

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

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

CS Docket No. 97-80

COMMENTS OF ECHELON CORPORATION
ON PETITIONS FOR RECONSIDERATION

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SUMMARY

Echelon supports the petitions filed by NCTA and TIA urging the Commission to exclude analog set-top boxes from the separation rules adopted in the *Navigation Device Order*. The Commission continues to expend significant governmental resources to guide through the complex transition from 1950s NTSC technology to the fully digital television world of the 21st century. The obstacles to this transition have been immense, and the *Navigation Device Order* unnecessarily adds to these barriers by requiring consumer and industry investment in obsolescent analog set-top boxes. Extending new resource-intensive separation regulations to analog navigation devices, which plainly represent “the technology of the past,” is thus poor public policy. The inclusion of analog navigation devices is also outside the Commission’s mandate under Section 629 of the Communications Act and inconsistent with Congress’ explicit desire in Section 624A, as amended, that the Commission avoid setting technological standards and defer to industry standard-setting organizations.

The Commission should reject the CEMA petition asking that the Commission direct the C3AG, an advisory group formed and operating under Commission auspices, to establish the specifications necessary to separate security and non-security modules. The C3AG was created for a completely unrelated purpose and has operated in the past in a manner that is antithetical to the type of voluntary, industry standards-setting organization with which Congress directed the Commission to “consult” in “assuring the commercial availability” of navigation devices. The C3AG has operated under closed, obstructionist procedures that deny consensus-built standards. The Commission should affirm its decision to rely on CableLabs for the development of any technical standards necessary for the separation of security and non-security functionality in digital navigation devices.

Echelon also agrees with NCTA and TIA that the Commission should reconsider its decision prohibiting cable operators from providing integrated set-top boxes—combining the security and non-security functionalities of navigation devices—after January 1, 2005.

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Pursuant to the Commission's September 8, 1998 Public Notice, Echelon Corporation ("Echelon"), by its attorneys, respectfully submits these comments in response to the petitions for reconsideration¹ on the Commission's June 24, 1998 *Navigation Device Order* in the above-captioned docket.²

Echelon supports the reconsideration petitions filed by the National Cable Television Association ("NCTA") and the Telecommunications Industry Association ("TIA") urging the Commission to exclude analog set-top boxes from the separation rules adopted in the *Navigation Device Order*. In addition, Echelon opposes the Consumer Electronics Manufacturers ("CEMA") petition asking that the Commission direct the Cable-Consumer Electronics Compatibility Advisory Group ("C3AG") to establish the technical specifications necessary to separate security and non-security modules for digital navigation devices. Echelon also agrees with NCTA and TIA that the Commission should reconsider its decision prohibiting cable operators

¹ National Cable Television Association, Petition for Expedited Reconsideration (filed Aug. 14, 1998) ("NCTA Petition"); Telecommunications Industry Association, Petition for Expedited Reconsideration (filed Aug. 14, 1998) ("TIA Petition"); Consumer Electronics Manufacturers Association, Petition for Reconsideration (filed Aug. 14, 1998) ("CEMA Petition").

² *Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices*, Navigation Device Order, CS Docket No. 97-80, FCC 98-117 (released June 24, 1998) ("*Navigation Device Order*").

from providing integrated set-top boxes—combining the security and non-security functionalities of navigation devices—after January 1, 2005.

INTRODUCTION

In the *Navigation Device Order*, the Commission promulgated regulations, pursuant to Section 629 of the Communications Act, that directly impact technological development in the rapidly converging television and computing industries.³ Section 629 instructs the Commission to “assure” that navigation devices⁴ and other customer premises equipment (“CPE”), such as set-top boxes, are “commercially available” from “manufacturers, retailers, and other vendors not affiliated with any multichannel video programming distributor” (“MVPDs”), including cable television system operators.

Implementing its own view of the scope and purpose of Section 629, the Commission ordered MVPDs to separate the security and non-security functions of both digital and analog set-top boxes. Under the regulations promulgated with the *Navigation Device Order*, cable operators and other MVPDs must begin to offer separate security modules by July 1, 2000 and cease providing navigation devices that combine security and non-security functions by January 1, 2005.⁵ As a means of implementing the separation of these two functionalities, the Commission endorsed use of the “decoder interface” standard,⁶ also known as IS-105, notwithstanding the fact, expressly acknowledged by the *Navigation Device Order*, that this standard was “intended for a different purpose.”⁷

³ 47 U.S.C. § 549, added by Section 304 of the 1996 Act.

