

ORIGINAL

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

RECEIVED
FEB 16 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)
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

REPLY COMMENTS OF THE CONSUMER ELECTRONICS GROUP
OF THE ELECTRONIC INDUSTRIES ASSOCIATION

Barbara N. McLennan
Staff Vice President
Government and Legal Affairs

George A. Hanover
Staff Vice President
Engineering

2001 Pennsylvania Avenue, N. W.
Washington, D.C. 20006
(202) 457-4900

Of Counsel:

James L. Casserly
Squire, Sanders & Dempsey
1201 Pennsylvania Avenue, N.W.
Post Office Box 407
Washington, D.C. 20044
(202) 6266600

February 16, 1994

No. of Copies rec'd
List ABCDE

009

TABLE OF CONTENTS

SUMMARY	ii
I. Introduction.	2
II. Application of Rules for “Cable-Ready” Receivers.	4
III. Decoder Interface	8
IV. Digital Standards	11
V. Miscellaneous Issues	15
Supplemental Equipment	15
Scrambling	16
Consumer Education and Remote Controls	16
Technical Standards	18
Verification	18
Equipment Charges	19
VI. Conclusion	20

SUMMARY OF REPLY COMMENTS

The Consumer Electronics Group of the Electronic Industries Association ("EIA/CEG") believes that the comments submitted in response to the Commission's Notice of Proposed Rulemaking provide substantial support for the course recommended in the submission of the Cable-Consumer Electronics Compatibility Advisory Group ("Advisory Group"). EIA/CEG strongly supports the Advisory Group's recommendations, which result from extensive discussion by numerous representatives of both the cable and consumer electronics industries. They constitute the first comprehensive, integrated, and jointly endorsed solution to compatibility problems. We applaud the National Cable Television Association, the cable members of the Advisory Group, and the cable participants in the Joint Engineering Committee who have participated actively in the development of the joint recommendations.

Regrettably, a handful of cable organizations have adopted an uncooperative posture, presenting extreme proposals that disregard statutory objectives, defy consumer expectations, and ignore joint industry efforts. These aberrant filings should not be permitted to deter progress in implementing Section 17 of the Cable Act.

EIA/CEG welcomes the opportunity to assist the Commission in completing the current phase of its deliberations by the statutory deadline. Our reply comments do not attempt to address every issue raised in the Notice and in the first-round comments. On some issues we have nothing to add to what the Advisory Group has already said; on others, a few additional words will suffice.

Our primary concerns relate to troublesome proposals offered by certain cable parties in three particular areas: (1) proposals to regulate the characteristics or marketing of television receivers which are not claimed to be cable-ready, (2) proposals to delay the establishment of standards for digital delivery of cable services, and (3) proposals to

thwart the proposed Decoder Interface by allowing for incompatible signal formats. These proposals are not consistent with the joint recommendations submitted by the Advisory Group last July or the joint position presented in the Advisory Group's comments on January 25, 1994. Indeed, one or two of the cable industry comments were written as if there had been no Advisory Group, no Joint Engineering Committee, and no breakthrough cable industry proposal regarding digital standardization. They simply ignore these efforts and, in so doing, undermine the carefully balanced proposals which were jointly presented to the Commission.

Appropriate implementation of Section 17 of the Cable Act requires pragmatic, constructive solutions. The package of short-term and long-term solutions which were painstakingly developed by the principal trade associations and leading companies of the two industries is responsive to both the letter and the spirit of Section 17. We pledge our continuing cooperation with the Commission and the Advisory Group so that implementation of the statute can proceed in a constructive and effective manner.

TO: DIRECTOR, FCC

RECEIVED

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

FEB 16 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)
)
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

**REPLY COMMENTS OF THE CONSUMER ELECTRONICS GROUP
OF THE ELECTRONIC INDUSTRIES ASSOCIATION**

The Consumer Electronics Group of the Electronic Industries Association ("EIA/CEG") hereby replies to the comments submitted on or about January 25, 1994, in response to the above-captioned Notice of Proposed Rulemaking ("Notice").¹ Overall, the record reflects substantial support for the course recommended in the first-round submission of the Cable-Consumer Electronics Compatibility Advisory Group ("Advisory Group"), a course which was largely consistent with the proposals set forth in the Notice. EIA/CEG strongly supports the Advisory Group's recommendations. Regrettably, however, a handful of cable organizations have adopted an uncooperative posture, presenting extreme proposals that disregard statutory objectives, defy consumer expectations, and ignore joint industry efforts. These aberrant filings should not be permitted to deter progress in implementing Section 17 of the Cable Act.

