

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

In the Matter of
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
MB Docket No. 12-328
CSR-8740-Z
CS Docket No. 97-80

MEMORANDUM OPINION AND ORDER

Adopted: April 18, 2013

Released: April 18, 2013

By the Chief, Media Bureau:

I. INTRODUCTION

1. Charter Communications, Inc. ("Charter") has filed with the Chief of the Media Bureau the above-captioned request for a two year waiver (the "Waiver Request") of the ban on integrated set-top boxes set forth in Section 76.1204(a)(1) of the Commission's rules. For the reasons stated below, we grant the Waiver Request with conditions.

II. BACKGROUND

2. Congress directed the Commission to adopt regulations to assure the commercial availability of navigation devices as part of the Telecommunications Act of 1996. The Commission implemented this directive in 1998 through the adoption of the "integration ban," which established a date after which cable operators no longer may place into service new navigation devices (e.g., set-top boxes) that perform both conditional access and other functions in a single integrated device. Originally, the

1 47 C.F.R. § 76.1204(a)(1). The separation of the security element from the basic navigation device required by this rule is referred to as the "integration ban."

2 See Section 629(a) of the Communications Act of 1934, as amended, 47 U.S.C. § 549(a) (requiring the FCC "to adopt regulations to assure the commercial availability, to consumers of multichannel video programming and other services offered over multichannel video programming systems, of converter boxes, interactive communications equipment, and other equipment used by consumers to access multichannel video programming and other services offered over multichannel video programming systems, from manufacturers, retailers, and other vendors not affiliated with any multichannel video programming distributor"); see also Telecommunications Act of 1996, Pub. L. No. 104-104, § 304, 110 Stat. 56, 125-126 (1996).

3 See Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices, 13 FCC Rcd 14775, 14803, ¶ 69 (1998) ("First Report and Order") (adopting Section 76.1204 of the Commission's rules, subsection (a)(1) of which (1) required multichannel video programming distributors

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Commission established January 1, 2005 as the deadline for compliance with the integration ban.<sup>4</sup> On two occasions, the National Cable and Telecommunications Association (“NCTA”), on behalf of all cable operators, sought and obtained extensions of that deadline.<sup>5</sup> The Commission ultimately fixed July 1, 2007 as the deadline in order to afford cable operators additional time to determine the feasibility of developing a downloadable security function that would permit compliance with the Commission’s rules without incurring the costs associated with the separation of security.<sup>6</sup>

3. The purpose of the integration ban is to assure reliance by both cable operators and consumer electronics manufacturers on a common, separated-security solution.<sup>7</sup> This “common reliance” is necessary to achieve the broader goal of Section 629 – *i.e.*, to allow consumers the option of purchasing navigation devices from sources other than their MVPD by ensuring that cable systems support such equipment.<sup>8</sup> Although the cable industry has challenged the lawfulness of the integration ban on three separate occasions, in each of those cases the D.C. Circuit upheld the ban.<sup>9</sup> In limited circumstances, however, operators may be eligible for waiver of the integration ban.<sup>10</sup>

4. In *EchoStar Satellite L.L.C. v. FCC*<sup>11</sup> (“*EchoStar*”), the D.C. Circuit vacated the FCC’s *Second Report and Order*<sup>12</sup> and *Order on Reconsideration*,<sup>13</sup> which had the effect of vacating various

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(“MVPDs”) to make available by July 1, 2000 a security element separate from the basic navigation device, and, in its original form, (2) prohibited MVPDs covered by this subsection from “plac[ing] in service new navigation devices ... that perform both conditional access and other functions in a single integrated device” after January 1, 2005); *see also* 47 C.F.R. § 76.1204(a)(1) (1998).

<sup>4</sup> *First Report and Order*, 13 FCC Rcd at 14803, ¶ 69.

<sup>5</sup> In April 2003, the Commission extended the effective date of the integration ban until July 1, 2006. *See Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, 18 FCC Rcd 7924, 7926, ¶ 4 (2003) (“*Extension Order*”). Then, in 2005, the Commission further extended that date until July 1, 2007. *See Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, 20 FCC Rcd 6794, 6810, ¶ 31 (“*2005 Deferral Order*”).

<sup>6</sup> *2005 Deferral Order*, 20 FCC Rcd at 6810, ¶ 31.

<sup>7</sup> *See Cablevision Systems Corporation’s Request for Waiver of Section 76.1204(a)(1) of the Commission’s Rules*, 22 FCC Rcd 220, 226, ¶ 19 (2007) (“*Cablevision Order*”) (citing the *2005 Deferral Order*, 20 FCC Rcd at 6809, ¶ 30) (explaining why the Commission “require[d] MVPDs and consumer electronics manufacturers to rely upon identical separated security with regard to hardware-based conditional access solutions”).

<sup>8</sup> *See* S. REP. 104-230, at 181 (1996) (Conf. Rep.). *See also Bellsouth Interactive Media Services, LLC*, 19 FCC Rcd 15607, 15608, ¶ 2 (2004). As the Bureau noted, Congress characterized competition in navigation devices as an important goal, stating that “[c]ompetition in the manufacturing and distribution of consumer devices has always led to innovation, lower prices and higher quality.” *Id.*

<sup>9</sup> *Comcast Corp. v. FCC*, 526 F.3d 763 (D.C. Cir. 2008); *Charter Comm., Inc. v. FCC*, 460 F.3d 31 (D.C. Cir. 2006); *General Instrument Corp. v. FCC*, 213 F.3d 724 (D.C. Cir. 2000). The Commission argued, and the D.C. Circuit agreed, that the integration ban was a reasonable means to meet Section 629’s directive. *Charter Comm., Inc. v. FCC*, 460 F.3d 31, 41 (D.C. Cir. 2006) (“this court is bound to defer to the FCC’s predictive judgment that, “[a]bsent common reliance on an identical security function, we do not foresee the market developing in a manner consistent with our statutory obligation.””).