⁴ 47 U.S.C. § 549. The Commission defines “navigation devices” as “converter boxes, interactive equipment, and other equipment used by consumers within their premises to receive multichannel video programming and other services offered over multichannel video programming systems. Throughout this document, we use the term navigation devices as shorthand for equipment fitting this definition.” *Navigation Device Order* ¶ 1.

⁵ *Navigation Device Order* ¶ 3; 47 CFR § 76.1204.

⁶ *Navigation Device Order* ¶ 51-58, 70-73.

⁷ *Navigation Device Order* ¶ 52.

Echelon strongly supports the arguments raised by NCTA and TIA in their respective petitions and urges the Commission to reconsider its decision to apply the separation requirement to analog technology. Extending new resource-intensive separation regulations to “the technology of the past” is poor public policy, outside the Commission’s mandate under Section 629, and inconsistent with Congress’ explicit directive in Section 624A, as amended, that the Commission avoid setting technological standards and defer to industry standard-setting organizations.

The Commission should affirm its decision to rely on the Cable Television Laboratories, Inc. (“CableLabs”) OpenCable standards process, and reject CEMA’s petition that the Commission rely on the C3AG for the development of standards for the separation of security and non-security functionality for digital applications.⁸ The C3AG was established for a completely unrelated purpose in response to the 1992 Cable Act and has operated in the past in a manner that is antithetical to the type of organization with which the Commission should “consult” in “assuring the commercial availability” of navigation devices under Section 629. Not only is the C3AG, as a government-sponsored organization, hardly the type of voluntary industry standards-setting organization envisioned by Congress, but the C3AG operates under closed, obstructionist procedures that deny consensus-built standards and preclude fair participation by industries, such as the computer industry, that are integrally involved in the development of digital set-top boxes.

Finally, as proposed by NCTA, the Commission should reconsider its prohibition on “sunset” for distribution of integrated navigation devices after 2005. This regulation is inconsistent with the Commission’s obligations under Section 629 and constitutes poor public policy.

⁸ CEMA Petition at 11-14.

DISCUSSION

I. THE COMMISSION SHOULD APPLY ITS COMMERCIAL AVAILABILITY RULES EXCLUSIVELY TO DIGITAL EQUIPMENT AND SERVICES

NCTA and TIA are correct that the Commission should reconsider its inclusion of analog technology in its separation regulations and refocus its resources and efforts toward the rapid transition to digital broadcasting.⁹ There was a “general agreement among commenters in this proceeding, including both cable operators and manufacturers, that these analog devices should not be subject to the commercial availability requirements.”¹⁰ By forcing cable operators, manufacturers and, most importantly, consumers to invest the time and financial resources toward the separation of antiquated analog systems, the *Navigation Device Order* places a major impediment to the transition to a digital television (“DTV”) environment.

The Commission is not required by the statute to extend its navigation devices rules to every type of set-top box, regardless of circumstances or other policies. While Section 629 does not distinguish between analog and digital technologies,¹¹ there is nothing in the 1996 Act that obligates the Commission to require the separation of analog functionalities. The *Navigation Device Order* improperly assumes that Section 629 grants the Commission authority to require that these functionalities be separated in order to ensure so-called “portability,” a result that is neither compelled by nor consistent with the Act. Indeed, the security provision of Section 629 and the limitation on the FCC’s standard-setting authority of Section 624A, as amended, are strong evidence that the Commission does not have the authority to regulate analog set-top boxes in this way. By forcing the separation of security and navigation functions in analog set-top

⁹ NCTA Pet. at 17; TIA Pet. at 2-5.

¹⁰ TIA Pet. at 2 (citations omitted).

¹¹ *Navigation Device Order* ¶ 27.

boxes, and endorsing an analog technical standard to implement this requirement, the *Navigation Device Order* ignores the statutory framework that limits the Commission's standard-setting authority.

A. Application of the Separation Rules to Analog Devices is Inconsistent with the Commission's Policy of an Aggressive DTV Roll-Out

As Chairman Kennard emphasized in his separate statement in this proceeding, there is little doubt that “[t]he introduction of digital television is one of the most important initiatives for the Commission.”¹² According to the *Navigation Device Order*, the policy objective of this docket “extends beyond making navigation equipment commercially available, but in fulfilling the promise of the digital age to bring broader choices and opportunities to a wide group of consumers.”¹³ Thus, the overriding goal of the Commission is clearly to encourage the development and implementation of digital technology and electronic equipment in order to provide for a rapid and efficient transition to DTV.

