

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

In the Matter of:

Implementation of Section 304 of the
Telecommunications Act of 1996

CS Docket No. 97-80

Commercial Availability of Navigation
Devices

PP Docket No. 00-67

Compatibility Between Cable Systems and
Consumer Electronics Equipment

**THE NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION'S
REPLY TO OPPOSITIONS AND COMMENTS TO NCTA PETITION FOR
RECONSIDERATION**

The National Cable & Telecommunications Association (“NCTA”), pursuant to Section 1.429 of the Commission’s Rules, 47 C.F.R. §1.429, hereby replies to the Oppositions and Comments to NCTA’s Petition for Reconsideration or Clarification of the *Second Report & Order*¹ filed by Microsoft Corp., Hewlett Packard Corp. and Apple Computer, Inc. jointly (“Microsoft”), by the National Association of Broadcasters (“NAB”), and the Consumer Electronics Industry (“CEA”) in this proceeding.

I. Microsoft’s Proposal For Self-Certification Amounts To An Untimely Request For Reconsideration, and, In Any Event, Has No Merit.

Microsoft’s “Comments” on NCTA’s reconsideration petition in fact request major changes in the FCC rules governing testing for Unidirectional Digital Cable

¹ *Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices and Compatibility Between Cable Systems and Consumer Electronics Equipment*, CS Docket 97-80 and PP Docket No. 00-67, Second Report and Order and Second Further Notice of Proposed Rulemaking, 18 FCC Rcd 20885 (2003) (“*Second R&O*”).

Products (“UDCPs”). These should have been sought in a timely petition for reconsideration. Because the 30-day limit is statutory and jurisdictional, Microsoft’s requested changes must be dismissed.

Microsoft’s requested changes are also without merit. Primarily, Microsoft takes issue with the role CableLabs plays as a testing laboratory for verifying that the first UDCP and first Digital Television (“DTV”) produced by each manufacturer passes the Joint Test Suite (JTS).² This is a role agreed upon by cable MSOs and CE manufacturers in the 2002 Memorandum of Understanding (“MOU”), which led to the “plug and play” rules. CableLabs’ role is critical in insuring that “cable ready” products work as intended. CE manufacturers have never before built set-top box functionality into integrated DTVs nor been responsible for protecting the copy control signals and business models that make the cable industry work. Manufacturing errors, intentional or negligent, may jeopardize cable’s signal security or cause devices not to work properly with cable systems. CE manufacturers, who had long been at odds with CableLabs over testing, licensing and certification requirements, agreed that CableLabs should play a central role in the UDCP testing regime. Microsoft’s theory that self-certification may be easier pays no regard to cable’s concerns over security that Section 629(b) of the Communications Act *requires* that FCC rules protect.³

² 47 C.F.R. §15.123(c)(1); “Each CE manufacturer will bring a prototype of its first POD-enabled Unidirectional Digital Cable Television to CableLabs or to an appropriately qualified third-party test facility to execute the Test Suite.” Memorandum Of Understanding (“MOU”) ¶ 3.7, *available at Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices; Compatibility Between Cable Systems and Consumer Electronics Equipment*, Further Notice of Proposed Rulemaking, 18 FCC Rcd 518, 545 (2003) (“FNPRM”).

³ Microsoft implies that CableLabs is by rule the exclusive test facility for UDCPs. Microsoft Comments at 5-6. That, of course, is not the case. Under the FCC rules, other appropriately qualified facilities may test UDCPs. 47 C.F.R. §15.123(c)(2).

Microsoft suggests that testing at CableLabs is exclusively for the benefit of the cable industry. But CE manufacturers benefit greatly from the CableLabs testing experience. Utilizing CableLabs Development Support process, for example, CE Manufacturers have been able to identify and correct significant issues with products under development (e.g., tuning implementation, closed caption information, processing of PSIP and EAS related information). Although nine independent development and testing labs are available for UDCP assistance,⁴ over the past six months, 30 major manufacturers of digital televisions and related products have utilized *CableLabs*' state-of-the-art testing facilities, including headend equipment, test tools, and personnel to help evaluate and develop their CableCARD-enabled products. Two large manufacturers have made the choice to pursue the full CableLabs OpenCable certification test procedures. A total of seven models of digital television sets have been certified under the OpenCable process.⁵ Many other manufacturers are at this moment in Certification and Verification testing at CableLabs.⁶

It is significant that Microsoft has not disputed one single point of the exhaustive description about CableLabs' qualifications or objectivity that NCTA provided in its Petition for Reconsideration.⁷ CEA and its TV manufacturer members—who have never been shy about criticizing CableLabs testing and related requirements when they thought it warranted—agreed that testing of the first DTV initially belonged at CableLabs. The

⁴ Those currently known to us are posted at <http://www.opencable.com/testing/testing.html> (testing) and <http://www.opencable.com/testing/support.html> (development support). These facilities do not yet perform full Verification testing.

