

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Charter Communications, Inc.’s)	CSR-8740-Z
Request for Waiver of Section 76.1204(a)(1))	MB Docket No. 12-328
of the Commission’s Rules)	

REPLY COMMENTS OF CHARTER COMMUNICATIONS, INC.

Charter Communications, Inc. (“Charter”) respectfully submits these reply comments in support of its request for a limited waiver from the integration ban in order to enable Charter to initiate implementation of an open-standard, downloadable security solution that supports third party retail devices.

I. Introduction

Under the leadership of its new Chief Executive Officer, Tom Rutledge, Charter is building a forward-looking, next-generation all-digital network. A key component to this transition is the launch of a downloadable security system. With the support of a previous Commission waiver, Mr. Rutledge previously led Cablevision’s successful deployment of downloadable security in 2009-2010, and now wants do the same for Charter. Charter needs temporary relief from the integration ban so that it can deploy dual security boxes containing both a chip that would serve as the future platform for non-integrated downloadable security, and the traditional integrated security that would be utilized during the two-year transitional period before downloadable security is activated. Even after downloadable security is initiated, Charter would continue to “simulcrypt” its services using both security technologies to maintain service to

customers with retail CableCARD devices and to Charter's legacy leased set-top boxes, 2.75 million of which also include CableCARDS.

Three comments were filed in opposition, but none of them dispute the preceding facts. Instead, they premise their opposition on gross misunderstandings about what is being proposed, and on arguments that they have made against nearly every request for waiver of the integration ban and which the Commission has rejected many times before. The Commission should reject those arguments again here, and grant the requested waiver.

II. Charter's Downloadable Security Would Use Code to be Included in Versatile Commodity Chips.

The opposition comments claim that Charter's downloadable security would rely on a proprietary chip supporting only Charter service and the conditional access system used by Charter.¹ This is not correct.

In fact, and as stated in the Request, Charter's implementation would make use of the commodity chips that power set-top boxes and consumer electronics devices – the same kinds of commodity chips (including several Broadcom chips) used by Cablevision's downloadable security. These same commodity chips can be used as a hardware root of trust for software-based security because the chip manufacturer can place special code in those chips as part of the ordinary supply chain.² The use of these chips does not commit the device only to Charter service or only to the security system

¹ CEA Comments at 2; Biller Comments at 2.

² See Charter Waiver Request at 3-4 (“The planned system would combine software-based security with a hardware root of trust housed in a commodity chip. The key ladder utilized for the hardware root of trust would be available in the same commodity chips that also support Cablevision's downloadable security. The key ladder will be made available on an open, royalty-free basis so that the chips may also be made available to retail host manufacturers through established supply chains.”).

used by Charter. It is routine for commodity chips to include code for many different functionalities, some of which the host device may use, some of which it may never use.³ The code for Charter's downloadable security will be made available royalty-free to facilitate easy inclusion in readily-available commodity chips. This is the same approach employed by Cablevision, and following it here will broaden the downloadable security footprint available for retail implementations.

III. Charter's Downloadable Security Request Provides for Common Reliance.

The opposition comments make a second set of mistakes by claiming that the relief requested would undermine common reliance and that the "waiver sought by Charter would free Charter entirely and indefinitely from the duty to supply and support CableCARDS."⁴ In fact, Charter's Request seeks relief only from the integration ban, and not from Charter's independent obligation to supply and support CableCARDS.

³ For example, Broadcom's system-on-a-chip solutions generally support various features and outputs that may or may not be used in a particular box. *See, e.g.*, Broadcom, Cable Set-Top Box Solutions, BCM7420, <http://www.broadcom.com/products/Cable/Cable-Set-Top-Box-Solutions/BCM7420> (last visited Dec. 5, 2012) (noting that the particular SoC supports H.264/AVC Main and High Profile to Level 4.1; VC-1 Advanced Profile @ Level 3; VC-1 Simple and Main Profile; HD MPEG-2 and SD MPEG-2; MPEG still-picture decode; DivX; MPEG-4 part 2 ASP decode; and H.263 and AVS). *See also* Press Release, Broadcom, *Broadcom Delivers Nine New 40 nm Set-Top Solutions for the Full Resolution 3DTV Internet Connected Home*, Jan. 4, 2011, available at <http://www.broadcom.com/press/release.php?id=s541251> (announcing SoC solutions that support full resolution HD 3DTV capabilities (including MPEG H.264 scalable and multi-view video coding standards and an OpenGL ES 2.0 3D graphics processing unit for advanced 3D graphics) and include additional features such as DDR3 memory interfaces; next generation security support; support for Android and Linux platforms; and application libraries and frameworks such as DLNA 1.5, Webkit HTML 5, Java, Nokia's Qt Framework, RVU Alliance's Remote User Interface, and the Adobe Flash Platform for TV); Press Release, Broadcom, *Broadcom Announces Industry's First MoCA-Integrated SoC Solutions for High Definition Set-Top Box and Gateway Applications*, Jan. 8, 2009, available at <http://www.broadcom.com/press/release.php?id=s358252> (announcing new SoC solutions that include, among other things, MoCA 1.1+ modem for home networking; 1080p/60 "full HD" quality video outputs; high-definition video decoders that support H.264, VC-1, MPEG-2, MPEG-4 Part 2, H.263 and DivX; multifunction audio decoder; and programmable security processor).

