

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

In the Matter of	)	
	)	
Charter Communications, Inc.'s	)	CSR-
Request for Waiver of Section 76.1204(a)(1)	)	
of the Commission's Rules	)	
	)	
Implementation of Section 304 of the	)	CS Docket No. 97-80
Telecommunications Act of 1996	)	
	)	
Commercial Availability of	)	
Navigation Devices	)	
	)	

To: Chief, Media Bureau

**REQUEST FOR WAIVER**

Pursuant to Sections 1.3 and 76.7 of the Commission's rules, 47 C.F.R. §§ 1.3, 76.7, and Section 706 of the Telecommunications Act of 1996, Charter Communications, Inc. ("Charter") respectfully requests that Commission grant a limited, two-year waiver of the integration ban set forth in the second sentence of Section 76.1204(a)(1) of the Commission's rules, 47 C.F.R. § 76.1204(a)(1). The waiver would enable Charter to initiate implementation of an open-standard, downloadable security solution that supports third party retail devices.

**I. A Temporary Integration Ban Waiver Would Enable Charter's Transition to Next-Generation Technology.**

Under the leadership of its new Chief Executive Officer, Tom Rutledge, Charter is embarking on an ambitious transition to a forward-looking, next-generation network. For example, Charter's entry-level Internet service now offers download speeds of 30 Mbps, and Charter also offers 100 Mbps throughout its footprint. Charter offers

unlimited cloud storage that enables its Internet customers to access their data from anywhere and share it with others. Charter also plans to transition all of its cable systems to an all-digital network.

A key component of this technology campaign and the transition to an all-digital network is the launch of software-based downloadable security. With the Commission's support, Mr. Rutledge previously led Cablevision's successful deployment of downloadable security in 2009-2010. Now Mr. Rutledge would like to do the same for Charter. But this undertaking will be much more difficult for Charter than it was for Cablevision. Cablevision's downloadable security deployment was located entirely in the New York City metropolitan area, with only a few tightly-clustered headends passing millions of homes. By contrast, Charter has more than 190 headends in twenty-five states, which pass a median of 23,000 homes. Seventy-five percent of Charter's subscribers live outside of the nation's twenty largest DMAs.

The implementation of downloadable security across Charter's much larger, scattered and more diverse footprint will be more expensive, time-consuming and challenging than it was in Cablevision's case. Charter will need to deploy new security servers to support downloadable security set-top boxes in each headend; have new set-top boxes with new downloadable chipsets in them deployed in the field for the servers to talk to; and get the servers and headends working together in tandem, fine-tuned and ready for the whole architecture to work with the new security system *before* it cuts the new boxes over to downloadable security. Although Charter operates some large systems, it continues to have a distinctly rural footprint with far fewer subscribers per headend than its peers with which to cover the costs of this upgrade.

Since Charter will need to start rolling out downloadable security boxes to customers well before the conversion of any cable system, the initial downloadable security devices will include two security systems: a chip that would serve as the future platform for non-integrated downloadable security, and 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 avoid stranding customers with retail CableCARD devices or Charter’s legacy leased set-top boxes, 2.75 million of which also include CableCARDs.

Because the new dual-security devices include integrated security, they could not be placed into service without a waiver from the integration ban. Cablevision’s deployment was made possible by a Commission waiver from the integration ban in 2009.<sup>1</sup> Charter needs similar temporary relief from the integration ban so that it can deploy these dual-security boxes and focus its technical and strategic resources on an efficient downloadable security implementation.

## **II. Charter’s Deployment of Downloadable Security Would Deliver Substantial Benefits to Consumers.**

Charter’s downloadable security would be better for consumers and consumer electronics manufacturers. 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

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<sup>1</sup> *Cablevision Systems Corporation’s Request for Waiver of Section 76.1204(a)(1) of the Commission’s Rules, CSR Docket CSR-7078-Z, and Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, CS Docket 97-80, Memorandum Opinion and Order, DA 09-67, 24 FCC Rcd 393 (2009).*

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. In initial deployment, Charter anticipates no additional certification requirements beyond those required for a retail host today.

This approach offers several benefits. Because Charter plans to thoroughly test the downloadable security over the course of its extended transition period, upon launch, the new environment would be well tested and ready for retail common reliance. The requested waiver would also assure that technology and financial resources would be directed to the new security, the new downloadable headend servers, the new boxes with new downloadable chipsets, and the integration of the complete architecture, to ready it for operation.