<sup>10</sup> For example, petitioners who have been deemed by the Commission to have shown good cause have received waivers of the integration ban pursuant to Sections 1.3 and 76.7 of the Commission’s rules. 47 C.F.R. §§ 1.3, 76.7. *See, e.g., Cablevision Order*, 22 FCC Rcd at 226-7, ¶ 20. *See also* 47 U.S.C § 549(c) (providing that the Commission shall grant a waiver of its regulations implementing Section 629(a) upon an appropriate showing that such waiver is necessary to assist the development or introduction of new or improved services).

<sup>11</sup> 704 F.3d 992 (D.C. Cir. 2013).

rules adopted in those orders, including the encoding rules,<sup>14</sup> the technical standards for CableCARD (Sections 76.602 and 76.640),<sup>15</sup> and labeling with respect to CableCARD compatibility (Section 15.123).<sup>16</sup> The integration ban was adopted in the *First Report and Order*<sup>17</sup> and therefore is unaffected by the *EchoStar* decision.<sup>18</sup>

5. On November 1, 2012, Charter filed a request, pursuant to Sections 1.3 and 76.7 of the Commission's rules, for a limited, two-year waiver of the prohibition on integrated set-top boxes set forth in Section 76.1204(a)(1) of the Commission's rules.<sup>19</sup> According to Charter, securing a two-year waiver of the integration ban would allow Charter to "initiate implementation of an open-standard, downloadable security solution that supports third party retail devices."<sup>20</sup> Charter explains that it needs two years to roll out downloadable security set-top boxes to customers before its cable systems will be fully ready to support downloadable security.<sup>21</sup> Therefore, during this interim period, Charter would deploy boxes that include two security systems – one that includes a hardware chip that would eventually be used for downloadable security and a second that includes traditional integrated security to be used for a two-year "transitional period before downloadable security is activated."<sup>22</sup> Charter's proposed downloadable security system would "combine a software-based security with a hardware root of trust housed in a

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<sup>12</sup> *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, Second Report and Order and Second Further Notice of Proposed Rulemaking, 18 FCC Rcd 20885 (2003).

<sup>13</sup> *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, Order on Reconsideration, 18 FCC Rcd 27059 (2003).

<sup>14</sup> 47 C.F.R. §§ 76.1901-76.1908. The encoding rules limited copy protection techniques that MVPDs could use to prevent consumers from making copies of their programming.

<sup>15</sup> 47 C.F.R. §§ 76.602, 76.640.

<sup>16</sup> 47 C.F.R. § 15.123. In *EchoStar*, the majority concluded that the Commission lacked authority to adopt the encoding rules and, viewing those rules as "not severable" from the challenged orders, vacated the *Second Report and Order* and *Order on Reconsideration* in their entirety. 704 F.3d at 1000.

<sup>17</sup> *See supra* n.3.

<sup>18</sup> Sections 15.123 and 76.640 were modified, among other sections, by the *Third Report and Order* in the navigation devices proceeding. *See Implementation of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, 25 FCC Rcd 14657, 14698-703 (2010). It is not necessary, in the context of this order, to address the continued effectiveness of these modifications.

<sup>19</sup> On November 7, 2012, the Media Bureau released a Public Notice seeking comment on the Waiver Request, setting a deadline of November 30, 2012 for Comments and December 10, 2012 for Reply Comments. *Charter Communications, Inc. Files Request for Waiver*, 27 FCC Rcd 13600 (MB 2012). Samuel J. Biller ("Biller"), the Consumer Electronics Association ("CEA"), and Public Knowledge all filed comments. Charter, AllVid Tech Company Alliance ("ATCA"), Beyond Broadband Technology, LLC ("BBT"), Biller and CEA filed Reply Comments. CEA filed *ex parte* letters on December 13, 2012, January 28, 2013, February 14, 2013, March 7, 2013, March 15, 2013, March 22, 2013, March 29, 2013 and April 8, 2013. In addition, TiVo, Inc. submitted an *ex parte* letter on January 22, 2013 and Biller submitted an *ex parte* letter on March 8, 2013. Charter submitted *ex parte* letters on January 28, 2013, February 6, 2013, February 28, 2013, March 13, 2013, March 20, 2013, and April 4, 2013. All submissions were made in MB Docket 12-328.

<sup>20</sup> Charter Communications, Inc., Request for Waiver, CSR-8740, MB Docket 12-328, CS Docket 97-80 (filed Nov. 1, 2012) ("Waiver Request") at 1.

<sup>21</sup> *Id.* at 2-3.