EIA/CEG welcomes the opportunity to assist the Commission in completing the current phase of its deliberations by the statutory deadline. Our reply comments do not

^{1/} A list of parties filing timely comments is attached as Appendix A. Except as otherwise noted, all citations are to comments filed in January 1994.

attempt to address every issue raised in the Notice and in the first-round comments. On some issues we have nothing to add to what the Advisory Group has already said; on others, a few additional words will suffice. Our primary concerns relate to troublesome proposals offered by certain cable parties in three particular areas: (1) proposals to regulate the characteristics or marketing of television receivers which are not claimed to be cable-ready, (2) proposals to delay the establishment of standards for digital delivery of cable services, and (3) proposals to thwart the proposed Decoder Interface by allowing for incompatible signal formats.

I. Introduction

The comments filed by the Advisory Group reflect the considerable efforts of numerous representatives of both the consumer electronics and cable industries. Cooperative efforts are producing realistic, meaningful solutions to compatibility problems. Progress is continuing.

EIA/CEG will not burden the Commission with a recitation of the history of joint industry efforts to address compatibility issues. For present purposes, it suffices to note that the joint proposals submitted by the Advisory Group last July and the joint position presented in the Advisory Group's comments on January 25, 1994, result from extensive discussion by leading experts from both industries. They constitute the first comprehensive, integrated, and jointly endorsed solution to compatibility problems. We applaud the National Cable Television Association, the cable members of the Advisory Group, and the cable participants in the Joint Engineering Committee ("**JEC**") who have participated actively in the development of practical solutions.*

2/ The relevant statutory provision concerns the compatibility of cable systems and consumer electronics equipment. As a result, most of the participants in the effort to develop technical standards and policy recommendations are drawn from
(continued..)

Although there has been much constructive cooperation on both sides and there is solid support in both industries (and elsewhere) for the Advisory Group's **position**,³ **EIA/CEG** finds it regrettable that several cable organizations have chosen to try to undermine the Advisory Group's recommendations. Collectively, a handful of extreme filings seem to challenge virtually every element of the joint recommendations, except perhaps the promise to deploy "supplementary equipment" which will provide only limited relief from compatibility problems and entail additional costs and wiring complications for the consumer. These troublesome cable filings renege on the key proposal, presented by the cable industry within the Advisory Group, which made joint cooperative efforts possible over the past 9-10 months. That proposal -- which was presented without any expression of dissent from the parties which now seek to derail the effort -- was that the two industries should cooperate to develop digital standards, which would then be recommended to the FCC for prescription.

Yet now, one or two of the cable industry comments were written as if there had been no Advisory Group, no Joint Engineering Committee, and no breakthrough proposal regarding digital standardization. They simply ignore these efforts and, in so doing, undermine the carefully balanced proposals which were jointly presented to the Commission. Thus, for example, there are proposals to regulate the design of TV receivers which are not marketed as "cable-ready," efforts to thwart mutual commitments

2/(. . .continued)

these two industries. Once the initial statutory deadline is met, and the first steps toward solving compatibility problems are taken, it may be timely to begin to address issues involving other delivery media. **EIA/CEG** will welcome the opportunity to work with all interested parties. For present purposes, however, it is neither necessary nor feasible to try to encompass SMATV, DBS, video dialtone, or other services in the present rulemaking.

3/ E.g., **CATA** at 2; **Cox Cable** at 3; **Greater Media** at 2; **Mitsubishi** at 1-2; **NYC** at 3-4, 8; **Zenith** at 1.

of cooperation in the prompt development of digital standards, and requests to authorize the delivery of cable signals which are incompatible with the new Decoder Interface. These subjects are discussed in detail in the pages which follow.

Appropriate implementation of Section 17 of the Cable Act requires pragmatic, constructive solutions. The package of short-term and long-term solutions which were painstakingly negotiated between the principal trade associations and leading companies of the two industries is responsive to both the letter and the spirit of Section 17.

II. Application of Rules for "Cable-Ready" Receivers

One important element of the statute requires the Commission to establish rules governing the characteristics of receivers which are marketed as "cable-ready."⁴ EIA/CEG and its members have cooperated vigorously in this effort, particularly through the JEC. Considerable progress has been made. Unfortunately, some cable operators now wish to use this work for purposes for which it was not intended: they urge the Commission to establish rules governing the characteristics of receivers which are not marketed as "cable-ready."⁵

The short answer to these proposals is that the statute does not authorize the Commission to adopt them. Section 17 empowers the Commission "to specify the technical requirements with which a television receiver or video cassette recorder must

^{4/} Unless the context otherwise plainly requires, the term "receiver" as used herein refers equally to television receivers and to videocassette recorders ("VCRs").