The Commission's imposition of its separation requirement on analog technology is flatly inconsistent with “the promise of the digital age” that is the express objective of the *Navigation Device Order*. The Commission based this separation decision on the conclusion that “it is possible to segregate analog conditional access from other functions” through the decoder interface.¹⁴ Yet the *Navigation Device Order* seeks to avoid giving the appearance of explicitly mandating a standard by asserting that the decoder interface is “not necessarily an exclusive standard”¹⁵ and that “the rule does not include any specific or detailed standards.”¹⁶ This attempt

¹² Statement of Chairman William E. Kennard; see Echelon Comments at 47-51, quoting *Advanced Television Systems and Their Impact Upon Existing Television Broadcast Service*, Fifth Report and Order, FCC 97-116, MM Docket No. 87-268 at ¶ 2 (released April 21, 1997).

¹³ *Report & Order* ¶ 16.

¹⁴ *Navigation Device Order* ¶ 71.

¹⁵ *Navigation Device Order* ¶ 71.

¹⁶ *Navigation Device Order* ¶ 72.

is unavailing because the Commission expressly endorses the IS-105 standard, the only analog standard identified by the *Navigation Device Order*, as “the model” standard for an interface between the security and non-security components.¹⁷ The decoder interface is the only existing standard that can effect the separation of security and non-security modules in an analog setting. Thus, by forcing MVPDs to separate the components of their navigation devices, the *Navigation Device Order* effectively mandates use of IS-105 for analog consumer equipment. Yet the Commission has failed to recognize the significant and detrimental policy consequences, or the serious legal implications, of its decision to include analog navigation devices in its separation regulations.

1. Application of the Commercial Availability Rules to Analog Will Force Consumers to Bear Both the Risk and Expense of Investing in Outdated Technology

Application of the FCC’s separation regulations, which in turn necessitates use of the decoder interface, will force a significant detour of resources and market attention away from the transition to digital technologies. The IS-105 standard originated in 1993 in the cable equipment compatibility proceeding (ET Docket No. 93-7) in response to Congress’ mandate that the Commission promulgate compatibility regulations to solve several specific compatibility issues for cable television set-top boxes under Section 17 of the 1992 Cable Act.¹⁸ Echelon is not aware of a single television, videocassette recorder (“VCR”) or set-back box product that has been developed and offered for sale incorporating the decoder interface.

¹⁷ *Navigation Device Order* ¶ 71.

¹⁸ 47 U.S.C. § 544a. Specifically, the 1992 Cable Act instructed the Commission to promulgate regulations to ensure that set-top boxes did not interfere with the functionality of premium TV received features, so that consumers could: watch one channel while simultaneously videotaping another channel; tape two consecutive programs that appear on different channels; and use advanced television picture generation and display features, such as picture-in-picture. 47 U.S.C. § 544a(c)(1)(B).

As a result, the *Navigation Device Order* will, of necessity, require the production, sale and installation of an entire new generation of analog set-top boxes. While this massive replacement will greatly benefit the manufacturers of these products, such as CEMA members, consumers will be forced to invest in a new generation of analog CPE at the same time the Commission is seeking to accelerate acceptance of DTV and digital television equipment. During the sunset of analog technology, a new regulatory structure separating security and tuner modules in analog navigation devices will require consumers to purchase a completely new suite of home entertainment devices.

The Commission's separation rules for analog will not only require consumers to invest in new set-top boxes; consumers will also have to purchase new VCRs and televisions, as no current VCRs or televisions are compatible with the IS-105 standard.¹⁹ The net effect of the regulation would thus be to compel consumers, who already own hundreds of millions of analog televisions, VCRs and set-top boxes, to spend at least several hundred dollars (and more likely \$1,000 or more) each on the purchase of additional soon-to-be-obsolete equipment systems. Given the huge embedded base of electronic TVs and set-top boxes, "it would be very difficult to retroactively impose a regulatory regime to apply to analog devices."²⁰ Furthermore, these investments will have to be made on the heels of the Commission's adoption of a transmission standard for digital television. Thus, these new analog IS-105 compatible consumer products will quickly become obsolete with the introduction of digital televisions in the next few years. Requiring consumers to invest in two generations of CPE suites (analog compatible with the decoder interface and then digital) within such a short time span will cause what economists term

¹⁹ Echelon Comments at 43-44, 46-47.

²⁰ TIA Pet. at 2.

a “dead weight” economic loss for American consumers—one for which there is no offsetting gain in efficiency or consumer welfare.