<sup>22</sup> *Id.* at 3.

commodity chip.”<sup>23</sup> Charter states that the “key ladder”<sup>24</sup> for the hardware root of trust<sup>25</sup> will be “made available on an open royalty-free basis” so that third-party manufacturers can manufacture and market commercially available devices that could interconnect and operate with Charter’s cable systems nationwide.<sup>26</sup>

6. The system that Charter plans to deploy is apparently the same downloadable system now being used by Cablevision.<sup>27</sup> Charter contends that the Media Bureau’s 2009 grant to Cablevision of a two-year waiver extension of Section 76.1204(a)(1) is comparable to the Waiver Request because, according to Charter, the waiver extension would not have been granted without Cablevision’s promise to deploy downloadable security (as Charter also promises to do) and the Commission “determined that Cablevision’s downloadable security plan was sufficiently beneficial to the public interest to warrant a waiver” even though Cablevision would not be deploying CableCARDS in its own equipment.<sup>28</sup> Furthermore, because Charter argues it is using the “same approach employed by Cablevision,” Charter submits that its use of the system “will broaden the downloadable security footprint available for retail implementations.”<sup>29</sup> After it tests and launches the new system, 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.”<sup>30</sup> Charter also contends that after its downloadable system becomes operational, “it will be better positioned to support a wider variety of devices if and when content providers grow more comfortable with software-based security.”<sup>31</sup> Grant of the waiver, according to Charter, “would facilitate Charter’s transition to an all-digital network,” which the Commission has observed can free up spectrum to offer new and improved services to cable consumers.<sup>32</sup> In particular, Charter argues that “waiver grant . . . will uniquely accelerate the digital transition in rural America, an area that the Commission has previously acknowledged is in greater need of digital investment” because Charter will be able to use the cost savings realized from not deploying more expensive CableCARD compatible set-top boxes for “finite investments to be directed instead to headend, plant and security faster and at lower cost to consumers.”<sup>33</sup> Both during the waiver period and then after the company initiates downloadable security,

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<sup>23</sup> *Id.* “Commodity chips” are computer chips “that are produced in the hundreds of thousands, often in the millions.” Colin Picker, *A View From 40,000 Feet: International Law and the Invisible Hand of Technology*, 23 CARDOZO L. REV. 149, 211 (2001). Because each chip manufacturer makes chips that are “approximately the same as chips available from competitors, market competition for [commodity chips] is primarily based on price.” MICHAEL R. KINNEY & CECILY A. RAIBORN, COST ACCOUNTING: FOUNDATIONS AND EVOLUTIONS 457 (2008).

<sup>24</sup> It is our understanding that when Charter refers to a “key ladder,” it is referring to the conditional access codes necessary to operate the system.

<sup>25</sup> It is our understanding that when Charter uses the term “hardware root of trust” it is referring to the commodity chip that will contain, among other things, the key ladder.

<sup>26</sup> Waiver Request at 3-4.

<sup>27</sup> See Waiver Request at 3-4; Charter Reply Comments at 2-3.

<sup>28</sup> Waiver Request at 3 (citing *Cablevision System Corporation’s Request for Waiver of Section 76.1204(a)(1) of the Commission’s Rules*, Memorandum Opinion and Order, 24 FCC Rcd 393 (2009) (“*Cablevision 2009 Waiver*”)); Charter February 28, 2013 *ex parte* at 6-7.

<sup>29</sup> Charter Reply Comments at 3.

<sup>30</sup> Waiver Request at 4.

<sup>31</sup> *Id.* at 4-5.

<sup>32</sup> Charter Reply Comments at 6 (citing *Basic Service Tier Encryption, Compatibility Between Cable Systems and Consumer Electronics Equipment*, 27 FCC Rcd 12786, ¶ 3 (2012)).

<sup>33</sup> Charter February 6, 2013 *ex parte* at 2; Charter February 28, 2013 *ex parte* at 4-5.

“Charter would continue to ‘simulcrypt’<sup>34</sup> its services using both security technologies” to support both devices using downloadable security and retail and legacy devices being leased by Charter that rely on CableCARDs.<sup>35</sup> Charter argues that it is highly incentivized to continue support of CableCARD, and commits to doing so indefinitely, because it “has enormous common reliance on CableCARDs,” with 2.75 million leased CableCARD set-top boxes currently deployed to Charter customers.<sup>36</sup> Charter states that including a CableCARD interface within a box with downloadable security would be prohibitively costly and would prevent the company from rolling out the new downloadable security technology in an expeditious and seamless fashion.<sup>37</sup> Charter submits that the FCC has “held, repeatedly, that deploying downloadable security rather than CableCARDs is permissible without a waiver”<sup>38</sup> and that Cablevision’s experience demonstrates that grant of the Waiver Request would have no impact on the retail market for CableCARD devices.<sup>39</sup>

7. Beyond Broadband Technology, LLC (“BBT”) commented in support of the Waiver Request, contending that Charter’s proposed dual security box for use in migrating to downloadable security is “sensible and consistent with the public interest.”<sup>40</sup> BBT urges the Commission to continue allowing experimentation and development of security systems and argues that Charter’s proposal is a positive outgrowth of allowing for such experimentation.<sup>41</sup>

8. AllVid Tech Company Alliance (“ATCA”), Samuel J. Biller, the Consumer Electronics Association (“CEA”), and Public Knowledge oppose the Waiver Request.<sup>42</sup> These parties argue that there are no consumer benefits in granting the waiver<sup>43</sup> and are skeptical that third-party manufacturers will develop devices compatible with Charter’s downloadable system because consumers will not purchase

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<sup>34</sup> Charter uses the term “simulcrypt” to refer to the process of encrypting a cable transmission simultaneously in two different ways. The effect of simulcrypt as Charter proposes it would allow both a Charter subscriber operating a device with a CableCARD and a Charter subscriber operating a box with Charter’s downloadable security to access Charter programming services on the same Charter system. *See* Waiver Request at 3.