^{5/} See, e.g., TCI at 18 (any TV or VCR that tunes cable-channels should be required to meet standards); General Instrument at 14 (FCC should prohibit advertising or marketing, including statements like "tunes all cable channels," which imply cable-readiness); Cablevision Industries at 4 (all consumer electronics equipment which tunes cable channels should meet new tuner standards developed for cable-ready products).

comply in order to be sold as 'cable compatible' or 'cable-ready.'"⁶ No one has identified a source of statutory authority for the Commission to extend these requirements to products which are not marketed with such terminology.

Proposals to expand the new receiver regulations are not only without statutory foundation but also in direct conflict with the joint industry recommendations. Last July, the Advisory Group reported to the Commission, "No regulations are needed regarding the compatibility characteristics of TV's or VCR's that are not marketed with the term 'cable-ready.'"⁷ Insofar as EIA/CEG can recall, none of the comments on the joint recommendations took issue with this recommendation.⁸

The Advisory Group was even more explicit in its recent filing:

The recommended approach -- and the only one which is consistent with the statute -- is simply to apply the rules to those products which are expressly claimed to be "cable-ready" or for which the same claim is made using substantially the same language. The consumer electronics industry should remain free to manufacture and market, and consumers should be free to continue to purchase, products that have none, or only some, of the characteristics which will be required in "cable-ready" sets.

^{6/} 47 U.S.C. § 624A(c)(2)(A).

^{7/} Supplemental Comments of the Cable-Consumer Electronics Compatibility Advisory Group, at 10 (July 21, 1993)("Joint Recommendations").

^{8/} In contrast to its current position, General Instrument then agreed that "the compromise proposals, developed between the cable and consumer electronics industries, will serve the public interest by meeting consumer needs and establishing a process for further progress." Comments of General Instrument Corporation, at 3 (Aug. 10, 1993).

Another contradiction should also be mentioned. TCI here seeks to impose stringent technical standards not only on receivers that are claimed to be cable-ready but also on those that are not. Yet in mailings sent to TCI subscribers across the country, TCI has taken the very different position that any set which tunes 130 channels is "truly cable-ready" -- apparently without regard to any other technical criteria. See Appendix B.

Such sets, for example, might tune cable channels, include "F" connectors, and incorporate on-screen displays that refer to cable inputs.'

EIA/CEG firmly believes this is the right position.

For the record, it is important to note that **EIA/CEG** does not acquiesce in negative characterizations of TV receivers. A few parties have gone to considerable lengths to document what they believe to be inadequacies in the performance of TV receiver tuners or in other aspects of TV receiver design." Although **EIA/CEG** does not concede the accuracy of any of these assertions,¹¹ the more important point is that they are irrelevant. Both industries are committed to working cooperatively on rules for "cable-ready" receivers, that is, receivers which comply with new technical standards developed by the Joint Engineering Committee and incorporate the hybrid analog/digital Decoder Interface. Industry's support for the development of rigorous technical specifications in the JEC, and **EIA/CEG's** support for FCC prescription of these specifications as part of the "cable-ready" receiver regulations, is expressly predicated upon the understanding that receivers which are not marketed with this nomenclature will not be subject to the rules. **EIA/CEG** expressly reserves the right to challenge the reasonableness of the technical standards, even as to "cable-ready" receivers, if these specifications are applied to any receivers other than those marketed as cable-ready.¹²

9/ Advisory Group at 10 (emphasis in original; footnote omitted).

10/ **E.g.**, InterMedia Partners (which submits hundreds of pages of reports from CableLabs and other testing organizations).

11/ For example, concerning the tests of tuner performance, **EIA/CEG** was not afforded an opportunity to participate in the establishment of the measurement procedure. **EIA/CEG** did not monitor the testing process. **EIA/CEG** was not permitted to assist in the interpretation of test results.

12/ **EIA/CEG** would also remind the most avid proponents of receiver regulation that no level of tuner performance can overcome compatibility problems resulting from the scrambling of cable signals.

