

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

In the Matter of)	
)	
Downloadable Security Technical Advisory)	MB Docket No. 15-64
Committee (DSTAC) Report)	
)	

**COMMENTS OF
THE FREE STATE FOUNDATION***

I. Introduction and Summary

These comments are submitted in response to the Commission’s request for comments regarding the final report that the Downloadable Security Technical Advisory Committee (DSTAC) submitted to the Commission on August 28, 2015. The STELA Reauthorization Act of 2014 (STELAR) required the Chairman to establish a working group to recommend standards for software-based downloadable security to video navigation devices. The standards are supposed to be “not unduly burdensome, uniform, and technology- and platform-neutral.” The DSTAC report was submitted pursuant to STELAR.

Importantly, the working group’s report did not recommend that any technical mandates be imposed concerning downloadable security software or any other design or functionality aspects of video device design. The focus of these comments is on the policy imperative that the Commission refrain from imposing any technical mandates or other new regulations on the design of video devices.

Market innovation – not FCC regulation – is responsible for consumers’ enjoyment of

* These comments express the views of Randolph J. May, President of the Free State Foundation, and Seth L.

multi-channel video programming distributor (MVPD) and other video viewing options, such as Wi-Fi or wireless, mobile devices, tablets, and video game consoles. New restrictions on the designs of video device hardware and software would threaten the investment and innovation that has taken place outside the scope of regulation. New regulation would harm MVPDs' ability to compete for consumers in a market that now includes online video distributors (OVDs) and streaming media devices.

Providers in different segments of the video market should be left free to pursue the design of video device functions and interfaces. Design decisions and arrangements should not be decided through a command-and-control process in which regulators place their thumbs on the scales.

A fair reading of the report suggests that any attempt by the Commission to impose new downloadable security or other technical mandates on MVPD-supplied devices would overtax the agency's administrative capabilities and cause harm to the development of technologies and business models. Tremendous technological diversity exists among MVPD, direct broadcast satellite (DBS), and telco IPTV platforms. Not surprisingly, the report deemed it unreasonable to expect MVPDs to re-architect their networks in order to converge on a single, common security solution.

New technical mandates regarding downloadable security would displace or even destroy the intricate and interdependent technological systems and business arrangements that shape the video navigation device market. Video content owners, video device manufacturers, and video service providers have direct institutional knowledge and expertise concerning the technical functions and business models involved. These market participants balance security and other rights and interests through detailed voluntary agreements. The Commission does not possess the

kind of institutional knowledge or the incentives necessary to balance those rights and interests. Market participants are best positioned to propel and adapt to change in the video device market.

Nor should the Commission impose new video device controls over video menu content and display functions. The report declined to endorse new controls on menu and content display, and rightfully so. MVPD editorial choices regarding video programming content, arrangement, and menu displays are protected forms of free speech. Requiring MVPDs to disaggregate bundled content and menu products into outputs for third parties to reassemble and rebrand would infringe upon their First Amendment rights, and perhaps their intellectual property rights as well.

The Commission should adopt an alternative course to imposing new regulations. It should finally eliminate its analog, VCR-era video device regulations. Section 629(e) contains a unique mechanism for sunseting the video device regulations when the Commission determines that the MVPD and devices markets are fully competitive and that elimination of regulations would promote further competition and the public interest.

Section 629 passed Congress at a time when cable operators still had more than 90% market share for video subscription services. But nationwide DBS and telco IPTV entrants have reduced that market share significantly. The *Effective Competition Order* (2015) acknowledged the effective competitive state of national and local MVPD markets. That acknowledgment effectively undermines the analytical basis for video device regulations.

Also to be considered is the rapid rise of online video distributor (OVD) services and the emergence of the streaming media device market. These new services and devices also offer independent alternatives for video viewing that is increasingly popular with consumers, especially cost-conscious consumers. The disruptive presence of OVDs and the streaming media

devices undermines the old rationale for intrusively regulating MVPD-provided video devices. The Commission should therefore sunset those regulations under Section 629(e).

II. The Working Group Did Not Endorse Technical Mandates for Video Devices, and Neither Should the Commission

The critical takeaway from the report by the DSTAC working group is that it did *not* recommend software and hardware technical mandates for video devices. Following the report, the Commission should likewise refrain from imposing any new technical mandates. Instead, the Commission should allow for the market to develop its own standards by voluntary cooperation and course of dealing. The dynamic forces at work in the video market must remain free to offer consumers a continuing supply of new video viewing choices.

Consumer enjoyment of MVPD and other video content viewing options – whether through Wi-Fi or wireless, mobile devices, tablets, video game consoles, or otherwise – is the result of market innovation, not FCC regulation. New regulation of the designs of video device hardware and software would threaten the investment and innovation in video device technology that has taken place outside the scope of existing Commission requirements. Regulation would impose serious harms on MVPDs’ ability to make competitive offerings to consumers in response to challenges posed by OVD and streaming media devices.

Any future standards to govern the MVPD or broader video device market should be freely adopted by the market providers themselves and adjusted by those same providers over time. Providers in different segments of the video market should be left free to pursue the design of broader video device functions and interfaces. Negotiations and arrangements on such matters should be voluntary. They should not be decided through a suspect process in which regulators place their thumbs on the scales.

Indeed, the report suggests the any attempt by the Commission to impose new

downloadable security or other technical mandates on MVPD-supplied devices would overtax the agency's administrative capabilities and cause tremendous harm to existing technologies and business courses of dealing. The report not only acknowledges the tremendous network technological diversity that exists between MVPD, DBS and telco IPTV platforms, it also acknowledges the significant technological differences that exist between individual providers within those market provider segments.¹ Not surprisingly, the report's consensus held it unreasonable to expect MVPDs to re-architect their networks in order to converge on a single, common security solution. Thus, the report concluded: "It should not be necessary to disturb the potentially multiple present and future [conditional access/digital rights management] system choices made by cable, DBS and IPTV systems, which effectively leaves in place several proprietary systems for delivering digital video programming and services across MVPDs."²

The video navigation device market is also characterized by a variety content protection systems that rely upon conditional access (CA) or digital rights management (DRM), as well as other requirements set through licensing arrangements.³ Diverse network engineering and other technical arrangements exist among MVPDs.⁴ And both CA and DRM present myriad technical complexities in hardware and software.⁵

Licensing requirements necessary to provide further protection against security threats are likewise the subject of complex business contracts and agreements involving video programming content owners, device manufacturers, and MVPDs.⁶ Security chain of trust systems constitute

¹ DSTAC FINAL REPORT (August 28, 2015), at 2, available at: <https://transition.fcc.gov/dstac/dstac-report-final-08282015.pdf>.

² *Id.*

³ See DSTAC - Working Group 2, Report #1 (April 21, 2015) at 1.

⁴ *Id.* at 3-5.

⁵ *Id.* at 2-3.

⁶ *Id.* at 6-7.

another layer of dizzying complexity in the operations of video navigation devices.⁷ These chains of trust run from video content owners to MVPDs and to retail subscribers, providing security protections consistent with licensing restrictions on access. Indeed, through complex contractual and licensing arrangements, chains of trust connect differing security systems.

New technical mandates regarding downloadable security would harmfully disrupt – if not destroy – the intricate and interdependent technological systems and business arrangements that shape the video navigation device market. Video content owners, video device manufacturers, and MVPDs have direct institutional knowledge and expertise concerning the technical functions and business interests involved. Those market participants balance security and other rights and interests through a variety of carefully detailed negotiated agreements. The Commission can scarcely lay claim to possessing this kind of critical institutional knowledge necessary to balance those rights and interests into a working, thriving state of affairs. