

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
International Comparison and Consumer	)	
Survey Requirements in the Broadband	)	GN Docket No. 09-47
Data Improvement Act	)	
	)	
Inquiry Concerning the Deployment of	)	GN Docket No. 09-137
Advanced Telecommunications Capability	)	
to All Americans in a Reasonable and	)	
Timely Fashion, and Possible Steps to	)	
Accelerate Such Deployment Pursuant to	)	
Section 706 of the Telecommunications	)	
Act of 1996, as Amended by the	)	
Broadband Data Improvement Act	)	
	)	
Implementation of the Telecommunications	)	CS Docket No. 97-80
Act of 1996, Commercial Availability of	)	
Navigation Devices	)	

**CABLEVISION SYSTEMS CORPORATION  
COMMENTS - NBP PUBLIC NOTICE # 27**

Cablevision Systems Corporation (“Cablevision”) hereby submits these comments in the above-captioned proceedings in response to the issues raised by the Commission in Public Notice #27, which seeks comment on “how [it] can encourage innovation in the market for video devices that will assist the Commission’s development of a National Broadband Plan.”<sup>1/</sup> As discussed further below, Cablevision respectfully suggests that the Commission should enable the continued innovation of devices that bring online video directly to the television to flourish

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<sup>1/</sup> *Comment Sought on Video Device Innovation*, NBP Public Notice # 27, GN Docket Nos. 09-47, et al., DA 09-2519 (rel. Dec. 3, 2009) (“*Public Notice*”). Cablevision provides cable, broadband and digital phone services to customers on an advanced, fiber-optic network that serves approximately 4.5 million households in New York, New Jersey, and Connecticut, primarily in the New York City metropolitan area.

and avoid unnecessary further regulation of the set top box devices that might frustrate that innovation.

Cablevision has recognized the benefits of promoting interoperability among third party devices and cable networks to facilitate development of a retail market for navigational devices. Cablevision was the first cable operator in the nation to support separate, removable conditional access in all of its set top boxes, provides robust support for CableCARDs, and has deployed network support for Tru2Way throughout its service area.<sup>2/</sup> At the Commission's urging, Cablevision also was the first to develop and implement an open, downloadable conditional access system for use on its own and third party navigation devices. The Commission has found

“that the development of set-top boxes and other devices utilizing downloadable security is likely to facilitate a competitive navigation device market, aid in the interoperability of a variety of digital devices, and thereby further the DTV transition. We also recognize that software-oriented conditional access solutions currently under development may 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.”<sup>3</sup>

By developing an open standard, Java-based secure access channel that is extremely low cost, efficient, and portable, Cablevision is pursuing the Commission's preferred path for implementing the separable security requirement and ushering innovation on “the edge.”<sup>4/</sup> The

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<sup>2/</sup> *Cablevision Systems Corporation's Request for Waiver of Section 76.1204(a)(1) of the Commission's Rules*, 22 FCC Rcd 220 (2007).

<sup>3</sup> *Implementation of Section 304 of the Telecommunications Act of 1996*, 20 FCC Rcd 6794, ¶ 3 (2005) (“*Second Report and Order*”).

<sup>4/</sup> *See Second Report and Order* ¶ 31; *id.* ¶ 35 (“Downloadable security comports with the rule's ban on the inclusion of conditional access and other functions in a ‘single integrated device’ because, by definition, the conditional access functionality of a device with downloadable security is not activated until it is downloaded to the box by the cable operator.”); *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*, CS Docket No. 97-80, Public Notice, DA 07-51 (rel. Jan. 10, 2007).

royalty free NDS “key ladder” is already embedded in scores of microprocessors in use in third party video devices – televisions, set top boxes, video recorders – and those devices will be able to operate on Cablevision’s network using downloadable security and Java-based middleware. Cablevision is moving forward with plans to place the administration of the downloadable solution in the hands of third parties, so that it can be administered for the benefit of all stakeholders.

Cablevision’s investment in, and success in implementing, downloadable security already has sparked the interests of other operators, consumer electronics vendors, and set top box manufacturers because it unleashes opportunities for innovation by supporting genuine device independence. As Cablevision’s downloadable security solution matures, new set top box manufacturers – such as LG, ADB, KAON, Arris, Funai, Pace – are driving the pace of development, spurring industry leaders including Cisco, Motorola, Samsung and Panasonic to bring lower cost, higher functioning set top boxes to market on a downloadable platform. Cablevision’s downloadable security solution also works alongside CableCARDS and tru2way technology, supporting the next generation of two-way set top boxes and third party devices on a robust, standardized platform that supports the Commission’s goal of portability and interoperability.

Against this backdrop, Cablevision continues to drive extraordinary innovation in features and capabilities among the set top boxes it makes available to its customers, while balancing the critical needs of the company’s cable operation to maintain consistency, reliability, and predictability in the field to keep costs low and customer service high. In the last several years, Cablevision has deployed robust search capabilities, telescoping, advanced DVR interoperability with the web, network DVR capabilities, applets, shortcuts, personalization, and

voice service synchronization. In addition – and just as important for the quality of the customer experience and operations overall – it has introduced these and other capabilities while reducing boot times on the set top boxes, thereby avoiding incursion of extraordinary new call center and customer support costs that typically result from new product introductions. So even as some commenters allege that “the big pay TV companies” are “block[ing] innovation” in this space,<sup>5/</sup> Cablevision has leveraged its open platform to get better set top boxes, better applications, and a better experience into the homes of its customers without fundamentally disrupting the uniformity, simplicity and low error rates that are essential to a cable operation that has more than 10 million contacts – phone calls, web interactions, home visits – with customers each year.