In an effort to squeeze in one more “bite at the analog apple,” consumer electronics manufacturers have supported the Commission approval of their analog decoder interface standard. This standard, now endorsed by the *Navigation Device Order*, will effectively render obsolete all current analog video CPE (more than 200 million existing television sets), requiring consumers to invest in one last round of “cable ready” analog equipment before TV manufacturers bring their digital equipment to market. Forcing this paradox of financial burden on consumers at the dawn of digital television provides an anticonsumer and anticompetitive regulatory advantage to TV and VCR manufacturers. It also directly threatens the overriding policy of accelerating the transition to a digital television marketplace. Rather than incenting consumers to invest in what are rapidly becoming antiquated analog devices, the Commission instead should continue its aggressive course toward digital technology, where a government-endorsed “model” standard interface is plainly not needed to assure the commercial availability of navigation devices.²¹

2. Forcing the Separation of Analog Navigation Devices Will Distract the Consumer Electronics Industry From Pursuing and Implementing the Transition to Digital Technology

The inclusion of analog devices in the Commission’s navigation device rules will also harm industry by deterring DTV investment and production. In order to comply with the Commission’s separation requirement for analog devices, equipment manufacturers will be forced to take resources away from their digital research and development plans to produce and offer a whole new generation of analog consumer electronics equipment. Through its Advanced Televi-

²¹ Echelon Comments at 47-51.

sion (“ATV”) proceeding, the Commission is urging manufacturers of televisions, VCRs and set-top boxes, who have finite resources, to devote significant resources to the development of digital applications. A great deal of effort and work remains to be done in order to meet the Commission’s and consumers’ digital expectations. For instance, high-speed digital interfaces between a digital set-top box and a digital receiver do not exist. The Commission has asked industry to accelerate its efforts to develop such an interface. This is one of the many products and technologies that must be implemented by industry in the near future if digital television is to meet its goals.

Separation restrictions on analog technologies will require industry to devote significant resources to the development of new analog devices which, as TIA emphasized, “would be designed and developed for a shrinking market, one that is in the twilight, but which may also be around for some time.”²² In short, forcing a regulatory “overhaul” of analog services when the Commission has set an accelerated pace toward digital is a technological step backward, in that it restricts the market’s ability to progress toward digital. This regulation is counterproductive to the Commission stated overriding policy goal of encouraging the development of digital applications.²³

²² TIA Pet. at 4.

²³ As Echelon noted (Echelon Comments at 51.), the decoder interface standard is no longer needed to serve the limited functions for which it was initially conceived. The marketplace and the development of digital technology have made this costly and overbroad standard obsolete. Nevertheless, proponents of the decoder interface continue to fight for its acceptance because it serves as a “Trojan Horse,” incorporating protocols and physical specifications that are unnecessary for cable compatibility, but which would provide regulatory protection against market competition for certain companies, namely television manufacturers, that prefer to gain market share in the halls of the FCC rather than the competitive marketplace itself. The Commission has always been vigilant against efforts to “game” the regulatory process to achieve marketplace advantage by administrative fiat, and should be vigilant to avoid accepting at face value arguments that the decoder interface, or any mandatory standard, is required to achieve the objectives of Section 629.

B. The Navigation Device Order’s Application of Its Separation Requirements to Analog Applications is Inconsistent With the 1996 Act

As a legal matter, the *Navigation Device Order’s* inclusion of analog devices is inconsistent with the statutory framework governing the Commission’s obligations to establish commercial availability regulations under Section 629. The *Navigation Device Order* justifies its separation requirement on the purported need to establish “portability” of navigation devices.²⁴ There is, however, no basis in Section 629 for mandating the portability of navigation devices. By mandating separation of analog devices—which are highly susceptible to cable theft—the Commission’s regulations also do not give proper weight to Congress’ mandate in Section 629 that the FCC protect the security interest of cable operators.²⁵

By segregating security and non-security functions of analog devices, the Commission is adopting the decoder interface as the “model” technological standard.²⁶ This level of standard-setting activity is directly prohibited under amended Section 624A, which was intended to provide a regulatory preference for market-based and voluntary industry standards. Contrary to the *Navigation Device Order’s* reasoning, this provision is applicable to the Commission’s standards and regulations in this proceeding, and cannot be avoided on the strained basis that the *Navigation Device Order* does not expressly mandate use of this “model” specification.

1. The Report and Order Incorrectly Presumes That Section 629 Provides the Commission with Authority to Set Standards and Mandate the Portability of Navigation Devices

The *Navigation Device Order* baldly asserts that “[g]eographic portability will enhance the commercial availability of navigation devices and should result in wider choice and lower

²⁴ *Navigation Device Order* ¶ 61.

²⁵ 47 U.S.C. § 549(b).