⁴ CEA Comments at 7.

Moreover, Charter relies on 2.75 million leased set-top boxes that include CableCARDs. As the Request sets forth, Charter will of necessity continue to provide and support CableCARDs before, during and after the waiver period.

The opposition comments object to any form of security in any cable operator leased device that differs from CableCARD.⁵ The Commission has previously rejected that argument. When Evolution Broadband sought a waiver for its integrated-security Digital Transport Adapters (DTAs), CEA made the same argument: that a waiver must be rejected because it would mean that not every cable operator device would use the same security used by all retail devices.⁶ The Commission disagreed, and granted the waiver for the industry to deploy a new security while continuing to support CableCARDs for leased and retail devices.⁷ The subsequent deployment of DTAs has had no adverse effect on support for retail devices.⁸ Charter's proposed waiver is consistent with this Commission precedent, and as the Request explains, Charter has already previously demonstrated that it supports CableCARDs even when not all of its leased set-top boxes include them.⁹

⁵ Mr. Biller incorrectly states that “[t]he concept of common reliance means that all MVPDs and all retail set-top box manufacturers rely on the same conditional access security system” for all of their navigation devices. Biller Comments at 4.

⁶ Comments of the Consumer Electronics Association, CSR-7902-Z; CS Docket No. 97-80 (June 16, 2008) at 5.

⁷ *In re Evolution Broadband, LLC's Request for Waiver of Section 76.1204(a)(1) of the Commission's Rules; Implementation of Section 304 of the Telecommunications Act of 1996; Commercial Availability of Navigation Devices*, Memorandum Opinion and Order, CSR-7902-Z; CS Docket No. 97-80, 24 FCC Rcd 7890, ¶ 14 (2009) (citing CEA Comments at 3, 5, n.4).

⁸ Cable operators have collectively deployed more than 37 million CableCARD-enabled set-top boxes. *See* NCTA Report, CS Docket No. 97-80, at 1 (Oct. 31, 2012).

⁹ Request at 8.

IV. Preference for a New Regulatory Regime is Not Grounds for Denial of Waiver from an Existing Rule.

The remaining contentions of the comments are not even about the merits of Charter's waiver. In another recent proceeding, CEA articulated its long-practiced policy: that it "has opposed and will continue to oppose any waiver that would undermine CableCARD common reliance unless and until an IP-based successor interface that is nationally standard and nationally portable is referenced in FCC regulations."¹⁰ Under this policy, CEA opposes the Charter waiver until the Commission completes a rulemaking to adopt CEA's preferred successor regime to CableCARDS. Likewise, Public Knowledge takes the position that an AllVid rulemaking is the only desirable path forward for home networking of retail devices.¹¹

These rote objections are no grounds for denying Charter's request for waiver. Waivers are warranted in individualized circumstances where application of the rule would impose costs that would outweigh its incremental benefits.¹² In this case, waiver

¹⁰ Comments of the Consumer Electronics Association, MB Docket No. 12-242; CS Docket No. 97-80; PP Docket No. 00-67, at 2 (Sept. 19, 2012). It also recounted that "CEA has opposed virtually every request for waiver of Section 76.1204(a)(1)." *Id.* at 6.

¹¹ The easy inclusion of additional code into readily-available commodity chips is not "equivalent," as Public Knowledge wrongly suggests, to requiring third-party manufacturers to include a "miniature" Verizon Fios Optical Network Terminal in every retail set-top box. Public Knowledge Comments at 2. Also, while not relevant to the outcome of this limited waiver proceeding, it should be noted that the Commission's HD set-top output rule (Section 76.640(b)(4)) has been designed to address much of Public Knowledge's interest in home networking.