⁵ http://www.cablelabs.com/news/pr/2003/03_pr_oc_samsung_cert_121703.html (Samsung); http://www.cablelabs.com/news/pr/2003/03_pr_oc_certified_081403.html (Panasonic).

⁶ The current test wave is scheduled to conclude March 26, 2004. The next test wave begins April 12. http://www.opencable.com/downloads/2004_OC_CertSchedule.pdf

⁷ NCTA Petition for Reconsideration or Clarification at 12-17.

CE industry's explicit endorsement of CableLabs in the MOU and its implicit endorsement by bringing products to CableLabs for testing, demonstrates that retaining CableLabs' role in UDCP testing is critical to the development and deployment of cable ready products that do not jeopardize the security or services of the cable network. Microsoft offers nothing to support a contrary conclusion.

Indeed, Microsoft seems not to have even familiarized itself with CableLabs' actual operation or applicable standards. For example, Microsoft requests that the FCC order CableLabs to publish its test procedures. They have been published and posted for months.⁸ Microsoft requests that the FCC order CableLabs to provide manufacturers with detailed reports for passing or failing Verification. CableLabs does so—and so states in its posted Test Wave Guidelines.⁹ Microsoft also asks that a party denied Verification have recourse to an FCC appeal. Manufacturers have not been reluctant to bring complaints to the FCC, and we would expect complaints would be brought pursuant to Section 15.123 of the Commission's rules if the testing regime actually—rather than theoretically—fails to operate properly.¹⁰ Finally, Microsoft asks that the Commission order CableLabs to let manufacturers sit on the test Verification panel. But, as the

⁸ Microsoft Comments at 7. See <http://www.cablelabs.com/udcp/>, which includes Test Guidelines for Unidirectional Digital Cable Products; Joint Test Suite PICS; Joint Test Suite ATP (Acceptance Test Procedure); and Vendor Submitted Documentation Recommendations.

⁹ Microsoft Comments at 7. See http://www.cablelabs.com/udcp/downloads/UDCP_Guidelines.pdf (at ¶ 6). Alternatively, Microsoft asks that Manufacturers be present in the common test lab during simultaneous testing, oblivious to the fact that products are submitted in confidence in a market of intense competition among manufacturers. CableLabs "Rules of Engagement" prevent such open disclosure of proprietary information to competitors (at ¶ 7.2) by not allowing any participants in the lab during testing. Presence of the manufacturers during testing would also tend to compromise impartiality.

¹⁰ Microsoft Comments at 7.

Commission has recognized, keeping the panel free of the manufacturers of the products being verified is critical to the definition of “independent.”¹¹

Microsoft presents its requests for changes in the current testing regime as part of a temporary alternative to its preferred arrangement, where Microsoft could self-certify its first DTV or preferably, a UDCP subsystem.¹² NCTA has explained in detail why the parties to the MOU agreed on a path toward self-certification that started with Verification of the first DTV at a qualified lab.¹³ Microsoft simply ignores that explanation.

Microsoft also ignores the experience it has had with self-certification of its own operating system. In the past year alone, Windows XP has had 57 critical and/or service packs, with 45 additional recommended “updates,” for a total of 102 corrections since the release of Service Pack 1. This does not even count Internet and Multimedia “updates,” or “additional Windows downloads.” In the past year alone, Windows 2000 has had 72 critical and/or service packs, 2 Advanced Security patches, and 14 additional

¹¹ Microsoft Comments at 2, 7. Separation from manufacturers is one of the central criteria for the “independence” of testing laboratories under FCC standards. *See, e.g. 1998 Biennial Regulatory Review - Amendment of Parts 2, 25, and 68 of the Commission's Rules (GMPCS)*, GEN Docket No. 98-68, Report and Order, 13 FCC Rcd 24687, 24695 (1998). “Guide 65 clearly requires that the certifying body be impartial. More specifically, clause 4.2 of Guide 65 requires that the certifying body ‘not supply or design products of the type it certifies’ nor ‘provide any product or service which could compromise the confidentiality, objectivity or impartiality of the certification process and decisions.’” *Id.* at 24697. The Commission also expected that a manufacturer would not be used as a subcontractor “to test its own products or similar products made by a competing manufacturer.” *Id.* By contrast, the MSOs who make up CableLabs and its Certification and Verification Panels are not in the business of manufacturing devices which compete with those being tested. Instead, MSOs are in a position to make certain that all devices work on their systems so their services will be deliverable to customers.

