

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

*In the matter of*

The Downloadable Security Technical  
Advisory Committee (DSTAC) Report

MB Docket No. 15-64

**REPLY COMMENTS OF THE  
COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION (CCIA)<sup>1</sup>**

CCIA respectfully submits these reply comments in the above-referenced proceeding regarding how the Downloadable Security Technical Advisory Committee’s (DSTAC) final report, submitted on August 28, 2015, “should inform the Commission’s obligations under Section 629 of the Communications Act.”<sup>2</sup> CCIA, along with the leading technology companies, consumer advocacy groups, and innovative video device manufacturers in the Consumer Video Choice Coalition (CVCC), believes that consumers and our economy would benefit from greater competition in the video navigation device marketplace. Just as *Carterfone*<sup>3</sup> unleashed innovation in telephony, the Commission now has an opportunity to open up a new market for technological progress. CCIA urges the Commission to review the DSTAC’s report and initiate a rulemaking following the “Competitive Navigation” solution without delay.

**I. The Commission Should Not Simply “Call It a Day.”**

The STELA Reauthorization Act of 2014 (STELAR) mandated that the Commission’s Chairman convene a working group of experts and stakeholders from a wide range of

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<sup>1</sup> CCIA represents large, medium, and small companies in the high technology products and services sectors, including computer hardware and software, electronic commerce, telecommunications, and Internet products and services. Our members employ more than 750,000 workers and generate annual revenues in excess of \$540 billion. A list of CCIA’s members is available online at <http://www.ccianet.org/members>.

<sup>2</sup> *Media Bureau Seeks Comment on DSTAC Report*, MB Docket No. 15-64, Public Notice, DA 15-982 (rel. Aug. 31, 2015).

<sup>3</sup> *Use of the Carterfone Device in Message Toll Telephone Service*, 13 FCC 2d 420 (June 26, 1968).

perspectives “to identify, report, and recommend performance objectives, technical capabilities, and technical standards of a not unduly burdensome, uniform, and technology- and platform-neutral software-based downloadable security system designed to promote the competitive availability of navigation devices in furtherance of Section 629 of the Communications Act.”<sup>4</sup>

On January 27, 2015, Chairman Wheeler announced the formation of the DSTAC, whose members represented a wide range of interests from multichannel video programming distributors (“MVPDs”), to device manufacturers, to public interest groups.<sup>5</sup> The DSTAC divided into four working groups, held seven meetings that were open to the public, and produced a report and recommendations to the Commission on August 28, 2015. Congress tasked the DSTAC with developing standards and guidelines to promote competition in this market, which generates an estimated \$19.5 billion annually.<sup>6</sup> Despite one commenter’s suggestion that the Commission ignore its statutory responsibilities and “call it a day,”<sup>7</sup> the Commission should initiate a rulemaking proceeding based on the “Competitive Navigation” solution in the DSTAC report, laying the necessary groundwork for unleashing innovation and promoting consumer access to additional devices.

**a. Congress Established Competition in the Set-Top Box Marketplace as a National Priority Requiring the Commission’s Attention.**

With the Telecommunications Act of 1996 (the 1996 Act), Congress aimed “to accelerate rapidly private sector deployment of advanced telecommunications and information technologies

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<sup>4</sup> Pub. L. No. 113-200, § 106(d), 128 Stat. 2059, 2063 (2014).

<sup>5</sup> FCC, Public Notice, *Appointment of Members to the Downloadable Security Technology Advisory Committee*, 30 FCC Rcd. 389 (2015).

<sup>6</sup> Press Release, Office of Sen. Ed Markey, Markey, Blumenthal Decry Lack of Choice, Competition in Pay-TV Video Box Marketplace (July 30, 2015), *available at* <http://www.markey.senate.gov/news/press-releases/markey-blumenthal-decry-lack-of-choice-competition-in-pay-tv-video-box-marketplace>.

<sup>7</sup> See Comments of AT&T, MB Docket 15-64, at 22 (filed Oct. 8, 2015) (“[T]he commission should carefully review the DSTAC Report and then call it a day, allowing the Apps Approach to continue its virtuous development unencumbered.”).

and services to all Americans by opening all telecommunications markets to competition.”<sup>8</sup> That law included a section that sought to empower the Commission to promote competition for video navigation devices. Section 629 of the 1996 Act stated: “The Commission shall . . . adopt regulations to assure the commercial availability . . . of converter boxes, interactive communications equipment, and other equipment used by consumers to access multichannel video programming . . . from manufacturers, retailers, and other vendors . . . .”<sup>9</sup> This provision plainly tasked the Commission with ensuring that consumers can use retail video navigation devices to access MVPD programming.