Once downloadable security is operational, Charter anticipates that the availability of set-top boxes (with downloadable chips) from a broad set of suppliers will lower equipment costs borne by consumers, open the doors to a wider variety of devices and features, and facilitate a more efficient transition to an all-digital network by reducing the costs for terminal equipment needed to support consumers through that transition. Consumer electronics manufacturers would be able to have more confidence in making investments to develop new retail downloadable-security products once they have seen that the system has actually been successfully implemented and that downloadable devices can work without the need for CableCARDS. For consumer electronics manufacturers still not ready to take that approach, CableCARDS will continue to be supported even after the downloadable architecture is activated, because

the simulcrypt system will support both current and downloadable security architectures. And by implementing a security system that is partly software-based, Charter will be better positioned for supporting an even wider variety of devices if and when content providers grow more comfortable with software-based security for a wider array of content and devices.

### **III. Charter’s Request Meets the Public Interest Standard for Waiver.**

Section 76.7 of the Commission’s rules provides that the Commission may waive a rule when “the public interest would be served.”<sup>2</sup> The Commission is required to “take a ‘hard look’ at meritorious applications for waiver, and must consider all relevant factors,” especially when the application of a general rule to a specific situation would not serve the public interest underlying the rule, and when grant of a waiver would not undermine the policy served by the rule.<sup>3</sup> In addition, the Obama Administration has directed federal agencies to “identify and consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public”<sup>4</sup> and to develop a plan to “periodically review [their] existing significant regulations to determine whether

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<sup>2</sup> See 47 C.F.R. § 76.7(i) (“The Commission, after consideration of the pleadings, may determine whether the public interest would be served by the grant, in whole or in part, or denial of the request . . .”). See also 47 C.F.R. § 1.3 (“Any provision of the rules may be waived by the Commission on its own motion or on petition if good cause therefor is shown.”).

<sup>3</sup> *KCST-TV, Inc. v. FCC*, 699 F.2d 1185, 1191-1192 (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). *Id.* at 1192, 1195. 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.”).

<sup>4</sup> *Improving Regulation and Regulatory Review*, Executive Order 13563, 76 Fed. Reg. 3821 (Jan. 21, 2011), available at <http://www.whitehouse.gov/the-press-office/2011/01/18/improving-regulation-and-regulatory-review-executive-order> (directing executive agencies to take a flexible approach to regulation).

any such regulations should be modified, streamlined, expanded, or repealed.”<sup>5</sup> In its recent Final Plan for Retrospective Analysis of Existing Rules, the Commission touted its “efforts to eliminate outdated regulations and to promote private investment and innovation that creates jobs and spurs economic growth.”<sup>6</sup>

The Commission has repeatedly described downloadable security as the preferred path for complying with its separable security rules.<sup>7</sup> It has also sought to keep its existing rules from “imped[ing] the development of a less expensive and more flexible system for both protecting system security and creating a consumer product interface” by trying to avoid “resources [from being] diverted from producing a downloadable security system to physical separation of the security element from set-top boxes.”<sup>8</sup> The Commission has therefore previously granted waivers to companies to provide time to

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<sup>5</sup> *Regulation and Independent Regulatory Agencies*, Executive Order 13579, 76 Fed. Reg. 41587 (July 14, 2011), available at <http://www.whitehouse.gov/the-press-office/2011/07/11/executive-order-regulation-and-independent-regulatory-agencies> (applying Executive Order 13563 to independent agencies).

<sup>6</sup> *Final Plan for Retrospective Analysis of Existing Rules* (May 18, 2012) at 5, available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-314166A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-314166A1.pdf).

<sup>7</sup> *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, FCC 05-76, 20 FCC Rcd 6794, ¶ 31 (2005). The Commission further recognized “that the development of set-top boxes and other devices utilizing downloadable security is likely to facilitate a competitive navigation device market [and] aid in the interoperability of a variety of digital devices,” that it offers “a less expensive and more flexible system for both protecting system security and creating a consumer product interface,” that it would “add[] significantly to the options that equipment manufacturers now have in using the CableCARD,” “and will allow common reliance by cable operators and consumer electronics manufacturers on an identical security function without the potentially costly physical separation of the conditional access element.” *Id.*, ¶¶ 3, 31, 27, Appendix C. The Commission later made clear that an MVPD that deploys an open-standard, downloadable security solution is in compliance with the separate security rules. *See, e.g.*, Public Notice, Commission Reiterates that Downloadable Security Technology Satisfies the Commission’s Rules on Set-top Boxes and Notes Beyond Broadband Technology’s Development of Downloadable Security Solution, DA 07-51 (Jan. 10, 2007).