¹² Microsoft Comments at 3. Microsoft also asks that certification of a “device subsystem” should suffice as the first UDCP DTV. *Id.* at 3-4. It offers no suggestion of how a “device subsystem” can be tested independent of the device which is supposed to process the video and house the outputs. Such a regime invites defects in meeting JTS standards and/or output restrictions, especially for the larger “systems” that have outputs that a “subsystem” would not. In any event, as with its other requests for changes in the testing regime, Microsoft has not raised these points in a timely request for reconsideration.

¹³ NCTA Petition for Reconsideration or Clarification at 11-12.

recommended “updates,” for a total of 88 corrections since the release of Service Pack 2.¹⁴ This experience has been widely criticized as unfair to consumers.¹⁵ It is not the model for the roll-out of functional first-generation “cable ready” one-way DTVs that have no guaranteed interactive path for bug fixes, nor the right footing to build consumer confidence in a digital transition. The FCC adopted the current testing regime based in part on a record of product certification programs similar to that of CableLabs.¹⁶ Microsoft offers no factual foundation for changing any aspect of this detailed and successfully functioning arrangement. Its opposition is without merit.¹⁷

II. The NAB Seeks To Expand The Range Of PSIP Carriage To Data Enhancements Which Were Not Intended to be Included in the Rules as Adopted

NCTA requested three clarifications to the PSIP rules which arose from the CEA-NCTA February 2000 PSIP agreement, incorporated verbatim into the MOU. CEA has agreed that NCTA’s interpretation is correct and that the FCC should clarify its rule

¹⁴ Data compiled from Microsoft Windows Update, <http://v4.windowsupdate.microsoft.com/en/default.asp> (visited March 15, 2004). According to data compiled from the “Microsoft Security Bulletin Search,” <http://www.microsoft.com/technet/security/current.aspx>, since its release, Windows XP Professional has had a total of 77 Security patches, 50 of them critical.

¹⁵ Walter S. Mossberg, “PC Users Deserve a Free, Simple Service to Handle All Threats,” Wall Street Journal, p. B1 (March 11, 2004).

¹⁶ NCTA’s Reply Comments at 22-24 (filed April 28, 2003). For example, Intel Corp. and Nokia are among the bigger names that have joined WiMAX, a non-profit company whose goal is to promote and certify broadband wireless access equipment based on the IEEE 802.11 standard. WiMAX plans to develop conformance test plans, select certification labs and host interoperability events over the next 12 months – exactly as CableLabs does. Group Expanded to Promote New Wireless Broadband Technology Standard, <http://wimaxforum.org/index.asp> 04.08.2003

¹⁷ Equally without merit are the concerns raised over CableLabs’ role by American Antitrust Institute. Its Opposition recites, for example, an erroneous history of how DVI came to be included in set-top boxes (*compare* AAI Opposition at 3-4 *with* NCTA Opposition to Petitions for Reconsideration, at 5-9 (filed March 10, 2004)). AAI’s position is an apparent knee-jerk opposition to the use of working groups to develop standards as opposed to standard-setting bodies (ignoring how many technology problems have been promptly addressed in working groups) and an unjustified sympathetic reaction to Genesis’ patent litigation losses. Most importantly, after devaluing the working groups and the DVI process, AAI admits that it does not really know the facts. AAI Opposition at 4. AAI’s position is therefore without any basis and should be ignored.

accordingly.¹⁸ As to the first, NAB agrees that cable is permitted to carry *more* than 12 hours of PSIP event information, but proposes that such carriage be “permissible,” rather than at the “option” of the cable operator.¹⁹ NAB’s suggested change would import debates that belong only in the must carry docket. The 12 hours of EIT carriage was intended as a minimum, so anything more should be at the operators’ discretion.

As to the second proposed clarification, all agree that cable operators are not required to correct non-conforming event information and do not oppose NCTA’s requested language.