CableCARD developed from the Commission’s initial attempts to fulfill Section 629’s mandate. However, the implementation of CableCARD has been slow and costly, and it has not led to the desired level of competition. Since 2007, the nine largest cable operators have deployed about 617,000 CableCARDS for use in retail devices.<sup>10</sup> During that same time period, the National Cable & Telecommunications Association (NCTA) also noted that over 53,000,000 CableCARDS have been deployed in devices cable operators supplied directly to their customers.<sup>11</sup> In its first attempt to implement Section 629, the Commission hoped that its rules, “if implemented promptly and in good faith, should result in an evolution of the market for navigation devices so that they become generally and competitively available through commercial retail outlets.”<sup>12</sup> However, as Google explained in its comments, “[f]or nearly two decades, Section 629 of the Communications Act has directed the Commission to assure the

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<sup>8</sup> S. REP. NO. 104-230, at 113 (1996) (joint explanatory statement of Committee of Conference).

<sup>9</sup> 47 U.S.C. § 549(a) (2012).

<sup>10</sup> Letter from Neal M. Goldberg, Vice President and Gen. Counsel, National Cable & Telecommunications Association, to Marlene H. Dortch, Fed. Comm’n Sec’y, CS Docket No. 97-80 (July 31, 2015), <http://apps.fcc.gov/ecfs/document/view?id=60001119614>.

<sup>11</sup> *Id.*

<sup>12</sup> *In the Matter of Implementation of Section 304 of the Telecommunications Act of 1996; Commercial Availability of Navigation Devices, Report and Order*, 13 FCC Rcd. 14775, at 6, ¶ 13 (rel. June 24, 1998), <https://transition.fcc.gov/Bureaus/Cable/Orders/1998/fcc98116.pdf>.

commercial availability of equipment used to access services provided by MVPDs. By its own measure, the Commission has not yet successfully implemented Congress's mandate."<sup>13</sup>

**b. There is a Manifest Lack of Competition in the Set-Top Box Marketplace.**

Congress mandated the creation of the DSTAC in STELAR because of inadequate competition in the video navigation device market. A crucial component of this problem is the near-ubiquity of set-top box leasing among consumers. Senators Ed Markey and Richard Blumenthal recently found that "approximately 99 percent of customers rent set-top boxes directly from their MVPD."<sup>14</sup> This means that ninety-nine percent of consumers are leasing the set-top box that their provider chooses for them. Many consumers may not even contemplate the possibility of using a device not supplied by an MVPD.

Senators Markey and Blumenthal also found that leasing costs consumers about \$19.5 billion annually,<sup>15</sup> creating an unnecessary drag on the economy. They estimated that "[t]he average household spends \$231.82 a year on set-top box rental fees."<sup>16</sup> Many consumers lease these boxes for multi-year, even perpetual terms, without knowing that they could purchase a compatible, often technically superior device for less than the cost of renting their providers' box for one year. Beyond that, consumers and market watchers have frequently complained that the MVPD-provided devices include outdated technology, cable systems operators are slow to update features, and consumers often experience difficulties with installation even by the cable operators' own technicians.<sup>17</sup> The navigation device marketplace has not developed the robust competition that Congress sought to ensure.

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<sup>13</sup> Comments of Google, Inc., MB Docket 15-64, at 2 (filed Oct. 8, 2015).

<sup>14</sup> Markey Press Release, *supra* note 6.

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> Comments of Consumers Union, MB Docket 15-64, at 3 (filed Oct. 8, 2015).

## **II. The Commission Should Follow the Principles in *Carterfone* and Unleash Innovation and Competition in the Video Navigation Device Marketplace.**

The *Carterfone* decision has had a long-lasting and significant effect on telecommunications and the consumer electronics marketplaces. In *Carterfone*, the Commission required that the telephone monopoly, AT&T, allow customers to use third-party devices as long as they did not “adversely affect” AT&T’s network.<sup>18</sup> This is analogous to the current situation with the cable provider-preferred set-top boxes because before *Carterfone*, most consumers rented phones that AT&T provided to them. After *Carterfone*, customers were free to choose whichever third-party device they wanted to use as long as the device did not harm AT&T’s network. Furthermore, *Carterfone* opened a new market for innovation, ultimately leading to the modem and the commercial Internet, which as COMPTTEL (now INCOMPAS) noted, would probably not have been possible without the guiding principles of *Carterfone*.<sup>19</sup>

CCIA agrees with NCTA that the DSTAC process involves a “fundamental debate” regarding how consumers “receive video” in light of “market developments;” however, *Carterfone* should not be relegated to being a mere “casual allusion[.]”<sup>20</sup> The principles of *Carterfone* have yielded unbelievable technological developments that have begotten immeasurable benefits to consumers and our economy. Similarly, consumer choice, interoperability, and competitive markets should guide the Commission’s action in this proceeding.