<sup>35</sup> *Id.*

<sup>36</sup> *Id.* at 7; Charter February 6, 2013 *ex parte* at 3; Charter April 4, 2013 *ex parte* at 1. In its April 4, 2013 *ex parte*, Charter also voluntarily committed to convert 100% of its systems to all-digital by nine months after the end of the two-year waiver period and to make broadband Internet access service of 100 Mbps or greater available to 200,000 additional homes before the end of the waiver period. *See* Charter April 4, 2013 *ex parte* at 1.

<sup>37</sup> Waiver Request at 8-9; Charter January 28, 2013 *ex parte* at 1-2; Charter February 28, 2013 *ex parte* at 4-5.

<sup>38</sup> Charter February 28, 2013 *ex parte* at 2 (citing *Comcast Corporation 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*, 22 FCC Rcd 228, ¶ 34 (MB 2007) (“*Bureau Comcast Waiver Denial*”); *Comcast Corporation 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, Application for Review*, 22 FCC Rcd 17113, ¶ 4 (2007) (“*Commission Comcast Waiver Denial*”); 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, 22 FCC Rcd 244 (2007)).

<sup>39</sup> Charter March 13, 2013 *ex parte* at 1 (citing Letter from Neal M. Goldberg, Vice President and General Counsel, National Cable & Telecommunications Association, to Marlene H. Dortch, Secretary, FCC, CS Docket No. 97-80 (Jan. 31, 2013) (“*January 2013 NCTA Letter*”) at 3).

<sup>40</sup> BBT Reply Comments at 5.

<sup>41</sup> *See id.*

<sup>42</sup> TiVo filed an *ex parte* in MB Docket 12-328, which generally argued that waivers of the rules implementing Section 629 were counterproductive. *See* TiVo January 22, 2013 *ex parte* at 1-2.

<sup>43</sup> *See* Biller Reply Comments at 2; Biller March 8, 2013 *ex parte* at 3-4; CEA December 13, 2012 *ex parte* at 2.

devices that work with only one or two cable systems and are not nationally portable.<sup>44</sup> They further argue that Charter's proposed downloadable system does not separate security, does not support portability, and does not further the purposes of Section 629.<sup>45</sup> Opposing parties seek to distinguish the *Cablevision 2009 Waiver* case on the ground that Cablevision continued to separate its security during the waiver period and argue that, in any event, the Bureau did not determine whether Cablevision's downloadable security system complies with the integration ban.<sup>46</sup> Furthermore, opposing parties claim that granting the waiver will undermine common reliance and effectively end cable operators' obligation to support CableCARD.<sup>47</sup> Opponents claim that expediting a transition to digital is not a valid basis for waiver, and that in any event Charter has already committed to transitioning to digital regardless of whether it receives the waiver.<sup>48</sup> Finally, opponents argue that past Commission statements supporting the development and deployment of downloadable security are not applicable to Charter's proposed system.<sup>49</sup>

### III. DISCUSSION

9. We find good cause to grant Charter a limited two-year waiver of Section 76.1204(a)(1) subject to conditions. We recognize that, in vacating the *Second Report and Order*, the *EchoStar* decision eliminated the requirement that cable operators continue to support CableCARD as a means of complying with the integration ban. Charter does not need a waiver in order to implement a downloadable security system as long as such system complies with the integration ban. Prior to the *EchoStar* decision, the Commission's CableCARD rules furthered Section 629 by ensuring that consumers could purchase CableCARD retail devices with the knowledge that such devices would work on their cable operators' digital cable system. After the *EchoStar* decision, we recognize that there is the potential for a fractured cable set-top box market should different cable operators adopt differing non-CableCARD separated-security standards. In the past, the Commission has encouraged the development of an industry-wide downloadable separate security standard to further the purposes of Section 629.<sup>50</sup> We believe granting Charter's waiver under the circumstances presented in this proceeding will increase the chance of an industry-wide standard developing. Through acceptance of this waiver and its conditions, Charter is committing to adopt the same downloadable system being utilized by Cablevision.<sup>51</sup> We believe Charter's adoption of the same system will make it more likely that other operators considering moving to

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<sup>44</sup> See Biller Comments at 2-3; Biller March 8, 2013 *ex parte* at 2; CEA Comments at 5; CEA December 13, 2013 *ex parte* at 2; CEA March 22, 2013 *ex parte* at 1.

<sup>45</sup> See ATCA Reply Comments at 3-5; Biller Comments at 3; Biller March 8, 2013 *ex parte* at 4; CEA Comments at 2; CEA January 28, 2013 *ex parte* at 1; CEA January 28, 2013 *ex parte* at 2; TiVo *ex parte* at 2.

<sup>46</sup> See Biller Comment at 3-4; CEA Comments at 3; CEA February 14, 2013 *ex parte* at 1-2; CEA March 7, 2013 *ex parte* at 5.

<sup>47</sup> See Biller Reply Comments at 1; Biller March 8, 2013 *ex parte* at 4; Public Knowledge Comments at 3; CEA Comments at 7; CEA December 13, 2012 *ex parte* at 2; TiVo *ex parte* at 2.

<sup>48</sup> Biller March 8, 2013 *ex parte* at 4; CEA February 14, 2013 *ex parte* at 1-2.

<sup>49</sup> Biller March 8, 2013 *ex parte* at 1-2; CEA March 7, 2013 *ex parte* at 2-5.

<sup>50</sup> See 2005 *Deferral Order* at ¶ 31.