²⁶ *Navigation Device Order* ¶ 71.

prices to consumers.”²⁷ The Commission, however, fails to provide any authority or other legal basis on which it makes this declaration. The reason for this omission is that there is no statutory basis for the FCC’s portability requirement.

Because the only existing interface for the transmission of signals between separated analog devices is IS-105, by mandating portability through segregated security and non-security modules, the *Navigation Device Order* indirectly establishes the decoder interface as the “model” technical standard for analog devices.²⁸ This interpretation does not give proper deference to the statutory framework governing the Commission’s obligations. As NCTA emphasized, “[c]ontrary to the suggestion in the Order, Section 629 is not an absolute, all-encompassing provision.”²⁹

As an initial matter, Section 629 does not authorize portability. The word “portability,” or its functional equivalent, appears nowhere in the statutory language or the Conference Report adopting this provision.³⁰ If Congress had intended to include a portability requirement in Section 629, it would have done so explicitly. Rather, Section 629 is limited to requiring the FCC to ensure “the commercial availability” of navigation devices from “vendors unaffiliated with any multichannel video programming distributor.”³¹ As long as at least one unaffiliated vendor is making the devices available on a commercial basis, the statute is satisfied.

²⁷ *Navigation Device Order* ¶ 61.

²⁸ *Navigation Device Order* ¶ 71.

²⁹ NCTA Pet. at 8.

³⁰ As Echelon explained in its comments, the legislative history demonstrates that in modifying the final language of Section 629, the Conference Committee rejected the reference to “competitive availability” and any inference of national interoperability, in favor of “commercial availability.” This change is dispositive, because commercial availability in no way implies a portability requirement. Rather, the Commission’s regulations need only ensure that navigation devices are available at retail from vendors unaffiliated with the subscriber’s MVPD. Echelon Comments at 26-29.

³¹ 47 U.S.C. § 549(a).

The Commission's initial NPRM questioned whether navigation devices should be "portable" so that the devices "will work with similar types of MVPDs in different parts of the country."³² Whether or not portability is good public policy, however, Section 629 requires that portability be achieved by the marketplace, not Commission regulation. The *Navigation Device Order's* resulting failure to grapple with the absence of any statutory authorization for the mandate of set-top box portability is a fatal flaw in the Commission's reasoning for mandated separation of analog devices.

2. Under the Security Protection Provision of Section 629(b), the Commission Should Reconsider its Decision and Exempt Analog Applications From the Separation Rules

As the NCTA and TIA petitions demonstrate, the security provision in Section 629(b) not only authorizes, but also justifies, a Commission exemption of analog applications from the separation rules. According to Section 629(b), the Commission must "not prescribe regulations . . . which would jeopardize security . . . or impede the legal rights of a provider of such services to prevent theft of service."³³ Given Congress' express reservation of signal security decisions to MVPDs in Section 629 and the well-known history of piracy of cable programming,³⁴ requiring the separation of analog devices, which substantially increases the risk of cable piracy, is inconsistent with the FCC's responsibility in establishing commercial availability regulations.

³² NPRM at ¶ 24.

³³ 47 U.S.C. § 549(b).

³⁴ NCTA Pet at. 7-8; TIA Pet. at 4-5.

Cable piracy is responsible for \$5.1 billion in lost revenue each year.³⁵ Separating out the security function and standardizing an analog interface to achieve the separation of security from non-security functions will thwart the development of improved security safeguards that could stem this loss. The significant risk involved in separating out security functionality in analog devices, which will soon be replaced by digital devices, far outweighs any benefit to be gained by such a requirement.³⁶ In short, “the Commission’s decision to regulate analog would cause it to run afoul of the statutory requirement that security not be jeopardized.”³⁷ Therefore, under the security provision of Section 629, the Commission has ample authority and substantial justification to exclude analog applications from its separation requirements.

3. The Amendments to Section 624A Demonstrate Congress’ Intent to Limit the FCC’s Standard-Setting Authority

The Commission recognizes that in order to require separation of analog modules, which must be done through the decoder interface, it must “get around” amended Section 624A, which precludes the FCC’s adoption of the IS-105 standard.³⁸ The amendments to Section 624A, added by the 1996 Act, restrict the Commission’s authority under the 1992 Cable Act by requiring the Commission to achieve compatibility between televisions, VCRs and cable set-top boxes with “narrow technical standards” requiring only a “minimum degree of common design and operation.”³⁹ Through these amendments, Congress took the extraordinary step of directly intervening in a pending rulemaking, the cable equipment compatibility proceeding, to specifically limit the

³⁵ NCTA Pet. at 7; *see* TIA Pet. at 4.

