



NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION

WILLIAM A. CHECK, PH.D. VICE PRESIDENT, SCIENCE AND TECHNOLOGY

1724 MASSACHUSETTS AVE N.W. WASHINGTON, D.C. 20036-1903

TEL: 202.775.3637 FAX: 202.775.3698

December 31, 2002

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street S.W.
Washington, D.C. 20554

Re: **Compatibility Between Cable Systems And Consumer Electronics
Equipment PP Docket No. 00-67**

Pursuant to the Commission's Report and Order ("R&O") in the above captioned proceeding, and on behalf of the National Cable & Telecommunications Association ("NCTA"), I am submitting the fifth progress report called for in the R&O.

On September 14, 2000, the Commission released its Report and Order in this proceeding addressing issues regarding the compatibility between cable television systems, digital television ("DTV") receivers and other consumer electronics equipment.¹ In the R&O, the Commission requested that the cable and consumer electronics industries report by October 31, 2000, and every six months thereafter until October 2002, on progress in implementing the February 22, 2000 agreements between the two industries.² Those agreements dealt with the technical requirements for direct connection of DTV receivers to digital cable systems and for the provision of tuning and program scheduling information to support the navigation functions of DTV receivers. The Commission also asked for information on efforts to develop standards for an "integrated bi-directional receiver." NCTA filed our last report on April 30, 2002, and is pleased to provide the following update on our efforts in these matters.

While these status reports are specifically limited to updates on the February 2000 NCTA-CEA agreements and the status of specifications for the integrated bi-directional receiver, as the Commission is aware, on December 19, 2002, eight cable companies who serve over 75% of the nation's cable subscribers, and 14 consumer electronics companies, representing the majority of HDTV sales in the United States, submitted to the Commission a comprehensive agreement on cable compatibility and other digital transition issues.

¹ In the Matter of Compatibility Between Cable Systems and Consumer Electronics Equipment, Report and Order, PP Docket No. 00-67, FCC 00-342, released September 15, 2000.

² The Commission subsequently changed the date for filing the first progress report to November 30, 2000; Erratum, PP Docket No. 00-67, released October 25, 2000. By letter dated November 13, 2002, to Michael Petricone of the Consumer Electronics Association and Neal Goldberg of NCTA, the Chief, Media Bureau, extended the time for filing this report until December 31, 2002.

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That agreement was the culmination of months of negotiations between cable company business and technical representatives and their consumer electronics manufacturer counterparts and consists of a package of (1) private industry agreements and (2) joint recommendations to the FCC for rules to implement some parts of the Agreement. This report does not directly address that agreement, portions of which we expect will be the subject of an FCC notice-and-comment rulemaking in the near future.

Bi-directional DTV Specification

In the R&O, the Commission established labels for three types of DTV receivers: (1) a unidirectional receiver capable of direct connection to a cable system; (2) a unidirectional receiver capable of direct connection to a cable system but that also includes a IEEE 1394 interface for the receipt of advanced and interactive services; and (3) a bi-directional receiver capable of direct connection to a cable system and of accessing interactive services using that direct connection. However, because specifications for an integrated bi-directional DTV receiver had not yet been finalized, the Commission ordered that the docket remain open and that the cable and consumer electronics industries provide periodic reports on the development of such specifications.

As we have reported in our last three status reports, on December 31, 2000, Cable Television Laboratories Inc. ("CableLabs") released the *OpenCable Terminal Device CORE Functional Requirements for Bi-directional Cable* specification, which established the functional requirements for a DTV receiver capable of direct connection to, and operation on, a bi-directional cable system. CableLabs then incorporated the requirements contained in this, and all OpenCable Host specifications, into a single document -- the *OpenCable Host Device Core Functional Requirements*.³ This revised document describes the requirements for OpenCable Host devices. The public release of this document occurred on December 28, 2001.

NCTA/CEA February 2000 Agreements

On February 22, 2000, NCTA and the CEA reached a set of voluntary agreements, which will allow consumer DTV sets to be connected directly to digital cable systems to provide certain features and functions. In particular, the features and functions negotiated and agreed to by CEA and NCTA that would be provided by these types of DTV models, and spelled out in the agreements, are:

³ OC-SP-HOST-CFR-I11-021126, OpenCable™ Host Device Core Functional Requirements. It can be downloaded from <http://www.opencable.com/specifications.html>

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- Analog television programs that are transmitted in the clear.
- Digital television programs that are transmitted in the clear.
- Scrambled digital television programs that can be authorized by one-way downstream data transmission to a Point of Deployment ("POD") replaceable security module supplied by a cable TV system operator. These include subscription television programs and pay-per-view programs that are separately ordered by telephone.
- The carriage of data, when available, to support the navigation function in the receiver as defined in a separate "PSIP" agreement.

