

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

In the Matter of	)	
	)	
Implementation of Section 304 of the Telecommunications Act of 1996	)	CS Docket No. 97-80
	)	
Commercial Availability of Navigation Devices	)	
	)	
Compatibility Between Cable Systems and Consumer Electronics Equipment	)	PP Docket No. 00-67

**REPLY COMMENTS OF CISCO SYSTEMS, INC.**

Cisco Systems, Inc. ("Cisco") submits these reply comments in response to the Third Further Notice of Proposed Rulemaking ("*Notice*") issued by the Federal Communications Commission ("Commission") in the above-captioned proceeding.<sup>1</sup> Cisco's Scientific-Atlanta subsidiary is a major supplier of set-top boxes to the cable industry and has worked closely with the Multichannel Video Programming Distributor ("MVPD") industry regarding the Commission's efforts to promote the commercial availability of navigation devices under Section 629 of the Communications Act, as amended.<sup>2</sup> As a result, Cisco brings a unique and well-informed perspective to the issues presented in the *Notice*.

**I. THE COMMISSION SHOULD ENCOURAGE A PLUG-AND-PLAY SOLUTION THAT IS UNIVERSAL AND PLATFORM-AGNOSTIC**

In the *Notice*, the Commission sought comment on how best to ensure the commercial availability of two-way plug-and-play devices pursuant to Section 629.<sup>3</sup> The initial comments

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<sup>1</sup> *Implementation of Section 304 of the Telecommunications Act of 1996*, Third Further Notice of Proposed Rulemaking, 22 FCC Rcd 12024 (2007) (FCC 07-120) ("*Notice*").

<sup>2</sup> 47 U.S.C. § 549.

<sup>3</sup> *Notice* ¶¶ 1, 8-12.

in this proceeding expressed broad support – from cable companies, wireline video providers, and others – for pursuing an approach that will encourage the development of technology- and platform-agnostic interface devices.<sup>4</sup>

Cisco supports this approach. Unless navigation devices purchased at retail can easily connect to the video service of *any* MVPD operator and to *all* two-way interactive services, consumers will be confused and unwilling to purchase costly retail navigation devices. In that event, a competitive retail market for such devices would be unlikely to develop. Not only would consumers continue to lack two-way functionality on digital cable-ready devices, but they could be deterred from purchasing digital televisions, thereby delaying an effective digital transition.<sup>5</sup> The best way to avoid this scenario is to encourage the development of a universal, platform-agnostic interface device such as those proposed by Time Warner Cable (“TWC”), Verizon, and other parties.<sup>6</sup> The Commission also should adopt proposals by the commenters to pair this universal approach with binding obligations on consumer electronics device manufacturers to ensure their commitment to making plug-and-play devices available.<sup>7</sup>

Cisco believes it is technically feasible to develop and deploy a universal plug-and-play device which all MVPDs could use to supply their own conditional access technology and to enable 2-ways services. Cisco understands that some consumer electronics manufacturers have already expressed interest in such a solution.

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<sup>4</sup> See, e.g., Comments of Time Warner Cable Inc. at i (“TWC Comments”); Comments of Verizon at 1-5 (“Verizon Comments”). (All comments cited herein were filed in CS Docket No. 97-80 on August 24, 2007.)

<sup>5</sup> See Notice ¶ 7.

<sup>6</sup> See *supra* note 4.

<sup>7</sup> See TWC Comments at i, 21. The Commission successfully imposed such binding obligations on manufacturers as part of its digital television (“DTV”) tuner mandate. *Id.* at 21.

While a universal solution is the best way to implement section 629, in the near term, other approaches – like the OpenCable Application Platform supported by the cable industry or standards being developed by the Alliance for Telecommunications Industry Solutions (“ATIS”) – may yield a viable option for bringing two-way digital cable-ready devices to market.<sup>8</sup> Cisco’s products fully support the OpenCable Platform, and Cisco will also support any efforts to build on OpenCable by developing a platform-agnostic, all-MVPD solution. Cisco also anticipates being able to develop products that fully support any standards adopted by ATIS for two-way functionality.

## **II. THE CEA PROPOSAL IS FUNDAMENTALLY FLAWED**

The *Notice* seeks comment on the “DCR+” proposal advanced by the Consumer Electronics Association (“CEA”).<sup>9</sup> As the initial comments make clear, the DCR+ proposal provides neither a viable short-term approach nor a long-term universal solution that will promote the public interest or section 629’s objectives.<sup>10</sup> Among other problems, the DCR+ proposal is technically flawed, would hamper innovation, and would fail to advance the DTV transition.

### **A. The CEA Proposal Is Technically Flawed**

The DCR+ proposal is technically flawed in two principal ways. First, it rests inordinately on speculation about completely new devices based on yet-to-be-developed standards and protocols. As a result, DCR+ devices likely would not be available for years,

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<sup>8</sup> See, e.g., TWC Comments at 22-25 (supporting OpenCable Platform proposal); Verizon Comments at 5-8 (supporting standards being developed by ATIS for two-way functionality).

<sup>9</sup> See *Notice* ¶¶ 8-9 & App. B.

