



NATIONAL CABLE TELEVISION ASSOCIATION

DOCKET FILE COPY ORIGINAL

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

April 30, 2001

RECEIVED

APR 30 2001

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Magalie R. Salas
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 Television Association ("NCTA"), I am submitting the second progress report called for in the R&O.

On September 14, 2000, the Commission released its Report and Order in this proceeding to help resolve outstanding issues regarding the compatibility between cable television systems, digital television 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 digital receivers to digital cable systems and on 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 the first such report on November 30, 2000, and is pleased to provide the following update on our efforts in these matters.

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; 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 digital television 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.

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.

No. of Copies rec'd 0
List A B C D E

Ms. Magalie R. Salas
April 30, 2001
Page 2

In our November 30, 2000 report, we discussed the ongoing efforts of CableLabs to develop such specifications for a direct connection “integrated” bi-directional digital television receiver. As we reported, the *OpenCable Terminal Device CORE Functional Requirements for Bi-directional Cable* specification, released to OpenCable participants for review on November 8, 2000, establishes the functional requirements for a digital television receiver that can operate on a bi-directional cable plant, and that can access interactive services using that direct connection.

We are pleased to report that after following the OpenCable review process,³ which allowed sufficient time for review by cable operators and equipment manufacturers, including consumer electronics equipment manufacturers among others registered to participate in the OpenCable process, the public release of this specification occurred on December 31, 2000. Consequently, manufacturers now have the hardware specification to build a bi-directional digital television receiver product that will be compatible with OpenCable architecture.⁴

It is important to note, however, that while this specification is sufficient for manufacturers to begin developing bi-directional digital television products, CableLabs is also developing the OpenCable Application Platform (“OCAP”) -- or middleware -- software specification. This specification includes a set of Application Programming Interfaces (“APIs”) designed to establish a road map for companies to create applications for services that operate seamlessly over the broadband cable network. By adding software interfaces to the existing OpenCable hardware platform, OCAP will provide consumer electronics manufacturers and retailers even greater ability to build set-top boxes or integrated television receivers capable of providing the same services available on set-tops provided by the cable operator. In addition, OCAP will also support the portability of navigation devices – a goal encouraged, but not mandated, by the Commission.

³ The OpenCable process through which this specification was developed, reviewed, and refined is an open and inclusive process, with participation by a broad spectrum of interests, including almost 400 private sector and governmental organizations. The list encompasses a wide range of organizations, including cable operators, traditional cable equipment manufacturers, *consumer electronics manufacturers*, retailers, content providers, computer manufacturers, software developers, satellite service providers, telecommunications equipment manufacturers and service providers, governmental agencies, research institutes, and trade associations.

⁴ This specification includes a requirement for a 1394/5C interface. Content-protected digital interfaces may be critical, even on DTV receivers with “integrated” bi-directional capabilities, to permit receipt by consumers of certain services cable provides in the future.

Ms. Magalie R. Salas
April 30, 2001
Page 3

NCTA/CEA Technical Agreements

On February 23, 2000, the Consumer Electronics Association (CEA) and NCTA reached a voluntary set of agreements that will help foster compatibility between consumer digital television receiving devices and cable television systems. The agreements detail the technical specifications that will enable consumers to receive digital programming and services over cable systems.⁵

The first agreement addressed the network interface specifications that permit direct connection of consumer digital receivers to cable television systems. These network interface specifications were adopted by the Society of Cable Telecommunications Engineers ("SCTE") as a US cable industry standard ("DVS 313") on May 30, 2000.⁶ Following its adoption as a standard, this document proceeded through a comment resolution and re-balloting process, which included participation from both the cable industry and the consumer electronics industry. We are pleased to report that this process concluded on April 4, 2001. All comments were resolved to the satisfaction of the parties that submitted them. DVS 313 assures a cable customer who buys a digital television receiver built to that standard that the set will connect directly to a cable system.

The second agreement detailed the requisite conditions necessary to carry, when available, Program and System Information Protocol ("PSIP") data on cable systems to support consumer digital receiving devices connected directly to the cable TV system. To our knowledge, none of the implementation scenarios outlined in the agreement requires the development of additional technical specifications or standards, but they may require upgrade or replacement of existing equipment or additional product development by individual cable operators. The cable industry is currently working with its manufacturers to analyze product and other needs to implement the carriage of PSIP over cable consistent with this agreement. As we said in our November 30 report, the agreement focuses on the carriage of PSIP through the distribution chain and not its creation by program providers. As such, these carriage requirements are based on the availability of PSIP data from the content provider.

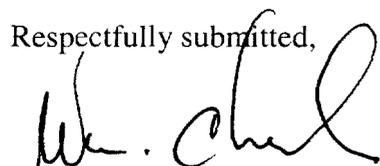
⁵ See Letter from Robert Sachs, President and CEO, NCTA, and Gary Shapiro, President and CEO, CEA, to William E. Kennard, Chairman, FCC, February 22, 2000.

⁶ DVS 313, *Digital Cable Network Interface Standard*, defines the 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 via the OpenCable specification process for retail sale.

Ms. Magalie R. Salas
April 30, 2001
Page 4

The cable industry and CableLabs will continue working to jointly develop specifications which will foster the compatibility between cable systems and consumer electronics products and which will permit consumers to receive and use all of the features and services that their cable operators offer.

Respectfully submitted,



William A. Check
Vice President, Science and Technology

cc: Chairman Michael K. Powell
Commissioner Susan Ness
Commissioner Harold Furchtgott-Roth
Commissioner Gloria Tristani
Bruce Franca, Acting Chief, Office of Engineering and Technology
Deborah Lathen, Chief, Cable Services Bureau
William Johnson, Deputy Chief, Cable Services Bureau
Robert Pepper, Chief, Office of Plans and Policy
Amy Nathan, Senior Legal Counsel, Office of Plans and Policy
Jonathan Levy, Economist, Office of Plans and Policy
Gary Shapiro, President, Consumer Electronics Manufacturers Association
Edward O. Fritts, President and CEO, National Association of Broadcasters
Robert Sachs, President & CEO, NCTA