Further, it is only in the context of an integrated solution (including digital standards and an hybrid analog/digital Decoder Interface) that many JEC participants have concluded that the tuner modifications will be beneficial to the consumer and worth the additional expense.¹³ The costs of receiver design changes necessary to meet the “cable-ready” specifications are expected to be **substantial**.¹⁴ As the Advisory Group has stated, consumers should continue to have the opportunity to purchase receivers that do not reflect this extra expense, so long as the term “cable-ready” (or “cable-compatible”) is not used.¹⁵ A contrary position would needlessly limit consumer choice and impose extra costs on consumers who are least able to bear **them**.¹⁶

13/ To date, the JEC has only developed tuner specifications for analog signals, but the work plan contemplates that digital signals will also be encompassed in IS-23 before the standard is finalized.

14/ Those expenses will result from (1) the incorporation of the Decoder Interface and (2) tuner performance specifications and other receiver modifications. Notwithstanding one party’s assertion to the contrary, it is the latter which will entail the most significant costs. Comoare Advisory Group at 13 n.39 with MCSI at 9. By far the greatest benefits will be afforded to receivers which incorporate the Decoder Interface and which will be capable of receiving both digital and analog cable services.

15/ For essentially the same reasons, **EIA/CEG** strongly opposes any proposals regarding the mandatory labeling of receivers which are not claimed to be “cable-ready.” See discussion below at page 17.

16/ One party, in late-tiled comments, has advocated that prescription of the Decoder Interface be decoupled from other receiver modifications contemplated as part of the new definition of “cable-ready.” MCSI at 8-1 1. The reply deadline does not allow for an extended response to the lengthy argument presented on this subject. Suffice it to say that the Advisory Group held extensive discussions concerning the possibility of having multiple definitions of “cable-ready” and ultimately concluded that expense and confusion could be minimized by implementing the “cable-ready” definition in a single step. Incidentally, **EIA/CEG** does not share **MCSI**’s pessimism about the time it will take to complete development of a Decoder Interface.

III. Decoder Interface

A central feature of the joint industry recommendations and of the Commission's Notice is the proposal for development of a Decoder Interface for inclusion in new "cable-ready" sets. The technical work on this new interface has not yet been completed, but, as Appendix B to the Advisory Group's Comments showed, considerable progress has been made.

One issue that can quickly be put to rest is the question whether the Commission should prescribe EIA-563 (the old "Multiport" standard) or should instead await completion of development of the new Decoder Interface (EIA IS-105).¹⁷ The record is clear that only the latter course makes any sense. Every party to address the issue agrees.¹⁸

There is, however, a significant potential problem that warrants the Commission's close attention. The Decoder Interface is intended to protect consumers against the costs, complications, and compatibility problems that result from set-top boxes. The Decoder Interface can serve these purposes only if cable operators deliver their signals in a form which is compatible with the Decoder Interface. The Advisory Group specifically explained this in its comments last July," and no commenting party dissented.*' The

17/ References to "an improved EIA-563" are in error. The Decoder Interface under development is completely new, physically and electrically.

18/ E.g., Greater Media at 9; Zenith at 2; TCI at 21.

19/ Joint Recommendations at 11.

20/ Announcement of the agreement to cooperate in the development of a new hybrid analog/digital Decoder Interface was greeted with wide acclaim. It was universally understood that this approach would not freeze technology nor prevent innovation and experimentation. Everyone understood that new technologies could be developed and deployed so long as the resulting signal was in a form that was compatible with the Decoder Interface.

(continued..)

Commission then proposed to require cable signals to be delivered “in a form that is compatible with the Decoder Interface and component descrambler/decoder equipment used with that connector where ‘in-the-clear’ delivery methods are not used.”²¹ The Advisory Group supported that position.²²

Incredibly, there are cable parties which now maintain that cable operators should be free to deliver signals which are incompatible with the Decoder Interface, that is, which nonetheless require the consumer to procure a set-top box from the cable operator.²³ This position is absurd. It reflects disregard for the interests of consumers and for the provisions and purposes of the statute.” It flouts the very concept of a standard.

The critical consideration can be stated in a single sentence: Once a Decoder Interface is developed and consumers purchase equipment with the added cost necessary to incorporate that interface, it would be senseless thereafter to permit idiosyncratic

20/(... continued)

Subsequently, as the JEC has continued to specify the characteristics of the Decoder Interface, participants have gone to great lengths to make the interface extremely flexible. As in most good standards, the intention here is to make it possible to enable the development of new services through the interface without requiring that the interface itself be changed.

21/ Notice at ¶ 29.

22/ Advisory Group at 12.

23/ E.g., TCI at 21-24 (requirement for compatibility with Decoder Interface should apply only to those cable services existing at the time a particular version of the Decoder Interface standard is implemented; approach proposed by Advisory Group and by FCC amounts to a “moratorium on emerging cable technologies and services”); General Instrument at 18-22 (same).

24/ See NYC at 11-12 (if this approach is adopted, “equipment compatibility will remain an unfulfilled promise, and the purpose of Section 17 will be frustrated”).

signal delivery methods that nonetheless revive the need for new generations of set-top converter/descramblers, with all their attendant costs, complications, and compatibility problems. That danger can be averted only by requiring that signals be delivered in a form which is compatible with the Decoder Interface.”

There is another set of issues relating to the Decoder Interface. Although there is widespread support for the concept of a Decoder Interface, there remains some disagreement about precisely what its implications are. On the one hand, there are comments about the need for the Decoder Interface to respond to “forced tuning” controlled by the cable company.²⁶ On the other hand, there are expressions about concern about the unnecessary incorporation of functions in the cable company’s decoder and the concomitant reduction in the functions that can be successfully marketed in competitively supplied consumer electronics equipment.²⁷ EIA/CEG believes that such issues should be resolved with an emphasis on minimizing monopoly power and maximizing the sphere of competition.

25/ The only other alternative, of course, is that all signals be delivered “in the clear.” ~~The cable~~ industry has strenuously argued that such an approach is not feasible and that the equivalent degree of compatibility can be achieved through the Decoder Interface. If such arguments are accepted, then the cable industry must not be permitted to subvert the Decoder Interface by delivering incompatible signals.

26/ Cablevision Industries at 7. This presents the specter of cable companies ensuring that TVs, when turned on, first display a “barker channel” for whatever programming the cable company wishes to promote.

27/ Circuit City at 8-13. A related consideration, also addressed by Circuit City, is that the unnecessary inclusion of additional functions in the Decoder will saddle the consumer with increased costs. *Id.* at 8. In this regard, it is troubling that one cable company has predicted that set-back decoders will be as expensive as set-top converters. *InterMedia Partners* at 16; *but see Advisory Group* at 17-18 & n.52 (decoder will lack tuner, infrared receiving circuits, external displays, external controls).

Two relatively minor issues need to be addressed before leaving the subject of the Decoder Interface. First, one party proposes to require that consumer electronics equipment with multiple tuners incorporate multiple Decoder Interfaces as well.²⁸ There is no need for the Commission to second-guess the JEC on this issue. The definition developed by both industries ensures that any product marketed as "cable-ready" must have at least one Decoder Interface; market forces (that is, the normal interplay between manufacturers, retailers, and consumers) should be permitted to determine whether and to what extent extra tuners should also be "cable-ready." Second, we want to respond to the proposal for the development of a communications link from the consumer to the cable system.²⁹ This subject is appropriate for consideration by the Joint Engineering Committee, and specific proposals to address this issue through appropriate standards will be welcomed.

IV. Digital Standards

EIA/CEG's third area of particular interest involves the establishment of digital standards. Last Spring, it was the cable industry's promise to cooperate in the timely development of digital standards that made possible all of the cooperation that has occurred over the past year. Yet now there are parties which seem to want to place digital standardization on permanent, or possibly just indefinite, hold.³⁰ The Commission should not countenance any such delays.

As the recent joint filing observes, "The mutual recognition of the need for digital standards was a central element of the agreement that made it possible to submit joint

28/ Cablevision Systems at 13.

29/ Interactive Multimedia at 3-4.

30/ TCI at 31-34 ((1) FCC cannot prescribe standards; (2) it should do so later, not now); General Instrument at 31-35 (same).

recommendations to the Commission, and it is indispensable to the current cooperative efforts of the two industries.³¹ “More importantly still,” those comments went on to say, “a firm understanding that digital standards will be prescribed is essential to provide assurance to consumers and legislators against a recurrence of the kinds of problems that led to adoption of Section 17.”³²

In EIA/CEG’s view, consumers have every right to expect that enduring relief will result from the current process.³³ This can only be achieved through the development and prescription of uniform, nationwide standards for digital transmission and compression.

EIA/CEG does not wish to foreclose experimentation and prematurely to “freeze” technology. The schedule developed jointly by representatives of both industries was specifically designed to allow time for experimentation and innovation and to avoid premature standardization.³⁴ But the standards process must begin sooner rather than later.³⁵ The selection of a terrestrial HDTV system later this year should set the stage

^{31/} Advisory Group at 22.

^{32/} Id.

^{33/} The benefits of standardization will not accrue solely to consumers. Testimony at a recent hearing before the House Subcommittee on Telecommunications and Finance (February 1, 1994) reflected a strong desire on the part of pronram and service oviders that digital standards for cable distribution be established to ensure open access and to avoid the dangers of “technology bottlenecks.”

^{34/} Experimentation is just that, experimentation, but this does not provide a justification for “grandfathering” incompatible systems which deny users the benefits of a standard once the standard is established.

^{35/} EIA has been involved in the development of standards for nearly 70 years. Our experience has taught us that standards, when properly developed, do not stifle innovation; they facilitate it. Due process procedures will ensure that standards will be set at the right time, and with full consideration of all points of view.

for prompt action on a digital transmission standard for cable. Rapid progress should then follow concerning a standard for digital compression and a standard security interface system.³⁶

At the outset, the Commission must clarify that it will not only monitor progress in this area, or encourage the industries to develop standards, but also prescribe the necessary standards based on recommendations developed by industry in forums with due process **protections**.³⁷ Consistent with the schedule developed jointly by both industries, the objective should be to have standards for digital transmission in 1994 and, no later than the following year, to establish target dates for standards for digital compression and a standard security system interface. Standardization at the earliest practical date will help to avoid the use of multiple incompatible technologies, increase economies of scale for cable hardware and decoder manufacturers, and -- over time -- enable the migration of functions initially incorporated in the cable company-provided decoder into competitively supplied consumer electronics **products**.³⁸

36/ It is now beginning to appear that what some had thought to be a difficult challenge, developing a national renewable security system ("NRSS"), is simply a matter of defining the boundary between proprietary and nonproprietary portions of the receiver/cable system. Mitsubishi at 11 - 14 (describing "extraordinary progress" of NRSS Subcommittee). See Appendix C.

37/ A similar, industry-driven approach has worked well in the case of Advanced Television. Once this work is completed, it should not be necessary to start from "square one" to formulate digital standards for cable.

38/ At the time the Joint Recommendations were filed last July, it was hoped that the Grand Alliance would be making its digital modulation proposal by the end of 1993 and that this proposal would be ratified relatively promptly by the Advisory Committee on Advanced Television ("ACATS"), in which case the JEC would have been in a position to recommend tentative digital cable tuner specifications to the Advisory Group in time for inclusion in response to the Commission's Notice. Although the ACATS Technical Subcommittee will not decide on a
(continued..)

We are optimistic that technological developments in the future will create opportunities for increasingly consumer-friendly approaches to prevention of signal theft. In this regard, we note that two-way, switched communications systems may be less vulnerable to piracy than are today's one-way, **unswitched** cable delivery methods. We are also aware that so-called "smart cards" will be undergoing rigorous testing through deployment in conjunction with new Direct Broadcast Satellite services.

These or other developments may demonstrate that cable companies no longer need to retain the ability to own descrambling functionalities at the consumer's premises. If and to the extent that occurs, the Commission should not hesitate to adopt new rules which allow all customer-premises functions to be performed in competitively supplied equipment. This is the rule that now applies in the case of telephone services,³⁹ and it has allowed for maximum competition with minimal compatibility problems. If the same model can be applied in the cable environment, so much the better for consumers -- and for competition.⁴⁰

38/(...continued)

digital terrestrial modulation system until February 24 at the earliest, and the decision process for cable modulation is unclear, the development and verification of appropriate tuner specifications should be able to proceed rapidly once the ACATS decision is made. We therefore believe that the schedule presented in the Joint Recommendations -- for standardization of digital cable transmission before the end of 1994 -- remains realistic.

39/ 47 C.F.R. § 64.702(e)(1992).

40/ See, e.g., Statement of Reed E. Hundt, FCC Chairman, before the House Subcommittee on Telecommunications and Finance, at 4-5, 9 (Jan. 27, 1994) (CPE competition lowers prices, spurs innovation, and increases responsiveness to consumer demand).

V. Miscellaneous Issues

As the foregoing discussion demonstrates, the issues which are most essential to resolve correctly are those involving the treatment of non-cable-ready receivers, compatibility with the Decoder Interface, and the establishment of digital standards. Nonetheless, there are numerous other issues which require careful handling. On several such issues, **EIA/CEG** has nothing to add to what has already been said in the Advisory Group comments. On certain issues, some additional discussion is necessary:

Supplemental equipment: There is little controversy about the Commission's proposal to require cable operators to provide supplementary equipment such as set-top devices with multiple descramblers and/or timers and bypass switches at subscribers' request.⁴¹ Only a single cable company expresses any concern about this proposal, and its position is simply not credible -- especially in light of the support expressed by all other commenting parties, including the most "hard-line" of the cable operators.⁴²

The only point **EIA/CEG** wishes to clarify on this subject relates to the claim by certain parties that supplementary equipment like dual-tuner converters or converters with timers "restores" the functions of consumer electronics products. The more accurate statement is that such devices duplicate the functions of the consumer electronics products. This may "restore" the consumer's ability to perform one function or another, but only by making the consumer rent one device whose cost is attributable in part to the replication of functions that have been disabled in the associated consumer electronics device. This point is important to illustrate why more supplementary equipment is only

41/ Notice at ¶ 12.

42/ **Compare** Cablevision Systems at 3 (claims each operator should be free to decide whether to provide multiple descramblers or bypass switches) **with** TCI at 2-5 (supports FCC proposal regarding supplementary equipment and separate charges for same).

a partial solution and fundamental longer-term solutions as recommended by the Advisory Group are essential to provide full compatibility.

Scrambling: The first-round comments reflect a division of views about the extent to which cable operators should be prohibited from scrambling basic tier signals. Representatives of consumers support a prohibition applicable to all basic tier channels, mandatory and nonmandatory.⁴³ But some cable operators claim a need to retain flexibility in this area,⁴⁴ even though scrambling of the basic tier is quite rare.⁴⁵

EIA/CEG believes the Advisory Group's comments set forth a workable approach. Scrambling of any channels on the basic tier should be prohibited. Operators which can demonstrate "good cause" should be free to seek waivers from the Commission, and these requests should be subject to public comment (e.g., by consumers and by franchising authorities).⁴⁶ A more exacting standard should be applied to waiver requests involving retransmitted local broadcast signals or public, education, and governmental channels than to requests involving signals which are not required to be carried on the basic tier.

Consumer Education and Remote Controls: The first-round comments reflect a broad consensus that cable operators cannot reasonably be expected to gather information

43/ NYC at 5-6; Lakes Region at 1; see also Pacific Telesis at 2-3 (scrambling prohibition will keep costs lower and avoid complications to consumers).

44/ **Barden** Cablevision passim (FCC should delay implementation of prohibition on scrambling of basic tier at least until standard security interface system is implemented; alternatively, FCC should permit operators who are already scrambling to continue to do so; any prohibition should apply only to the mandatory channels).

45/ See CATA at 7 ("knows of no system that has ever scrambled basic service [or] is contemplating such a practice").

46/ 47 C.F.R. § 1.3 (1992).

on every possible model of remote control or even every retail source of such products. The Advisory Group's alternative **proposal**⁴⁷ will be both more practical and more useful to consumers.

Although we support a diminished responsibility for cable operators in this area, we oppose those who seek to shift consumer education responsibilities to consumer electronics retailers or consumer electronics **manufacturers**.⁴⁸ The applicable statutory provision speaks solely of regulations applicable to "a cable operator."⁴⁹ The consumer electronics industry stands ready to provide voluntary assistance in this **area**,⁵⁰ but there is no legal or policy reason for any requirements to be imposed on parties other than the cable operators."

The cable operators' extensive discussions about the large numbers of different models of converter boxes and remote controls puts in focus the need to stabilize a basic set of cable box infrared ("**IR**") codes. One problem that may not be adequately addressed in the joint filings or in the Notice is that even a "universal" remote which is compatible with every converter box that ever existed may become obsolete if a cable

^{47/} Advisory Group at 5-7.

^{48/} E.g., TCI at 6 (third-party manufacturers of remote controls should be required to list those set-tops with which the remote is compatible; retailers should warn consumers that TVs and VCRs may not work when connected to a cable system; TV/VCR cartons should indicate tuning range of the enclosed receiver and inform the consumer that certain TV/VCR features may not be compatible with all cable services); **InterMedia** Partners at 9 (proposing negative stickers on TV receivers).

^{49/} 47 U.S.C. § 624A(c)(2)(D).

^{50/} See Advisory Group at 6, 7.

^{51/} The inter-industry proposals last summer carefully avoided proposing any requirements regarding the consumer education burdens of the consumer electronics industry. See Joint Recommendations at 9 (advocating regulations to require the cable industry to strengthen its consumer education programs).

operator chooses to deploy new cable boxes that use new codes for such basic functions as on-off, channel up-channel down, and O-9. EIA/CEG is aware of no good reason why this practice should continue.⁵²

Technical standards: EIA/CEG urges the Commission to adopt the technical standards which were developed within the Joint Engineering Committee, not those which appeared in the Notice or those which have now been proposed by parties whose views did not prevail in the JEC deliberations.⁵³ These issues have been deliberated at length in the JEC, and there is no reason why the Commission (especially in light of its limited resources and the tight statutory timetable) should revisit the consensus standards developed by engineering representatives of both industries, after full consideration of all participants' points of view.⁵⁴ The standards developed by the JEC are practical, cost-effective, and based on the best judgment of the participants, on the basis of all information available. They warrant the Commission's support.

Verification: The Notice inquired about the possibility of changing the equipment authorization procedures applicable to manufacturers of television receivers. Only a single party expressed any positive sentiments regarding the possibility of replacing verification with certification.⁵⁵ EIA/CEG respectfully suggests that the reasons given in support of that viewpoint are not persuasive. Television receiver manufacturers have

52/ 47 U.S .C. § 624A(c)(2)(E)(regulations must prevent cable operators from taking actions which prevent converter box from operating with commercially available remote controls).

53/ E.g., Cablevision Industries at 9-10 (argues for 250 mV/m field intensity as criterion for minimizing DPU interference).

54/ Incidentally, a report by Jules Cohen Associates (cited at Advisory Group, Appendix C, page 5) reflects quite different measurement data than are presented by Cablevision Systems.

55/ NYC at 10-11.

an outstanding record of compliance with the Commission's rules, and there is no justification for imposing more burdensome equipment authorization procedures on the consumer electronics industry.

Equipment charges: The cable industry has expressed considerable concern about the Commission's proposal to preclude separate charges for the component descramblers to be used in conjunction with the Decoder Interfaces. **EIA/CEG** agrees that it would be preferable to unbundle the equipment charges from the charges for cable service. The equipment charges (excepting the installation charge for the first Decoder per home)⁵⁶ should be subject to rate regulation rules applicable to other equipment located at subscribers' premises.

For purposes of rate regulation, **EIA/CEG** recommends that the costs entitled to recovery be limited to those associated with the agreed-upon functions of the decoder. The objective is to move from complex set-top devices to simple set-back devices and ultimately to extremely inexpensive replaceable security modules (e.g., "smart cards"), not to compel customers to pay for a "bundled" device, provided on a sole-source basis, that provides functions which can and should be available for subscriber ownership from multiple, competitive sources of supply. The rate regulation rules can be used to ensure that the Decoder is used for its intended purpose and is not expanded into the powerful "converger" device that some cable representatives envision.⁵⁷

^{56/} Joint Recommendations at 11; Advisory Group at 17-18.

^{57/} The leader of the largest cable company has spoken with enthusiasm about the expected development of a single powerful box in each home which "will allow us to control all the communications needs of a household with one device." John Markoff, A Phone-Cable Vehicle for the Data Superhighway, New York Times, Oct. 14, 1993, at A1. Obviously, if any such device is developed, there can be no excuse for allowing it to be provided on a bundled basis instead of in the competitive marketplace.

VI. Conclusion

For the reasons stated above and in the Advisory Group comments, EIA/CEG is pleased to support the overall thrust of the Notice and to endorse anew the compromise proposals as submitted last July and as further explained just last month. In particular, we urge the Commission (1) to reject proposals to impose any requirements on the characteristics or marketing of receivers which are not expressly claimed to be "cable-ready," (2) to adhere to the proposal that cable operators deliver their signals in a form that is compatible with the Decoder Interface, and (3) to participate actively in efforts to ensure the timely formulation and prescription of standards for digital transmission, digital compression, and a standard security interface system. We pledge

our continuing cooperation with the Commission and the Advisory Group so that implementation of Section 17 can continue in a constructive and effective manner.

Respectfully Submitted,

CONSUMER ELECTRONICS GROUP
ELECTRONIC INDUSTRIES ASSOCIATION

By: 

Barbara N. McLennan
Staff Vice President
Government and Legal Affairs

By: 

George A. Hanover
Staff Vice President
Engineering

2001 Pennsylvania Avenue, N.W.
Washington, D. C. 20006
(202) 457-4900

Of Counsel:

James L. Casserly
Squire, Sanders & Dempsey
1201 Pennsylvania Avenue, N.W.
Post Office Box 407
Washington, D.C. 20044
(202) 626-6600

February 16, 1994