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<sup>18</sup> *Carterfone*, 13 F.C.C.2d at 423-24.

<sup>19</sup> Comments of COMPTTEL, MB Docket 15-64, at 6 (filed Oct. 8, 2015).

<sup>20</sup> Comments of the National Cable & Telecommunications Association (NCTA), MB Docket 15-64, at 9 (filed Oct. 8, 2015).

### **III. The Commission Should Pursue a Rulemaking Based on the DSTAC’s “Competitive Navigation” Solution.**

The DSTAC presented two proposals. The first proposal, dubbed the “Competitive Navigation” solution, would facilitate retail competition by promoting custom features and user interfaces in third party navigation devices. The second proposal, the “Apps Approach,” would only allow MVPD-provided apps on third-party devices. CCIA and its colleagues in the CVCC support the Competitive Navigation solution because it will better facilitate competition and consumer choice, which was ultimately Congress’s goal for the DSTAC.<sup>21</sup> Moreover, the Competition Navigation solution would foster the competition exemplified by *Carterfone*. The Apps Approach, however, would simply maintain the status quo.

#### **a. The “Competitive Navigation” Solution Would Facilitate Robust Competition.**

Though the market for consumer electronics is booming, the video navigation device sector has not experienced similar levels of competition. A key reason for this stagnation is lack of product differentiation. As discussed previously, *Carterfone* catalyzed product differentiation, ultimately leading to new devices like answering machines, modems, and now smartphones. Smartphone makers have flexibility to differentiate their products, offer different user interfaces (UIs) and operating systems, and develop new features, which can help them to thrive in a competitive marketplace.<sup>22</sup> In competitive markets, particularly the smartphone market, consumers expect new or improved features and products, and devices succeed or fail based on the ability to meet consumer demand. Smartphone makers turn out new products or updates every year to meet demand and maintain market share. However, in the context of the

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<sup>21</sup> See the STELA Reauthorization Act of 2014 (STELAR), Pub. L. No. 113-200, § 106(d), 128 Stat. 2059, 2063 (2014) (requiring that the DSTAC “identify, report, and recommend performance objectives, technical capabilities, and technical standards of a not unduly burdensome, uniform, and technology- and platform-neutral software-based downloadable security system designed to promote the competitive availability of navigation devices in furtherance of Section 629 of the Communications Act.”).

<sup>22</sup> Comments of Public Knowledge, MB Docket 15-64, at 10 (filed Oct. 7, 2015).

navigation devices, ninety-nine percent of customers lease a set-top box, for which they pay a leasing fee costing the average family almost \$232 per year and for which their MVPD sporadically provides new features, updates, or new hardware. Curiously, an opponent of the Competitive Navigation solution claimed it “would deprive customers of the features and functionalities that customers expect from their MVPD service and pay for,”<sup>23</sup> yet Consumers Union noted that “there is great consumer demand for additional features beyond what cable companies have made available.”<sup>24</sup>

The Competitive Navigation solution would open up the market for video navigation device makers, and let consumers decide which UIs and features they want. As the CVCC explained, “[t]he Competitive Navigation solution relies on a ‘Virtual Headend’ in which network security and conditional access are performed in the ‘cloud.’”<sup>25</sup> Furthermore, “[i]t does not require any changes to the content, channel, on-demand offers, or sequencing of an MVPD system, but allows competition in users’ search, selection, and storage options with respect to all the content from all sources to which a user has rights.”<sup>26</sup> MVPDs would provide new interfaces, allowing third party device manufacturers to develop and differentiate their own UIs.

There have been great changes in how consumers view content. CCIA agrees with NCTA that “[c]ompetition among these retail distributors has fueled and funded innovation, network upgrades, broadband deployment, and consumer choice. Each innovation by one provider spurs competitive responses by others in the market.”<sup>27</sup> NCTA also acknowledges that changes *elsewhere* in the video device marketplace have helped AT&T and Verizon expand into pay-TV, and features like Remote Storage DVR have also helped the incumbent Cablevision “to

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<sup>23</sup> AT&T Comments at 3.