<sup>8</sup> *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, FCC 05-76, 20 FCC Rcd 6794, ¶ 31 (2005).

adjust their technology, “preferably [toward] a downloadable solution based on open standards.”<sup>9</sup>

As with Cablevision, grant of Charter’s waiver request would deliver substantial public interest benefits to Charter’s customers. Charter’s request for waiver can be considered even more compelling than was Cablevision’s because, unlike Cablevision, Charter already has enormous common reliance on CableCARDs in its own leased set-top boxes. Charter has deployed more than 2.75 million CableCARD set-top boxes, which assures that Charter has plenty of incentive to make sure that CableCARDs work in its systems to support the 33,000 CableCARDs it has provided to customers for their use in retail devices. This common reliance will continue to assure the satisfaction of the purpose of the integration ban rule throughout a two-year waiver period, so grant of the waiver “will not undermine the policy served by the rule.”<sup>10</sup> Charter will continue to support its existing security system, including CableCARDs not only during the transition but also for years after the launch of downloadable security, since it has millions of devices in the field that use it.

Thus, even if the requested waiver is granted, Charter would have a common reliance on the security technology used by third-party devices, and a powerful incentive to assure that such technology functioned properly in order to satisfy the users of Charter’s CableCARD devices. Charter would continue to use two security systems simultaneously, but after the two-year transition it would no longer place new boxes with

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<sup>9</sup> *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).

<sup>10</sup> *WAIT Radio*, 418 F.2d at 1157.

integrated security into service and therefore would no longer need a waiver from the integration ban.

It is not necessary for 100% of navigation devices leased by cable operators to have the same security as third-party devices. From the start, the Commission exempted analog devices and devices that were in inventory prior to the integration ban. Later, the Commission allowed cable operators to deploy millions of integrated security digital transport adapters (DTAs) without any apparent adverse effect on cable operator support for retail CableCARD devices.<sup>11</sup> Charter has already previously demonstrated that it supports CableCARDS even when not all of its leased set-top boxes include them. During the first year in which the integration ban was in effect, Charter was granted a one-year waiver to continue deploying new integrated set-top boxes, with no adverse effect on its support for retail CableCARD devices.<sup>12</sup> Likewise, there is no evidence that Cablevision's support for its customers' use of CableCARDS has in any way diminished as a result of its waiver for downloadable security.

Charter is committed to begin work on the implementation of downloadable security immediately if the requested waiver is granted. But if the waiver is not granted,

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<sup>11</sup> The Commission has likewise granted numerous other waivers based on the use of different technology (such as IPTV), financial hardship, commitment to transition to an all-digital network, and commitment to support customers' use of retail integrated devices. *See e.g., Consolidated Requests for Waiver of Section 76.1204(a)(1) of the Commission's Rules*, CS Docket No. 97-80, Memorandum Opinion and Order, DA 07-2921, 22 FCC Rcd 11780 (2007); *Great Plains Cable Television, Inc. Request for Waiver of §76.1204(a)(1) of the Commission's Rules*, CSR Docket CSR-7212-Z, *et al.*, Memorandum Opinion and Order, DA 07-3316, 22 FCC Rcd 13414 (2007); *Baja Broadband Operating Co., LLC Request for Waiver of §76.1204(a)(1) of the Commission's Rules*, CSR Docket CSR-7111-Z, Memorandum Opinion and Order, DA 10-373, 25 FCC Rcd 2200 (2010). While some parties have criticized the number of waivers, there is no evidence that the waivers have undermined the recipients' support for CableCARDS in retail devices.

<sup>12</sup> *Charter Communications, Inc. 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*, CS Docket No. 97-80, Memorandum Opinion and Order, DA 07-2008, 22 FCC Rcd 8557 (2007).

Charter will be unable to launch this new, pro-consumer technology for the foreseeable future due to the lack of an affordable, available set-top box that can simultaneously support both security systems. Given that a waiver is essential to Charter's ability to deploy downloadable security, the Commission should be mindful of Congress' direction in implementing Section 629 that the Commission must "avoid actions which could have the effect of freezing or chilling the development of new technologies and services."<sup>13</sup>

For the foregoing reasons, 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 N.W., # 800  
Washington, DC 20006

*Attorneys for Charter Communications, Inc.*

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<sup>13</sup> H.R. Rep. No. 104-458, at 181 (1996) (Conf. Rep.), *reprinted in* 1996 U.S.C.C.A.N. 124, 194.