<sup>51</sup> See Charter February 28, 2013 *ex parte* at 3 ("Charter's downloadable security system is being designed specifically to increase interoperability and portability, so that the same device can be trusted on a Charter network as well as a downloadable Cablevision network."). Once Charter's four million customers begin using downloadable security, it will more than double the market for devices using this particular type of downloadable security, which currently consists of Cablevision's subscriber base of more than three million. See NCTA, Industry Data, <http://www.ncta.com/industry-data>. We presume retail devices would also be compatible with any additional cable systems owned by other operators that adopt the same downloadable security system as Charter and Cablevision.

a downloadable security system will adopt the same established and tested technology, which will in turn make it more likely that third party manufacturers will develop retail devices given the expanded market. Therefore, Charter's expansion of the market for devices operating this particular downloadable system should help "assure the commercial availability" of navigation devices, as Section 629 directs.<sup>52</sup> Moreover we believe that our condition, further explained below, that requires Charter to work with a consumer electronics manufacturer to bring a retail device using Charter's downloadable system to the retail market, will also further the purposes of Section 629 by mandating that Charter work towards creating a retail market for devices that commonly rely "on an identical security technology and conditional access interface."<sup>53</sup> In addition, waiver of the integration ban is likely to accelerate Charter's deployment of downloadable security. As even CEA acknowledges, Charter's systems "are widely dispersed and are the least densely concentrated among the six largest cable operators."<sup>54</sup> This footprint presents Charter with additional challenges in rolling out downloadable security across all of its headends.<sup>55</sup> Waiver grant will enable Charter to accelerate adoption of the new downloadable security system, notwithstanding its rural footprint, in an efficient manner that minimizes disruption to consumers and, in doing so, more quickly establish a larger market for downloadable retail devices.<sup>56</sup> As described below, we also adopt a number of conditions that we believe will ensure that this waiver, on balance, will serve the public interest and ensure that the waiver is consistent with the goals of Section 629.

10. To ensure that a waiver grant will be in the public interest, we subject Charter to the following conditions: First, prior to deployment of any set-top boxes that contain integrated security, Charter must submit a declaration, signed by its Chief Executive Officer under penalty of perjury, attesting that Charter is engaged in good faith negotiations with a consumer electronics manufacturer that intends to develop a set-top box device to be sold at retail in the United States that utilizes Charter's downloadable security and can be used by a Charter customer on all of Charter's cable systems. Second, Charter must continue, indefinitely, to support CableCARD<sup>57</sup> and comply with the Commission's CableCARD technical rules in 47 C.F.R. §§ 76.640, 76.1205 and 76.1602, including, but not limited to, continued support of CableCARD self-installation,<sup>58</sup> M-Card,<sup>59</sup> switched digital video solutions,<sup>60</sup>

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<sup>52</sup> See 47 U.S.C. § 549.

<sup>53</sup> 2005 Deferral Order at ¶ 3.

<sup>54</sup> CEA March 29, 2013 *ex parte* at 1.

<sup>55</sup> See Charter February 28, 2013 *ex parte* at 4-5.

<sup>56</sup> See Charter February 28, 2013 *ex parte* at 4-5.

<sup>57</sup> By "support" we mean that as part of this condition, Charter must continue to simulcrypt its services so that all third party CableCARD devices remain operable pursuant to the standards listed in 47 C.F.R. § 76.640 until such point as no Charter customers wish to use CableCARD devices purchased at retail. As we explain below, once a third party retail device using Charter's downloadable security is available for purchase, Charter will no longer need to provision new CableCARDS. Even after that point, however, Charter must continue simulcrypting its services to ensure that all Charter customers who purchased third party retail CableCARD equipment prior to the availability of a third party retail downloadable device, and in reliance on being able to operate the CableCARD equipment on Charter's systems, will be able to continue use of that third party CableCARD equipment indefinitely.

<sup>58</sup> See 47 C.F.R. § 76.1205(b)(1) (MVPDs generally must provide the means to allow subscribers to self-install CableCARDS and inform subscribers of this option when a subscriber requests a CableCARD.).

<sup>59</sup> See 47 C.F.R. § 76.1205(b)(2) (MVPDs must provide multi-stream CableCARDS unless subscribers request a single stream CableCARD.).

<sup>60</sup> See 47 C.F.R. § 76.1205(b)(4) (MVPDs must provide CableCARD compatible navigation devices that can tune to switched digital channels.).

uniform CableCARD fees,<sup>61</sup> the IP output requirement,<sup>62</sup> and the bring-your-own-box discount<sup>63</sup> requirement.<sup>64</sup> At such time that a third-party device compatible with Charter's downloadable security is available for purchase at retail, Charter will no longer be required to provision new CableCARDS to customers.<sup>65</sup> Third, similar to what we have required in previous waiver cases,<sup>66</sup> and to enable us to assess both Charter's efforts to bring a third party downloadable device to market and the impact of this waiver on the market for navigation devices, Charter must submit semi-annual reports (to coincide with the January and July submissions made by NCTA on Charter's behalf pursuant to the *2005 Deferral Order*)<sup>67</sup> to the Media Bureau for the next four years<sup>68</sup> that include the following information: (1) during

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<sup>61</sup> See 47 C.F.R. § 76.1205(b)(5)(ii)(B)(1) (CableCARD rental fees must be priced uniformly throughout a cable system; MVPDs may not charge for support of subscriber devices when there would be no charge for similar support of a leased device.). Charter currently offers its subscribers CableCARDS for lease with a fee of \$2 per month and we expect that Charter will maintain a similar price point going forward. *January 2013 NCTA Letter* at 6.