<sup>24</sup> Consumers Union Comments at 4.

<sup>25</sup> Comments of the Consumer Video Choice Coalition (CVCC), MB Docket 15-64, at 11 (filed Oct. 8, 2015).

<sup>26</sup> *Id.* at 12.

<sup>27</sup> NCTA Comments at 10.

compete.”<sup>28</sup> This is precisely the point. Consumers are hungry for innovation and new products. When TiVo began bringing digital video recorder (DVR) technology to market, consumers quickly embraced the feature, ultimately causing MVPDs to adopt it. However, true change in the navigation device marketplace cannot occur when ninety-nine percent of customers are locked into leasing a set-top box that their MVPD has chosen for them.

Opponents of the Competitive Navigation solution paint a misleading picture regarding the variety of ways that consumers can consume content. They name the many different streaming services and over-the-top (OTT) offerings, positing their increasing popularity as an example of growing competition.<sup>29</sup> However, they are merely obfuscating the truth that most customers still only have one way of accessing pay-TV – through a leased box. Moreover, as Public Knowledge explained, OTT offerings and MVPDs do not compete on the same playing field. MVPDs are afforded substantial benefits through local franchise agreements, utilizing public rights of way, “good faith” negotiations with broadcasters, and compulsory copyright licenses just to name a few.<sup>30</sup>

**b. The DSTAC Adhered to its Statutory Mandate by Recommending the Competitive Navigation Solution.**

Opponents of the Competitive Navigation solution claim that the DSTAC strayed from its statutory mandate by addressing issues in addition to downloadable security.<sup>31</sup> However, these

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<sup>28</sup> *Id.* at 10.

<sup>29</sup> *See* Comments of Comcast Corporation, MB Docket 15-64, at 2 (filed Oct. 8, 2015) (“the growing number of providers vying for [the consumer’s attention]”); NCTA Comments at 2.

<sup>30</sup> Public Knowledge Comments at 12-13.

<sup>31</sup> *See* Comments of the American Cable Association (ACA), MB Docket 15-64, at 4 (filed Oct. 8, 2015) (“WORKING GROUP 4 EXCEEDED THE EXPRESS DIRECTIVE OF STELAR BY EXAMINING NON-SECURITY FUNCTIONS RATHER THAN CONFINING ITSELF TO DOWNLOADABLE SECURITY”); AT&T Comments at 5 (“MVPDs and others on the DSTAC opposed these proposals, arguing that the DSTAC should limit its report to downloadable security, consistent with STELAR.”); Comments of the Motion Picture Association of America (MPAA), MB Docket 15-64, at 7 (filed Oct. 8, 2015) (arguing that the letter from Congressmen Latta and Green does not empower the FCC to go beyond downloadable security); Comcast Comments at 14; *see also* NCTA Comments at 13 (“[E]ven if it could be developed beyond the vaporware sketched in the Report, would undermine the retail market that Section 629 is intended to advance”).



commenters fail to recognize that DSTAC’s ultimate purpose was “to promote the competitive availability of navigation devices in furtherance of Section 629 of the Communications Act.”

When ninety-nine percent of customers lease a set-top box provided by their MVPD, it cannot be said that a market is sufficiently competitive.

**c. The “Apps Approach” Would Perpetuate the Status Quo.**

Opponents of the Competitive Navigation solution have instead backed the Apps Approach, claiming it would follow the “apps revolution” that has occurred in other parts of the consumer electronics marketplace.<sup>32</sup> While listing a number of other consumer electronics devices and services that often in reality do not have the same advantages as MVPDs,<sup>33</sup> AT&T argues: “Consumers can readily access MVPD programming and services via MVPD apps that serve over 450 million consumer-owned devices, including Android and iOS smartphones and tablets, PCs and Macs, game consoles, Smart TVs, and other retail devices such as Roku, Google Chromecast, and Kindle Fire.”<sup>34</sup> However, Apps Approach proponents neglect to mention that the Apps Approach would further entrench the incumbents’ control over how customers access MVPD offerings. An MVPD’s app will only work on the platform for which it is designed,<sup>35</sup> meaning that if a consumer uses an app on a third party platform, the MVPD could unilaterally and arbitrarily decide that it will no longer support that platform.<sup>36</sup> This would deprive the consumer of accessing the content for which she paid and, in all probability, force the consumer back to the MVPD’s equipment.

