable signals. In this regard, the record evidence clearly demonstrated that embedded security contained in integrated equipment is a more secure method of protecting

⁴¹ 47 U.S.C. §549(a) (emphasis added).

⁴² See Letter from Senator Conrad Burns, Chairman, Senate Committee on Communications, to FCC Chairman William E. Kennard, June 4, 1998 at 1 (“I do not see how the Commission could read a prohibition on an MVPD’s ability to offer an integrated device to be consistent with [Section 629(a)], especially given the well-expressed security concerns set forth in the statute itself and the legislative history.”).

intellectual property.⁴³ Yet by prohibiting operator provision of integrated boxes with embedded security the Commission has, with no statutory basis or compelling public interest rationale, required operators to provide a less-than-optimal level of security. That result is plainly contrary to the spirit, if not the letter, of Section 629(b).

Third, the legislative history of Section 629 adds another, equally telling, instruction. In adopting the navigation devices provision, the Conference Report cautioned the FCC “to avoid actions which could have the effect of freezing or chilling the development of new technologies and services.”⁴⁴ Prohibiting cable operator provision of integrated boxes -- and the economies of scope and scale such integration brings -- would have just such an adverse effect on the development of new technologies and services. Indeed, the retail community made clear its intention of integrating its “set-top” features equipment into television sets, VCRs, DVD players and the like to take advantage of economies of scale and scope.⁴⁵ Cable operators should be able to do the same and Congress seems to have warned the Commission to avoid precluding such an opportunity.

Fourth, at the same time it adopted section 629, Congress adopted the equipment averaging provision in the same statute.⁴⁶ The intent of that provision was to facilitate the introduction of new technology “to promote the development of a broadband, two-way telecommunications

⁴³ There is no question that separated security modules, smart cards and the like are more vulnerable to piracy than embedded security. See e.g., “Pirates Fined \$31 million,” Broadcasting & Cable, August 10, 1998 at 52 (DirecTV and NDS Americas awarded over \$31 million in damages from defendants who sold counterfeit DSS access cards and other devices).

⁴⁴ H.R. Rep. No. 104-458, 104th Cong. 2d Sess. 181 (1996) at 181 (“Conference Report”).

⁴⁵ See Letter from Robert S. Schwartz, counsel for Circuit City Stores, Inc. to Ms. Magalie R. Sales, FCC Secretary, April 2, 1998, attaching March 27, 1998 ex parte statement.

⁴⁶ 47 U.S.C. §543(a)(7) added by Section 301 of 1996 Act.

infrastructure.”⁴⁷ This would be done by fostering the introduction of advanced equipment such as new digital set-top boxes with embedded security just then coming to market when Congress adopted this provision. The Commission’s prohibition on integrated boxes flies in the face of this Congressional goal.

Fifth, the Commission had already concluded that it is in the public interest to permit operator provision of integrated boxes in an environment where non-security boxes are made commercially available -- a conclusion binding on the Commission in this proceeding. Section 629(d) requires that “[d]eterminations made or regulations prescribed by the Commission with respect to commercial availability to consumers of [navigation devices]” prior to the 1996 Act “shall fulfill the requirements of [Section 629].” Just such a determination was made in the Equipment Compatibility Rulemaking where the Commission concluded that “we see no reason to preclude cable operators from also incorporating signal access control functions in multi-function component devices that connect to the Decoder Interface connection.”⁴⁸

That decision is binding on the Commission pursuant to Section 629(d). Since the prohibition on operator provision of integrated boxes is inconsistent with that decision, it exceeds the Commission’s authority under Section 629.

⁴⁷ Conference Report at 167 citing House Report.

⁴⁸ Equipment Compatibility Reconsideration Order, 11 FCC Rcd at 4127 (March 1996 decision clarifying pre-1996 Act determination).

Finally, the Commission's citation of other proceedings in which it has "phased out" equipment is irrelevant.⁴⁹ Those cases involved the prohibition on use of equipment that either would become obsolete or that would not work on the system for which it was intended as a result of changes ordered by the Commission. That is not the case with the integrated set-top boxes prohibited by the Commission's rule.

C. It Is In The Public Interest To Permit Operators To Provide Integrated Boxes

Putting aside the statutory limits on the Commission's authority to adopt a prohibition on integrated boxes, there are numerous sound, public interest reasons to avoid doing so.

First, the Commission's determination in the Equipment Compatibility Rulemaking that it is in the public interest to permit operators to provide integrated boxes in an environment where non-security boxes are available at retail is equally applicable in this proceeding. There the Commission concluded that "we see no need to preclude cable operators from also incorporating signal access control functions in multi-function component devices. . . . Our decision ensures that subscribers will have several competitive alternatives in selecting component descrambler equipment."⁵⁰

Second, while cable operators agree that separation of security from non-security functions is one way to address the retail availability issue, virtually no-one disputes the fact that security is enhanced when it is embedded in integrated boxes. Given this fact, the Commission's prohibition on operator provision of integrated boxes will, of necessity, limit such enhanced security. Because

⁴⁹ Order at notes 167-68; Ness Separate Statement at 1.

⁵⁰ Equipment Compatibility Reconsideration Order, 11 FCC Rcd at 4127.

cable signal theft imposes a cost burden not only on cable operators and programmers, but also on innocent subscribers, anything that enhances security consistent with the statute is in the public interest.

Third, in the near term at least, the market for advanced set-tops will be limited as cable systems roll out features and functions. By allowing subscribers to obtain advanced integrated boxes for lease from cable operators, cable operator provision of integrated boxes will both “prime the pump” for an eventual retail market for such devices and spur innovation of advanced services by cable operators who will have a base of advanced boxes able to accommodate those services. Prohibiting cable operator provision of such boxes will stifle such innovation.

Fourth, any economies generated by the integration of security and non-security functions in one box should redound to the benefit of consumers. Therefore, cable operator provision of integrated boxes will benefit cost-conscious consumers who cannot afford to purchase consumer electronics equipment with an interface for security devices at retail. In this way, consumer resistance to the purchase of advanced equipment may be overcome to the ultimate benefit of consumers.

Fifth, consumers who are not technologically sophisticated will also benefit from operator provision of integrated boxes because they need not overcome concerns about purchasing unnecessary equipment. Instead, they can exchange such a leased box for one with more features as technology develops and/or systems are upgraded and they will not be saddled with “obsolete” boxes that cannot provide them with the full benefits of their cable systems.

Sixth, technologically sophisticated consumers could also benefit from operator provision of integrated boxes since they could lease operator-supplied boxes until the retail market brings forth a