<sup>62</sup> See 47 C.F.R. § 76.640(b)(4)(iii) (Cable operators must ensure that all non-unidirectional cable operator provided high definition set-top boxes comply with an open industry standard for home networking.).

<sup>63</sup> See 47 C.F.R. § 76.1602(b)(7), (8) (Cable operators must provide written information to subscribers at time of installation, annually, and upon request regarding assessed fees for rental of navigations devices and CableCARDS and whether equipment fees are included in the charges for an offer of bundled services.).

<sup>64</sup> Charter will therefore be subject to these provisions irrespective of the D.C. Circuit's decision in *Echostar*. Charter's continued compliance with the requirements of these rules is important to ensure that Charter customers can continue their use of retail CableCARD equipment (the only retail alternative currently available) on Charter systems even as Charter moves away from using CableCARDS in its own leased equipment. We note that Charter has voluntarily agreed to continue compliance with these rules for an unspecified time period notwithstanding the impact of the *Echostar* case. Charter February 6, 2013 *ex parte* at 3. Charter also voluntarily committed to providing "CableCARDS for new CableCARD devices until such time as a third-party retail device with downloadable security is available for use by Charter subscribers." Charter April 4, 2013 *ex parte* at 1. Should the Commission address its CableCARD rules or adopt any new or revised rules that apply to set-top box conditional access, Charter must come into compliance with any subsequent rule changes implementing Section 629. *Cf. Cablevision Systems Corp.*, 25 FCC Rcd 134, ¶16 (MB 2010) ("*Cablevision Encryption Waiver*").

<sup>65</sup> At the point that Charter wishes to stop provisioning new CableCARDS to subscribers, it must submit a declaration to the Media Bureau, under penalty of perjury, attesting to and accompanied by documented evidence that demonstrates the following: (1) a local or online seller has made available for retail purchase, to subscribers throughout Charter's entire footprint, a device utilizing Charter's downloadable security; and (2) such a device is available to all Charter subscribers at prices comparable to those charged for retail CableCARD devices. We emphasize that at all times during and after the waiver period, Charter customers will be able to use a retail device on Charter systems. Before a third party retail downloadable device is available, Charter customers can purchase new CableCARD retail devices and receive CableCARDS from Charter. After the third party retail downloadable devices are available, Charter will no longer be required to distribute new CableCARDS for new CableCARD devices (though they must ensure through simulcrypt that previously purchased CableCARD devices can still operate on Charter systems) but customers will have the downloadable retail option available.

<sup>66</sup> See, e.g., *Cable One, Inc.'s Request for Waiver of Section 76.1204(a)(1) of the Commission's Rules*, 24 FCC Rcd 7882,7887, ¶ 15 (2009); *Cablevision Encryption Waiver* at ¶ 16.

<sup>67</sup> Pursuant to the requirements of the *2005 Deferral Order*, which was not vacated by the *EchoStar* decision, Charter, along with Comcast, Time Warner Cable and Cox, must make quarterly submissions to the Commission "detailing CableCARD deployment and support." See *2005 Deferral Order* at ¶ 44. To comply with this requirement, NCTA compiles reports from all four companies and jointly submits them in January, April, July and October of each year. See, e.g., *January 2013 NCTA Letter*. Going forward, as a condition of waiver, Charter must submit the additional report that we detail in this Order, independently of, but at the same time that NCTA submits the January and July reports. Therefore the first report Charter must file pursuant to this Order will be in July of 2013. We are coinciding the timing of these two separate reports for administrative convenience.

the two-year waiver period, status updates on the development and deployment of Charter's downloadable security system; (2) the status of Charter's good faith efforts with the consumer electronics manufacturer discussed above to develop a retail set-top box for Charter's systems; (3) the status of any additional negotiations with consumer electronics manufacturers seeking to develop retail devices that will use the downloadable system being employed by Charter and the assistance rendered by Charter to such manufacturers; (4) the number of set-top boxes using integrated security being deployed by Charter; (5) the number of CableCARDS being deployed by Charter for use in retail devices and the number of CableCARD-reliant leased Charter devices in use by Charter customers; (6) the number and type of customer complaints received orally, via electronic mail, or in writing by Charter regarding third-party navigation devices being used by Charter's customers and Charter's responses to these complaints; and (7) pricing information regarding the lease fees charged to customers for boxes containing downloadable components (whether those components are in use at the time or not) versus the fees charged for CableCARD compatible boxes.<sup>69</sup> Fourth, to the extent such components are within its rights to license, Charter must offer the hardware, software, specifications and codes necessary to implement the downloadable security system it proposes to use on an open, royalty-free basis.<sup>70</sup> Fifth, Charter must cooperate in a timely manner,<sup>71</sup> with any third-party manufacturer seeking to develop retail devices that will use the downloadable system being employed by Charter. Finally, similar to what we required in the *Cablevision 2009 Waiver* case,<sup>72</sup> upon completion of the two-year waiver period, Charter must file a declaration certifying that it has deployed a downloadable security system that employs a software-based security with a hardware root of trust housed in a commodity chip<sup>73</sup> and is no longer using integrated security on any of its systems.<sup>74</sup> We reserve the right to revoke the waiver in the event that Charter fails to meet the conditions of this waiver or if the public interest otherwise warrants such action.<sup>75</sup>

11. In addition, Charter has committed to the following actions<sup>76</sup> that we also impose as public interest conditions to grant of the Waiver Request: 1) Charter must transition all of its cable systems to all-digital within nine months of expiration of the two-year waiver period and 2) Charter must

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<sup>68</sup> We believe an additional two years of reporting beyond the waiver period is necessary to provide additional information to confirm this Order's conclusion that development of Charter's downloadable security is consistent with the goals of Section 629.