³⁶ NCTA Pet. at 9.

³⁷ TIA Pet. at 5.

³⁸ *Navigation Device Order* ¶ 71.

³⁹ Among other things, amended Section 624A directs the Commission to “consider the need to maximize open competition in the market for all features, functions, protocols, and other product and service options of converter boxes and other cable converters unrelated to the descrambling or decryption of cable television signals.” 47 U.S.C. § 544a(a)(4).

Commission's authority to set standards and preserve a far wider role for market-based, industry-developed technical specifications.

The *Navigation Device Order* recognizes that “the text of the 1996 Amendments to Section 624A would appear, if applicable to Section 629, to direct the Commission to set only minimal standards in implementing Section 629 in both the analog and digital environments.”⁴⁰ Notwithstanding the clear “text” of the statute, the FCC, relying on the House Report to the rejected House version of Section 629, found that the amended language of Section 624A “applies only to rules required or prescribed by Section 624A.”⁴¹

The House Report is irrelevant to a proper interpretation of the final provisions of the 1996 Act. The Senate soundly defeated the House version in large part because of genuine and legitimate concern that the provision failed to limit sufficiently the Commission's standard-setting authority.⁴² The reasons for the Senate's defeat of commercial availability centered on concerns that the measure may have sanctioned mandatory Commission standards. Leading the opposition, Sen. Pressler (then Chairman of the Senate Telecommunications Subcommittee and floor manager of the bill) argued that “[t]his amendment is drafted in such a way that I cannot imagine the FCC reacting in any other way but to try to issue standards governing set top boxes. . . . Standards should be set by industry. Urging the FCC to step in to find a solution may not be the right way to proceed.”⁴³ Sen. Ford further explained that “when you set stan

⁴⁰ *Navigation Device Order* ¶ 54.

⁴¹ *Navigation Device Order* ¶ 72. *The Navigation Device Order* states that the “House Report specifically indicates that the amendments to Section 624A were ‘not intended to restrict the Commission's authority to promote the competitive availability of converter boxes, interactive communications devices, and other customer premises equipment as required [Section 629].’” *Navigation Device Order* ¶ 72, quoting H.R. Rep. No. 104-204, 104th Cong., 1st Sess. 111 (1995).

⁴² Only the House provision on Section 629 was presented to the Conference Committee because a proffered commercial availability amendment to the Senate bill was overwhelmingly defeated.

⁴³ 141 Cong. Rec. S7993, S7997 (remarks of Sen. Pressler) (daily ed. June 8, 1995).

dards, you limit the technology in a great many places, because as long as they meet the standards, they do not have to be competitive.”⁴⁴ Based on these and similar arguments against government-imposed standards, the Senate overwhelmingly rejected commercial availability, by a 64-30 vote, as part of the 1996 Act.⁴⁵

While the Conference Committee incorporated amended Section 624A verbatim, it made extensive changes to the House bill’s commercial availability provision. As part of the changes, the Conference Committee considered and rejected language from the House Report. Because of the significance of the changes between the House version and the Conference Committee’s final version, the House Commerce Committee’s opinions on the relationship between Section 629 and Section 624A are not germane and, at the very least, cannot be deemed dispositive. Thus, by relying on the House Report, the *Navigation Device Order*’s conclusion that amended Section 624A does not govern its commercial availability regulations is based on irrelevant legislative history.

In fact, an examination of the applicable statutory provisions and legislative histories demonstrates a clear congressional intent to require a narrowed scope for any Commission cable compatibility regulations, and absolutely none at all indicating that the Conference Committee anticipated undoing in Section 629 what it had done in Section 624A, as amended.⁴⁶

As an initial matter, amended Section 624A applies not only to the decoder interface standard that the Commission endorsed, but also to the “regulations” that the FCC promulgated

⁴⁴ 141 Cong. Rec. S8000 (Remarks of Sen. Ford) (daily ed. June 8, 1995).

⁴⁵ 141 Cong. Rec. S8000-01.

⁴⁶ As Echelon explained in its comments, regardless of the specific applicability of the Section 624A limitations, there is no precedent for the Commission seeking to achieve in one rulemaking a result that would violate the specific limitations of the Communications Act if promulgated in another proceeding. Echelon Comments at 45-46. Whether or not Section 624A by its terms applies to navigation device regulations, there is no basis on which to conclude that Congress would have authorized the Commission to achieve indirectly that which it prohibited directly.

in its *Navigation Device Order*. According to terms of Section 624A, the Commission must “ensure that any standards or regulations” are narrowly tailored.⁴⁷ Thus, regardless of the fact that the Commission’s navigation “rule does not include any specific or detailed standards”⁴⁸ for analog set-top boxes, or directly compel the adoption of IS-105, the Commission’s implementing regulations are prohibited under the terms of amended Section 624A.