As to the third requested clarification, NAB does not disagree that the intent of the February 2000 PSIP agreement was that cable operators describe the available audio/video services contained within a transport stream that include PSIP data, but not data services or ancillary services. NAB opposes NCTA’s clarification request because it contends that data enhancements to programming *could* be as important to consumers as “audio and video elements.”²⁰ The February 2000 PSIP agreement specifically referred to available audio/video services, not to data enhancements.²¹ It was that agreement that the FCC intended to incorporate into its rules.²² Any additional “must carry” requirements that NAB seeks should be deferred to the must carry docket, exactly as the

¹⁸ CEA states that “it has no reason to object” to the clarifications sought by NCTA. CEA Opposition to Petitions for Reconsideration at 25.

¹⁹ NAB Response at 3.

²⁰ NAB Response at 4. NAB also acknowledges that A/65B prohibits the use of EITs for ancillary data services. *Id.*, note 13.

²¹ In particular the parties agreed to making a map of “all available audio/video services” available to the digital receiver. *FNPRM*, “Carriage of PSIP over Cable Plants,” ¶ 2.1, 18 FCC Rcd at 555.

²² *Second R&O*, 18 FCC Rcd at 20896 (¶¶ 21-23).

Commission handled NAB's other proposed PSIP modifications earlier in this proceeding.²³

III. The Consumer Electronics Industry Objections are Without Merit

While supporting NCTA's proposed rule changes, CEA nonetheless offers some pro forma objections to NCTA's Petition.

CEA mischaracterizes the cable industry's concern over the compliance and robustness of UDCPs as one focused only on the POD-Host interface.²⁴ It should be evident from the MOU, if nothing else, that the security arrangements for UDCPs do not and cannot stop at the interface, because compliance, robustness, outputs, and points of attack are all downstream in the UDCP itself. It is critical to the success of UDCPs that they be tested and Verified to be sure they receive and display the services provided. First time failures in the field risk driving consumers away from "digital cable ready" devices (or cable altogether), even if such failures are later remedied.

CEA also suggests (at 26) that NCTA has an objection to the use of independent labs for testing UDCPs. That is not the case. In fact, CableLabs has posted available alternative testing and development labs on its website to assist manufacturers with product development. NCTA's petition merely sought a rule change to assure that when conducting Verification testing such labs are not only "knowledgeable" but independent, objective, impartial, equipped, and have competent personnel. If they are not, testing, and the security that depends on it, is at serious risk. In discussing the criteria for independence of testing facilities, CEA suggests that CableLabs' impartiality could be

²³ *Id.*, 18 FCC Rcd at 20896 (¶ 23).

²⁴ CEA Opposition at 26.

questioned since its MSO owners “now control the navigation device market exclusively, and may—indeed ought to—view devices CableLabs tests as providing competition for their own devices.”²⁵ As the CE community knows, cable operators are in the business of selling services, not in the device business. The more options consumers have to acquire devices that can access cable services—and the more potential suppliers of devices to cable operators there are—the better it is for cable operators. To suggest that because cable operators are the members of CableLabs there may be a question about the impartiality of CableLabs is a base canard that we had hoped had long ago been buried.²⁶

The consumer electronics manufacturers and retailers have made it plain that they want no output or device revoked, even if compromised.²⁷ The cable industry does not think that is the right solution, but given the stakes, and the manufacturers’ resistance to revocation, it is imperative that testing be done competently and correctly so that revocation is not required in the first place. In reality, having a qualified independent lab test the first product does make a difference.

CONCLUSION

For the foregoing reasons, NCTA urges the Commission to amend its rules, clarify the qualifications for testing facilities and clarify the PSIP carriage requirements as requested in NCTA’s Petition for Reconsideration and Clarification and in the Joint

²⁵ CEA/CERC at 26

²⁶ CEA also suggests (at 26) that a single national target like the POD-Host interface or copy protection is not a more tempting target than more differentiated security, when the professional literature, the experience of security professionals, and experience in the industries are to the contrary. NCTA Petition for Reconsideration and Clarification at 14, n. 21. CEA’s additional suggestion (at 26) that the cable industry’s security concerns are adequately addressed through the availability of *ex post* anti-circumvention or infringement litigation is also contrary to the premise of installing effective technological *ex ante* measures.

²⁷ CEA Comments, February 13, 2004 at 8-9; CERC Comments, February 13, 2004 at 3-4. *See* NCTA Reply Comments at 25-27.

Proposal submitted by NCTA and the Consumer Electronics Industry in their respective filings of March 10, 2004.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Julie P. Gordy, do hereby certify that a copy of the foregoing “National Cable & Telecommunications Association’s Reply to Oppositions and Comments to NCTA Petition for Reconsideration” was served by United States First Class Mail, postage prepaid, this 24th day of March, 2004 on the following:

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