<sup>69</sup> If necessary to protect confidential business information, Charter may file portions of its reports with a request for confidentiality. *See* 47 C.F.R. § 0.459.

<sup>70</sup> By "open, royalty-free basis" we mean that the licenses for the components are made available to any requesting party at no charge and without any restrictions. Charter explains that the "key ladder," will be offered on an "open-royalty free basis." Waiver Request at 3-4. It appears that the only hardware necessary is a commodity chip that Charter does not license, which Charter refers to as a "hardware root of trust." *See id.*; *see also supra* n.24.

<sup>71</sup> *See* 47 C.F.R. § 76.1205(a). Section 76.1205(a) was adopted by the *First Report and Order* and is therefore unaffected by the *EchoStar* decision.

<sup>72</sup> *Cablevision 2009 Waiver* at ¶¶ 8, 13.

<sup>73</sup> *See* Waiver Request at 3; *supra* n.23.

<sup>74</sup> After the expiration of the waiver, Charter is not required to remove the dual-security boxes from the field, but it must rely solely on the downloadable security component of those boxes and no longer use the integrated security component. We anticipate that at the end of the waiver period, many of Charter's customers will still be relying upon leased equipment that includes CableCARDS, which would also be compliant with the integration ban.

<sup>75</sup> In the event that upon expiration of the waiver Charter does not fully comply with Section 76.1204 of the Commission's rules, or any of the other conditions that apply beyond the two-year waiver period, Charter would be subject to the imposition of a forfeiture.

<sup>76</sup> *See* Charter April 4, 2013 *ex parte* at 1.

make broadband Internet access service of 100 Mbps or greater available to 200,000 additional homes before the expiration of the two-year waiver period.<sup>77</sup> These conditions, which are designed to promote one of the Commission's goals of furthering broadband deployment, represent additional public interest benefits of this waiver that contribute to a finding of good cause.

12. We do not believe that the concerns raised by opponents of the Waiver Request compel denial in view of the conditions described above.<sup>78</sup> As an initial matter, we note that while several opponents of the Waiver Request have argued Charter's proposed downloadable system does not separate security because the system utilizes a hardware chip component,<sup>79</sup> the Waiver Request is not a request for approval of Charter's downloadable system. In any event, Charter claims,<sup>80</sup> and we find that the record does not refute this claim, that Charter's approach of using a hardware chip as part of the downloadable security system is also used by the system developed by BBT, which the Bureau has specifically found is compliant with the integration ban.<sup>81</sup> In addition, opponents of the Waiver Request have expressed skepticism that third parties would be willing to work with Charter on a retail solution.<sup>82</sup> It is our expectation that our condition, which will require Charter to obtain a commitment from a consumer electronics retailer to work in conjunction with Charter to bring to market a retail device utilizing Charter's proposed downloadable security system, will ensure that Charter customers will have the option of purchasing equipment from a third party that takes advantage of Charter's downloadable technology for use on Charter systems, thereby helping to foster a competitive retail market as Section 629 intended.<sup>83</sup> Furthermore, it is notable that if not for the condition that we impose, Charter would not have been obligated to affirmatively seek out a consumer electronics retailer for collaboration.<sup>84</sup> In addition,

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<sup>77</sup> We expect Charter to file into this proceeding's docket, letters attesting that it has met the deployment deadlines for these two conditions.

<sup>78</sup> We agree with Biller and CEA that the *Cablevision 2009 Waiver* is not analogous to the Waiver Request. See Biller Comment at 3-4; CEA Comments at 3; CEA February 14, 2013 *ex parte* at 1-2; CEA March 7, 2013 *ex parte* at 5. The *Cablevision 2009 Waiver* was not granted, as Charter claims, based on Cablevision's deployment of downloadable security, but rather based on Cablevision's "demonstrated efforts stretching back to 2001 to implement the integration ban and to ensure the compatibility of SmartCard technology with CableCARD devices." *Cablevision 2009 Waiver*, 24 FCC Rcd at 396, ¶ 6. However, irrespective of the applicability of the *Cablevision 2009 Waiver*, as we discuss above, we find good cause to grant the Waiver Request.

<sup>79</sup> See ATCA Reply Comments at 3-5; Biller Comments at 3; Biller March 8, 2013 *ex parte* at 4; CEA Comments at 2; CEA January 28, 2013 *ex parte* at 1; CEA January 28, 2013 *ex parte* at 2; TiVo *ex parte* at 2.

<sup>80</sup> See Charter February 28, 2013 *ex parte* at 2.

<sup>81</sup> *National Cable & Telecommunications Assoc.*, 22 FCC Rcd 11767, 11779, ¶ 31 (MB 2007) ("We note that should NCTA's members deploy a downloadable conditional access security solution that is available today, such as that developed by Beyond Broadband Technology, no waiver of the [integration] ban would be necessary"); *Bureau Comcast Waiver Denial*, 22 FCC Rcd at 242-43 ¶ 34. CEA correctly points out that the Charter system is not identical to BBT's. See CEA March 7, 2013 *ex parte* at 6-7. However, CEA does not refute Charter's claim that both systems are similar in that they rely on a commodity hardware chip. We also agree with Biller and CEA that Charter's downloadable security is not the same system envisioned by the Commission when it made its statements about downloadable security in the *2005 Deferral Order*. See Biller March 8, 2013 *ex parte* at 1-2; CEA March 7, 2013 *ex parte* at 2-5. But the Bureau found the BBT system compliant under the Commission's rules even though the BBT system, like Charter's, also differed from the effort being described in the *2005 Deferral Order*.