Contrary to the *Navigation Device Order*’s conclusion, the legislative history of Section 629 demonstrates that the standard-setting principles of amended Section 624A extend beyond just the cable compatibility proceeding. During debate on Section 629, a colloquy between Sens. Burns and Faircloth reveals the applicability of Eshoo-based deference to private standard-setting authority to the commercial availability of navigation devices.

Mr. FAIRCLOTH. The competitive availability of navigation devices provision, Section 304, instructs the FCC to consult with appropriate voluntary industry standards-setting organizations for the purpose of promulgating a regulation. Given that the FCC is not a standards-setting organization, do you agree that this legislation does not authorize the FCC to set a standard for interactive video equipment?

Mr. BURNS. I agree. Moreover, FCC involvement in the emerging digital market could have the effect of freezing or chilling that market. If private groups are able to develop sufficient standards on their own, there is no need for the FCC to intervene. One such example of this is the so-called Eshoo amendment, which leaves the development of “features, functions, protocols, and other product and service options” for analog cable equipment to the private sector.⁴⁹

Unfortunately, the *Navigation Device Order* cites only a part of this debate,⁵⁰ ignoring the passage set forth above, which directly contradicts the Commission’s assumption that the navigation

⁴⁷ 47 U.S.C. § 544a (c)(2)(D).

⁴⁸ *Navigation Device Order* ¶ 72.

⁴⁹ 142 Cong. Rec. S700 (daily ed. Feb. 1, 1996).

⁵⁰ *Navigation Device Order* ¶ 90.

device rules of Section 629 and the cable compatibility amendments of Section 624A are completely unrelated.

Furthermore, as the FCC acknowledges, amended Section 624A specifically addresses the decoder interface.⁵¹ There is little doubt that the amended Section 624A was designed to prohibit the Commission's adoption of IS-105 in the cable compatibility proceeding, and it is plainly improper for the Commission to mandate a standard in one proceeding that is specifically banned in another proceeding. The Commission adoption of separation requirements for analog, which can only be implemented through the decoder interface standard, is thus a direct evasion of congressional intent. Having prohibited the decoder interface in the cable compatibility proceeding, Congress certainly could not have intended to authorize the Commission to adopt the same standard to further commercial availability without some explicit indication. Accordingly, using the decoder interface, which the Commission has still not addressed substantively in the cable compatibility proceeding, under the purported authority of Section 629 is an improper and unlawful "end run" around amended Section 624A.

In sum, both the terms and principles of Section 624A, as amended, must be construed to apply to any Commission-mandated standard for analog set-top boxes under Section 629, especially where, as in the *Navigation Device Order*, the Commission has endorsed use of the IS-105 cable compatibility standard as a "model" standard for analog navigation devices. The proper administrative approach is therefore for the Commission to limit any decision on commercial availability to digital navigation devices, for instance by grandfathering the installed base of analog CPE, and focus its attention on moving forward into the new digital era.

⁵¹ *Navigation Device Order* ¶ 53.

II. THE COMMISSION SHOULD REJECT CEMA'S PROPOSAL THAT THE COMMISSION DIRECT THE C3AG TO DEVELOP STANDARDS FOR THE SEPARATION OF SECURITY AND NON-SECURITY FUNCTIONALITY

As the *Navigation Device Order* recognized, Section 629 requires that the Commission consult “with appropriate industry standard-setting organizations” in adopting its commercial availability regulations.⁵² The *Navigation Device Order* repeatedly identifies and depends on the efforts of the OpenCable project, which is being managed through CableLabs and is developing “key interface specifications to foster interoperability among digital navigation devices manufactured by multiple vendors.”⁵³

CEMA challenges the Commission’s reliance on CableLabs and insists that the C3AG is “the appropriate body to develop any standards needed to ensure commercial availability of navigation devices.”⁵⁴ CEMA is plainly wrong. First, the C3AG was established to serve an entirely different purpose that is unrelated to and does not support the development of voluntary industry-based standards. Second, the C3AG’s methods and procedures make it the antithesis of the type of organization with whom Congress intended the Commission to consult under Section 629.