<sup>10</sup> See, e.g., TWC Comments at ii, 26-40; Verizon Comments at 12-14.

following development of the requisite technical standards and all necessary IP clearances – long after the Q4 2008 timeframe favored by the Commission.<sup>11</sup>

Second, the DCR+ proposal rests on a fundamentally flawed technical paradigm: the ill-conceived bifurcation of cable services into “basic” and “advanced” two-way categories. Although CEA attempts to describe these two categories,<sup>12</sup> it does not adequately define the boundaries between them. Even apart from the inevitable boundary disputes that would ensue, this bifurcated scheme would, if implemented, prompt manufacturers to roll out large numbers of “basic” devices that would be advertised as fully interactive, but that would, in reality, fail to deliver that functionality. Consumers would be frustrated and confused. Absent a comprehensive labeling and consumer education regime, moreover, consumers would have no way of distinguishing between devices capable of receiving only “basic” two-way cable services and those devices that will be compatible with newly introduced “advanced” interactive cable services.

Compounding these problems, “basic” DCR+ devices would not even support some services that already exist in today’s marketplace. For example, TWC has developed an innovative time-shifting service called Start Over which utilizes Scientific-Atlanta / Cisco products.<sup>13</sup> The Start Over service, which is available to TWC’s cable customers in certain markets at no additional charge, enables digital cable customers to view a program from its beginning even if they tune in midway through it, without need for a DVR. Because this service would not be supported by “basic” product offerings, purchasers of such devices would be unable to enjoy it under a DCR+ regime. Thus, in addition to being speculative and technically

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<sup>11</sup> See Notice ¶ 14.

<sup>12</sup> See Notice, App. B at 5-8.

<sup>13</sup> See TWC Comments at 28.

flawed, the CEA proposal threatens to cut off access to highly popular services that consumers can already enjoy *today*.

### **B. The CEA Proposal Would Thwart Innovation**

The CEA proposal would severely curtail innovation, contrary to Congress's intent.<sup>14</sup> Encouraging consumers to invest disproportionately in "basic" interactive devices would diminish providers' incentives to develop new interactive services. The likelihood that many consumers would purchase limited-functionality devices without even knowing that the devices will not accommodate new interactive services would greatly exacerbate this problem. Moreover, consumers who purchase a DCR+ device would be unlikely to replace it shortly thereafter with a superior solution (such as an OpenCable- or ATIS-based device), thus ensuring that the drag on innovation caused by the DCR+ proposal would continue for years.

As commenters explained, the DCR+ proposal would further chill innovation by permitting CE devices to disaggregate and strip out operator content.<sup>15</sup> Adding to the uncertainty of whether a consumer's device will be able to display a particular service, operators would have to worry about devices blocking those features that the device actually can accommodate. These dual uncertainties would risk frustrating consumer expectations and diminishing the supply of innovative features in the long run.

Finally, the CEA proposal would prohibit operators from delivering any linear service on an on-demand, switched digital video basis – and, in turn, limit their ability to increase the number of high-definition channels they offer, boost broadband capabilities, or expand video-on-

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<sup>14</sup> See Telecommunications Act of 1996, Joint Explanatory Statement of the Committee of Conference, S. Conf. Rep. 104-230, 104th Cong., 2d Sess., at 181 (1996).

<sup>15</sup> See TWC Comments at 31-32, 39.

demand offerings – until various new protocols and standards are developed.<sup>16</sup> Such an approach would deny consumers the benefits of advances in interactive digital television until consumer electronics (“CE”) manufacturers “signed off” on the requisite platform extensions and protocol developments. The Commission should not allow CE manufacturers to hold operators hostage in this manner, but should, instead, allow operators to remain “free to innovate and introduce new products and services without regard to whether consumer electronics manufacturers are positioned to deploy substantially similar products and services.”<sup>17</sup>

### **C. The CEA Proposal Would Hinder the DTV Transition**

Adopting the CEA proposal would significantly slow the deployment of interactive digital cable-ready devices, and thus would delay the DTV transition. The CEA proposal would entail a cumbersome and time-consuming two-stage process: (1) development of several new technical protocols and standards, which would entail substantial reengineering of existing services and negotiation of complex intellectual property clearances, followed by (2) the deployment of the new standards at cable headends. *Neither* of those processes has yet to commence. The protracted timeframe needed to finish both processes not only would preclude accomplishing the Commission’s goal of deploying two-way devices in time for the 2008 holiday season,<sup>18</sup> but would likely delay the deployment of such devices for several additional

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<sup>16</sup> See TWC Comments at 32; Comments of the National Cable and Telecommunications Association at 41-43.

<sup>17</sup> *Implementation of Section 304 of the Telecommunications Act of 1996; Commercial Availability of Navigation Devices*, Second Report and Order, 20 FCC Rcd 6794, ¶ 30 (2005). The CEA proposal would leave CE manufacturers free to include any additional features or functionality in their host devices, no matter their impact on cable services or consumers. The selective imposition of burdens on cable operators alone under the CEA proposal would be particularly unjustified as a matter of policy and law.

<sup>18</sup> See Notice ¶ 14.

years. The Commission should not endorse a proposal that would so clearly disserve the public interest.

### **III. CONCLUSION**

For the foregoing reasons, the Commission should reject the fatally-flawed DCR+ proposal and instead encourage implementation of a universal plug-and-play solution that is technology- and platform-agnostic.

Respectfully submitted,

**CISCO SYSTEMS, INC.**

/s/ A. Richard Metzger, Jr.

A. Richard Metzger, Jr.

Charles W. Logan

Lawler, Metzger, Milkman & Keeney, LLC

2001 K Street, NW, Suite 802

Washington, DC 20006

(202) 777-7700

Counsel for Cisco Systems, Inc.

Jeffrey A. Campbell  
Director, Technology and  
Communications Policy  
Cisco Systems, Inc.  
1300 Pennsylvania Avenue, N.W.  
Washington, DC 20004  
(202) 354-2920

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