<sup>82</sup> See Biller Comments at 2-3; Biller March 8, 2013 *ex parte* at 2; CEA Comments at 5; CEA December 13, 2013 *ex parte* at 2; CEA March 22, 2013 *ex parte* at 1.

<sup>83</sup> See 47 U.S.C. § 549(a); *First Report and Order*, 13 FCC Rcd at 14775, ¶ 1 ("The purpose of Section 629 and the rules we adopt is to expand opportunities to purchase [MVPD] equipment from sources other than the service provider.").

<sup>84</sup> Like all MVPDs Charter must provide, "technical information concerning interface parameters that are needed to permit navigation devices to operate" with its systems upon request, see 47 C.F.R. § 76.1205(a), but our condition

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because our condition requires that Charter continue to provide CableCARDs to customers until a third party retail device is made available, Charter will be incentivized to foster the creation of a retail device. As discussed above, we also find that the development of a competitive retail market is more likely in the unique factual circumstances of this case, where Charter plans to use the same downloadable system as Cablevision, because a retail device manufactured for a Charter system will have a larger market beyond Charter customers.<sup>85</sup>

13. Opponents have also expressed concern that Charter's downloadable system will not be portable,<sup>86</sup> but we believe the collaboration between Charter and a consumer electronics manufacturer that we are requiring will ensure that the retail device developed will be nationally portable on Charter systems, Cablevision systems, and the systems of any other cable operator that may subsequently adopt the same type of downloadable security technology as Charter. Furthermore, concerns that Charter will abandon support of CableCARD<sup>87</sup> or adopt a downloadable system that does not rely on commodity chips or royalty-free key ladders<sup>88</sup> are explicitly addressed by our conditions that require Charter to indefinitely support CableCARD and implement a downloadable system relying on commodity chips and royalty-free key ladders.<sup>89</sup> Finally, although Charter claims that waiver will accelerate its transition to an all-digital platform throughout its entire footprint, this is not, in and of itself, an adequate basis for waiver grant.<sup>90</sup> We note, however, that the conditions we impose relating to Charter's digital transition efforts will serve the public interest by giving Charter customers access to improved services.

#### IV. CONCLUSION

14. For the reasons stated herein, we conclude that Charter has, on balance, shown good cause for a waiver of Section 76.1204(a)(1) of the Commission's rules to allow Charter to use the integrated security component of its dual-security boxes for a period of two years until April 18, 2015, subject to the conditions enumerated above.

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places the additional onus on Charter to find a consumer electronics manufacturer for collaboration to create a third party retail device using Charter's downloadable security.

<sup>85</sup> See Charter February 28, 2013 *ex parte* at 3 ("Charter's downloadable security system is being designed specifically to increase interoperability and portability, so that the same device can be trusted on a Charter network as well as a downloadable Cablevision network.").

<sup>86</sup> See ATCA Reply Comments at 3-5; Biller Comments at 3; Biller March 8, 2013 *ex parte* at 4; CEA Comments at 2; CEA January 28, 2013 *ex parte* at 1; CEA January 28, 2013 *ex parte* at 2; TiVo *ex parte* at 2.

<sup>87</sup> See Biller Reply Comments at 1; Biller March 8, 2013 *ex parte* at 4; Public Knowledge Comments at 3; CEA Comments at 7; CEA December 13, 2012 *ex parte* at 2; TiVo *ex parte* at 2.

<sup>88</sup> See CEA March 29, 2013 *ex parte* at 2.

<sup>89</sup> See discussion *supra* at ¶ 10, n.57.

<sup>90</sup> See *Commission Comcast Waiver Denial*, 22 FCC Rcd at 17118-19, ¶¶ 8-10 (rejecting Comcast's request for a waiver of 47 C.F.R. § 76.1204(a) under Section 629(c) of the Communications Act on the grounds that waiver was necessary to continue digital deployment and consumer adoption of digital services); *Cablevision Order*, 22 FCC Rcd at 224, ¶¶ 12-16 (rejecting similar waiver argument by Cablevision). See also Biller March 8, 2013 *ex parte* at 1-2; CEA March 7, 2013 *ex parte* at 2-5 (arguing that Charter intends to continue its digital transition regardless of whether it receives waiver). Charter attempts to argue that the above cited decisions are inapplicable because the Waiver Request is pursuant to Sections 1.3 and 76.7 of our rules rather than Section 629(c). See Charter February 28, 2013 *ex parte* at 6. However, we believe that the reason this rationale was previously rejected for waiver requests in the context of Section 629(c) applies equally to waiver requests filed under the Commission's general waiver rules.

**V. ORDERING CLAUSES**

15. Accordingly, **IT IS ORDERED** that, pursuant to Sections 1.3 and 76.7 of the Commission's rules, 47 C.F.R. §§ 1.3, 76.7, a limited, conditional waiver of Section 76.1204(a)(1) of the Commission's rules, 47 C.F.R. § 76.1204(a)(1), **IS GRANTED** to Charter Communications, Inc. until April 18, 2015, consistent with the terms of this Order and subject to the conditions enumerated above.

16. This action is taken pursuant to authority delegated by Section 0.283 of the Commission's rules.<sup>91</sup>

FEDERAL COMMUNICATIONS COMMISSION

William T. Lake  
Chief, Media Bureau

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<sup>91</sup> 47 C.F.R. § 0.283.