1. The Technical Agreement

The first agreement reached in February 2000 addressed network interface specifications. On November 27, 2001, the Engineering Committee of the Society of Cable Telecommunications Engineers ("SCTE") unanimously approved the *Digital Cable Network Interface Standard* which implements the technical agreement reached by NCTA and CEA on February 22, 2000. That standard defines the technical characteristics and normative specifications for the network interface between a cable television system and commercially available consumer equipment that is used to access multi-channel video programming. The interface is also compatible with existing set-top terminal equipment deployed by cable operators and with terminal equipment developed using the OpenCable specifications. This standard, formerly DVS/313, is now denominated SCTE 40 2001 and is available on the SCTE web site (www.scte.org).⁴

The SCTE Engineering Committee also unanimously approved the two standards previously referred to by CEA as being "substantially related to implementation of the February 22 agreements"⁵: (1) ANSI-SCTE 28 2001 (formerly DVS/295), the Host-POD Interface Standard, which defines the characteristics and normative specifications for the interface between the POD separate security modules owned and distributed by cable operators and consumer electronics devices ("host devices") that are used to access multi-channel video programming carried on cable systems; and (2) ANSI-SCTE 41 2001 (formerly DVS/301),

⁴ An amendment to SCTE 40 2001 is currently under consideration by the SCTE Digital Video Subcommittee. DVS/535 proposes to amend SCTE 40 2001 to address comments received during its ANSI public review.

⁵ See Letter from Michael Petricone, Vice President, Technology Policy, Consumer Electronics Association, to Magalie Roman Salas, Secretary, FCC, PP Docket No. 00-67, May 3, 2001.

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the POD Copy Protection Standard, which defines the characteristics and normative specifications for the system that prevents the unrestricted copying of high value content as it crosses the POD-Host interface.⁶

Earlier this year, and consistent with the cable industry's commitment to the February 2000 agreements, the OpenCable process, and the OpenCable specifications for an integrated DTV set in particular, cable operators committed that they would support integrated DTV sets built to CableLabs specifications (now embodied in the above SCTE standards) so that those DTV sets can provide services operators make available to their customers using their leased set-tops.⁷ The agreement between cable MSOs and consumer electronics manufacturers regarding cable compatibility and related matters furthers this commitment.

2. The PSIP Agreement

The second NCTA-CEA agreement reached in February 2000 detailed the requisite conditions necessary to carry, when available from the content provider, Program and System Information Protocol ("PSIP") data on cable systems to support consumer digital receiving devices connected directly to the cable TV system. As we have stated in previous status reports, none of the requirements or implementation scenarios stated in the PSIP agreement requires the development of additional technical specifications or standards; however, they may require upgrade or replacement of existing equipment by individual cable operators.

To date, each of the implementation scenarios outlined in the February 2000 CEA and NCTA agreement has been evaluated through testing now completed at CableLabs. The most fundamental of these scenarios is for the cable operator to ensure that when PSIP is received from an off-air broadcaster, it can be carried on the cable plant consistent with the Agreement. It is our understanding that PSIP equipment has been developed and is now available from several manufacturers. Cable operators continue to work individually with CableLabs and leading manufacturers of PSIP-related products to analyze their specific product needs.

⁶ Amendments to both of these standards are currently under consideration by the SCTE Digital Video Subcommittee. DVS/519r2 proposes to amend ANSI-SCTE 28 2001 to support the CableLabs OpenCable Applications Platform ("OCAP") version 1.0 and 2.0 capabilities. DVS/301r4 proposes to amend ANSI-SCTE 41 2001 to address security issues, and add support for X.509 digital certificates.

⁷ See Letter from William Check, Vice President, Science and Technology, National Cable & Telecommunications Association, to Rick Chessen, Associate Bureau Chief, Mass Media Bureau, PP Docket No. 00-67, February 28, 2002.

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As the above report indicates, progress has been ongoing in the three areas about which the Commission asked NCTA and CEA to report – implementation of the February 2000 NCTA-CEA technical and PSIP agreements and on the development of standards for an “integrated bi-directional receiver.” Perhaps nothing better reflects the progress on cable/consumer electronics compatibility issues than the recent agreement between cable operators and consumer electronics manufacturers. We look forward to working with the consumer electronics industry and the Commission in implementing the terms of the recent agreement.

Respectfully submitted,



William A. Check, Ph.D.
Vice President, Science and Technology

cc: Chairman Michael K. Powell
Commissioner Kathleen Abernathy
Commissioner Michael Copps
Commissioner Kevin Martin
Commissioner Jonathan S. Adelstein

W. Kenneth Ferree, Chief, Media Bureau
Thomas Horan, Legal Advisor to Chief, Media Bureau
William Johnson, Deputy Chief, Media Bureau
Deborah Klein, Chief of Staff, Media Bureau
Mary Beth Murphy, Chief, Policy Division, Media Bureau
Steve Broeckhart, Deputy Chief, Policy Division, Media Bureau
John Wong, Division Chief, Engineering Division, Media Bureau
Michael Lance, Deputy Chief, Engineering Division, Media Bureau
Robert Pepper, Chief, Office of Plans and Policy
Amy Nathan, Senior Legal Counsel, Office of Plans and Policy
Jonathan Levy, Deputy Chief Economist, Office of Plans and Policy
Bruce Franca, Deputy Chief, Office of Engineering and Technology
Rick Chessen, Associate Bureau Chief, Media Bureau
Susan Mort, Attorney Advisory, Media Bureau