A. The Commission Established the C3AG to Satisfy the Cable, TV, VCR Compatibility Requirements of the 1992 Cable Act

The C3AG was formed to meet the Commission’s requirements under the 1992 Cable Act, and has not been organized or administered as the sort of open, consensus-based industry standards-setting body Congress intended the Commission to consult with. At the FCC’s direction, in 1994 C3AG—a working group of the Joint Engineering Committee (“JEC”) of CEMA

⁵² *Navigation Device Order* ¶ 53.

⁵³ *Navigation Device Order* ¶ 14; see ¶¶ 74-76.

⁵⁴ CEMA Pet. at 12.

and NCTA—developed and formally proposed the decoder interface as the solution for cable equipment compatibility.⁵⁵ Thus, the C3AG operates under the auspices and at the direction of the Commission to achieve equipment compatibility, and as such is an inappropriate organization to set industry standards for the commercial availability of navigation devices.

B. The C3AG Is Not The Type Of Open, Consensus-Based Industry Standard Setting Organization With Whom Congress Envisioned That The Commission Would Consult For Commercial Availability

The C3AG is not an accredited standard-setting body under the American National Standards Institute (“ANSI”), and its closed and exclusive procedures effectively shut out potentially affected industries from the technical and substantive decision-making process. The C3AG’s processes do not comply with the well-settled ANSI requirements for openness, balance and fairness in development of voluntary industry standards.⁵⁶ The Conference Report to Section 629 lists “appropriate” standard-setting organizations with which the Commission should consult for commercial availability. These include IEEE, DAVIC (Digital Audio Video Council), MPEG, ANSI.⁵⁷ Even though Congress was well aware of its existence and its work on the decoder interface, the C3AG is not listed as one of the “appropriate bodies.”

Contrary to CEMA’s petition, there is no question the C3AG does not use “an open process” that allows “for the full participation of both the consumer and cable industries.”⁵⁸ Rather, the C3AG has used its status to justify procedural practices that are antithetical to voluntary standards-setting process. The C3AG adopted voting procedures that denied many industry par

⁵⁵ Cable-Consumer Electronics Advisory Group Proposal for the Decoder Interface Standard, ET Docket No. 93-7 (filed Aug. 15, 1994); *see* Letter from Jeffrey A. Campbell to William F. Caton, Aug. 15, 1994 (forwarding C3AG Proposal); Proposal of the Consumer Electronics Group of the Electronics Industries Association for a Decoder Interface Standard, ET Docket No. 93-7 (filed Aug. 15, 1994)(“EIA/CEG Decoder Interface Proposal”).

⁵⁶ Echelon Comments at 44-45.

⁵⁷ Conference Report at 181.

⁵⁸ CEMA Pet. at 12.

ticipants, including Echelon, an effective role in the standard development process. Such practices have included “block voting,”⁵⁹ funding of product engineering activities, and issuance of false or misleading press releases. Had the C3AG been organized as an ANSI-accredited standards-setting organization, instead of an “advisory group” to the FCC, these sort of closed meetings would clearly have been impermissible. On the other hand, the OpenCable initiative has been singularly effective in implementing standards for open, digital set-top boxes.

III. THE COMMISSION SHOULD ELIMINATE ITS PROHIBITION ON INTEGRATED NAVIGATION DEVICES AFTER 2005

The *Navigation Device Order* determined that because “the continued ability to provide integrated equipment is likely to interfere with the statutory mandate of commercial availability,” cable operators should be prohibited from offering new integrated devices by January 1, 2005.⁶⁰ As both NCTA and TIA demonstrate, this regulation is outside the Commission’s legal mandate under Section 629 and constitutes poor public policy.⁶¹ Therefore, Echelon concurs with the NCTA and TIA proposal for the elimination of this prohibition from its rules.

NCTA argues that “[t]he prohibition on operator provision of integrated boxes exceeds the Commission’s jurisdiction.”⁶² Under Section 629, Congress directs that “regulations shall not prohibit” any cable operator from offering non-security features to consumers as long as the operator’s charges for this equipment are “separately stated and not subsidized by charges for such services.”⁶³ The navigation devices in existence when the 1996 Act was passed were inte-

⁵⁹ For instance, although representatives of non-cable and consumer electronics firms were permitted to attend C3AG meetings, all votes with respect to the decoder interface were taken as “block” votes in which the respective cable and consumer electronics “caucuses” each had one collective vote. Thus, other potentially affected industries—even where they had notice of the C3AG proposals and the opportunity to participate—were permitted no technical or substantive role in development of the decoder interface standard.

⁶⁰ *Navigation Device Order* ¶ 69.

⁶¹ NCTA Pet. at 17-25; *see* TIA Pet. at 5-7.

⁶² NCTA Pet. at 18.

⁶³ 47 U.S.C. § 549(a).