In furtherance of Commission policy objectives, Cablevision and other operators have spent tens of millions of dollars over the last decade deploying new technologies and standards to support the ability of third parties to develop and sell products to consumers to operate on the cable network. Cablevision has implemented ubiquitous support of CableCARDS, rolled out support for Tru2Way across its service area, and established a test bed to facilitate the ability of third party manufacturers to test, refine, and improve their products’ operation on our network before deployment. Having laid the foundation for third parties to create new and interesting products, the decision whether to invest in such products, market them, and attract consumers is left to the dynamics of the market.

In the *Public Notice*, the Commission asks if there is a “solution that would allow MVPDs to continue innovating without making navigation devices obsolete when MVPDs adopt incompatible delivery methods?”<sup>6/</sup> Like analog televisions, Betamax VCRs, integrated stereos,

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<sup>5/</sup> Letter from Harold Feld, Public Knowledge, to Marlene H. Dortch, Secretary, FCC, CS Docket 97-80, et al., Attachment at 2 (Oct. 28, 2009).

<sup>6/</sup> *Public Notice* at 4, question D2.

vinyl records, and compact discs, legacy devices ultimately will fall off the back of the innovation curve as cable networks continue to develop. Imposing regulation in order to arrest this process will entail more costs than benefits. MVPDs have no incentive to make it more difficult for their customers to use preferred devices to access their video programming services, and any provider that seeks to thwart those preferences risks driving its customers to rival platforms and providers. But rules mandating that network providers accommodate every legacy existing video device that a consumer might deploy would simply halt the innovation and experimentation on the cable platform that is responsible for the very kind of advanced features and functionalities that are at the center of the user experience today: high definition programming, digital video storage, interactivity, search, and other capabilities that devices sold just a few years old could not accommodate.

Perhaps even more to the point, the idea that we need new regulations to ensure that devices can be attached directly to an MVPD's network – as opposed to the television itself – are becoming increasingly anachronistic.<sup>7/</sup> Cablevision's implementation of downloadable security is further opening up its network to third party video devices. Given the simplicity, low cost and portability of Cablevision's downloadable CAS solution, other MSOs are likely to follow. At the same time, third-party manufacturers are providing consumers with a growing array of video devices that accommodate their lifestyles and individual viewing habits without relying on, or integrating with, the complex cable infrastructure. Such hardware, which includes laptops, mobile phones, Wi-Fi devices, iPod-related equipment, video devices, HTPCs, gaming hardware

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<sup>7/</sup> The petition for rulemaking recently filed by Public Knowledge and others calling on the Commission to require MVPDs to deploy "gateway devices," appears to be a paradigm of this approach. *See Petition for Rulemaking of Free Press, et al.*, CS Docket 97-80, et al. (filed Dec. 18, 2009). Notwithstanding press reports that at least one of the petitioners apparently does not believe a "broad notice" is necessary, Cablevision assumes the Commission will provide adequate opportunity for public comment on this petition. *See Josh Wein, Public Knowledge, Others, Petition FCC to Reopen Set-Top Box Rules*, COMMUNICATIONS DAILY, Dec. 21, 2009.

and retail devices like TiVo boxes and other set-top box like equipment, provides functionalities that allow for access to video content delivered over the Internet and other sources by connecting directly to subscriber television sets. In this regard, televisions themselves have become the central consumer user interface for selecting media content in the home, allowing users to switch among sources for music, video, games, Internet, and cable television content without restriction or the need for coordination among the myriad stakeholders with which the consumer can interface.

Consumers today already have the ability to access a vast amount of video programming content without having to utilize any devices provided by a cable operator or, indeed, without having to subscribe to MVPD video service at all.<sup>8/</sup> Many consumers are turning to “web TVs” to obtain both content from the Internet, as well as their respective MVPD. TV manufacturers including Sony, Samsung, LG, Panasonic, and Vizio are launching first-generation television sets that can “easily integrate Web content with traditional TV news and entertainment – without the fuss of connecting the TV to a set-top box.”<sup>9/</sup> One researcher predicts that 45 million of these sets will be purchased in 2014, roughly 69% of all TV sales.<sup>10/</sup> The popularity of such devices is illustrated by the “race” manufacturers are in “with cable companies and gadget providers - including makers of DVRs, Blu-ray players and game machines - who all offer alternative ways to blend the Internet with TV.”<sup>11/</sup> Indeed, consumers eagerly purchase such devices as soon as they hit the market in order to take advantage of the latest technologies.

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<sup>8/</sup> See, e.g., Nick Bilton, *Cable Freedom Is a Click Away*, N.Y. TIMES, Dec. 10, 2009.

<sup>9/</sup> David Lieberman, *Could this Finally be the Season for Web TV?*, USA TODAY, Nov. 13, 2009.

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

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

The Commission has previously recognized that “innovation continues to be a hallmark of the navigation devices and digital-cable ready equipment markets.”<sup>12/</sup> Allowing the interplay between those devices and MVPD network platforms to be refined organically – via open solutions such as Cablevision’s downloadable security platform – serves the public interest by promoting diverse methods of accessing video content while ensuring an operationally sound solution that preserves opportunities for innovation and product development for all stakeholders. In pursuing the issues in the *Public Notice* in a subsequent *Notice of Inquiry*, Cablevision urges the Commission to avoid preemptive and premature government regulation and instead enable innovation and experimentation to flourish by allowing the design, capabilities and features of video devices to be shaped by market forces and consumer preferences.

Respectfully submitted,



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<sup>12/</sup> *Second Report and Order*, n.146.