¹² *KCST-TV, Inc. v. FCC*, 699 F.2d 1185, 1191-1192, 1195 (D.C. Cir. 1983) (vacating FCC denial of waiver request, holding that once the premise of the rule had been shown not to apply, the "logic of applying [the rule] collapses," and it was arbitrary to apply the rule). *See also WAIT Radio v. FCC*, 418 F.2d 1153, 1157-59 (D.C. Cir. 1969) ("[A] general rule, deemed valid because the overall objectives are in the public interest, may not be in the 'public interest' if extended to an applicant who proposes a new service that will not undermine the policy, served by the rule, that has been adjudged in the public interest."). As CEA stated in own petition for waiver from the ACS rules earlier this year, "the Commission may exercise its discretion to waive a rule where particular facts would make strict compliance inconsistent with the public interest," or

will help advance what the Commission has identified as its “preferred” method for cable operator separable security.¹³ Grant of the waiver is consistent with the Cablevision precedent.¹⁴ Grant of the waiver would facilitate Charter’s transition to an all-digital network, which the Commission has repeatedly found would deliver substantial benefits to consumers.¹⁵ Grant of the waiver would not have any adverse effect on consumers because Charter will have far more than sufficient common reliance on CableCARDs through its prior deployment of millions of CableCARDs in its own leased devices. Instead, grant of the waiver would benefit consumers by helping to advance new technologies.

V. No Other Valid Objections Have Been Raised.

None of the remaining concerns expressed by the opposition comments provide any basis for denying the waiver. CEA vaguely suggests that Charter might discriminate

alternatively, where ‘special circumstances warrant a deviation from the general rule and such a deviation will serve the public interest.’” *See Implementation of Sections 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010*, CG Docket No. 10-213, Consumer Electronics Association Petition for Waiver (March 22, 2012), at 16 (quoting *Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990)).

¹³ *See* Charter Request at 7, citing *Consolidated Requests for Waiver of Section 76.1204(a)(1) of the Commission’s Rules*, DA 07-2921, 22 FCC Rcd 11780 at ¶ 61 (2007).

¹⁴ CEA seeks to diminish that Cablevision precedent as “expired.” CEA Comments at 3 and notes 11, 13, 18. But the fact that Cablevision no longer needs a waiver reflects the success of the Commission’s waiver in transitioning Cablevision to a compliant downloadable security system with no further need for waiver from the integration ban. Mr. Biller attempts to distinguish Charter from Cablevision because Charter did not previously use Smart Card technology. Biller Comments at 4. Cablevision’s use of Smart Cards was a basis for granting Cablevision its *initial* waiver in 2007. Charter’s request is based upon Cablevision’s *second* waiver granted in 2009, which the Commission granted in order to facilitate Cablevision’s transition to downloadable security.

¹⁵ *See* Charter Request at 2, 4. *See also Basic Service Tier Encryption, Compatibility Between Cable Systems and Consumer Electronics Equipment, et al.*, Report and Order, FCC 12-126, 56 CR 227, ¶ 3 (2012) (praising transition to all-digital as efficient and for “freeing up spectrum to offer new or improved products and services like higher-speed Internet access and high definition programming”).

against retail devices in the future, but no party presented any evidence that Charter would do so if it receives its requested waiver, or that Cablevision has done so in the four years since it received its transitional waiver for implementing downloadable security.

Finally, CEA seeks to cast doubt on the Commission's ability to trust Charter to deploy downloadable security by reaching way back to the cable industry's first unsuccessful attempt at downloadable security. But since then, downloadable security was successfully launched as promised by Cablevision, under Mr. Rutledge's leadership and the Commission's prior transitional waiver. Charter's requested waiver would allow Mr. Rutledge the time and opportunity to deliver again.

VI. Conclusion

For the reasons set forth in Charter's Request, grant of the requested waiver will benefit consumers and will further the Commission's objectives for the development of a next-generation, competitive marketplace for navigation devices, without undermining the purpose of the integration ban. The Commission should therefore grant Charter a two-year waiver from the integration ban that would allow Charter to deploy integrated security devices that also support downloadable security.

Respectfully submitted,

/s/ Paul Glist

Paul Glist

Paul Hudson

Davis Wright Tremaine, LLP

1919 Pennsylvania Avenue NW, # 800

Washington, DC 20006

Attorneys for Charter Communications, Inc.

December 10, 2012