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<sup>32</sup> NCTA Comments at 2.

<sup>33</sup> See *supra* note 30.

<sup>34</sup> AT&T Comments at 2.

<sup>35</sup> Public Knowledge Comments at 11.

<sup>36</sup> See John Bergmayer and Shiva Stella, *It’s Absurd that Comcast Can Block the HBO Go App on Your PS4*, SLATE (March 13, 2015), [http://www.slate.com/blogs/future\\_tense/2015/03/13/it\\_s\\_absurd\\_that\\_comcast\\_can\\_block\\_hbo\\_go\\_on\\_your\\_ps4.html](http://www.slate.com/blogs/future_tense/2015/03/13/it_s_absurd_that_comcast_can_block_hbo_go_on_your_ps4.html) (explaining how Comcast had prevented its subscribers from accessing HBO Go and Showtime apps on Roku devices).

Furthermore, the Apps Approach would project the incumbents' UI and features onto other devices. AT&T candidly explained the real intention and ultimate effect of the Apps Approach: "It thus would ensure that the MVPD's subscribers will receive their MVPD service with the 'look and feel' intended by their MVPD."<sup>37</sup> This solution would not foster competition, for as Consumers Union noted, "[t]here is little reason for a consumer to buy a third-party device that is nothing more than a display terminal for a user interface designed and controlled by their MVPD."<sup>38</sup> Moreover, Google noted that, on such an app, customers would not be afforded the recording features they have come to expect, so "the apps proposal actually could make subscribers who want to record TV programming worse off than they are today."<sup>39</sup>

**d. Copyrights are Not Adversely Affected by the Competitive Navigation Solution.**

In what can only be read as a "kitchen sink" paragraph, the MPAA raises contractual, copyright, and even constitutional concerns regarding allowing third party devices to develop their own UIs and display MVPD content.<sup>40</sup> ARRIS and AT&T engage in similar distracting arguments, claiming that the Apps Approach is the only way that they can comply with their copyrights, licenses, and prevent piracy.<sup>41</sup> In reality, the Commission's decision will affect neither copyright nor contract law. Device manufacturers, of course, cannot violate contracts to which they are not a party. Should a party breach contracts into which they have entered, content licensors will remain free to enforce those terms. Similarly, copyright law will continue

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<sup>37</sup> AT&T Comments at 8.

<sup>38</sup> Consumers Union Comments at 4-5.

<sup>39</sup> Google Comments at 7.

<sup>40</sup> See MPAA Comments at 2 ("Third-parties could potentially seek to disassemble the programming, features, and functions offered over distribution services and selectively reassemble some of them for their own commercial exploitation. This could interfere with contracts, upset copyright law, and run afoul of the First and Fifth Amendments to the U.S. Constitution.").

<sup>41</sup> See AT&T Comments at 2-3 ("MVPDs' use of apps allows them to . . . (v) provide service consistent with all the myriad copyright, contractual, and regulatory requirements associated with their conduct"); ARRIS at 5 ("This security framework ensures that video is secured against unauthorized use and piracy, and is presented in a way that respects usage rights and other content license restrictions negotiated between the distributor and content suppliers.").

to govern under what terms devices can handle content. Rightsholders have shown no qualms about litigating – largely without success – what functionality device manufacturers may provide to consumers in the home.<sup>42</sup>

#### **IV. Conclusion.**

By enacting Section 629 of the 1996 Act, Congress provided a clear mandate for the Commission to ensure vibrant competition in the set-top box marketplace. Almost two decades later, and after multiple failed attempts, Congress required that the DSTAC recommend a “downloadable security system designed to promote the competitive availability of navigation device in furtherance of Section 629 of the Communications Act.” With ninety-nine percent of customers renting their provider’s preferred set-top box, there is not the meaningful competition Congress envisioned. Now is the time for the Commission to finally promote competition for video navigation devices. The Commission should initiate a rulemaking proceeding and propose adopting the Competitive Navigation solution.

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Respectfully submitted,

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<sup>42</sup> See, e.g., *Sony Corp. of Am. v. Universal City Studios*, 464 U.S. 417 (1984); *Fox Broad. v. DISH Network LLC*, 723 F.3d 1067 (9th Cir. 2013), *further proceedings at* 114 U.S.P.Q.2d 1100 (C.D. Cal. 2015).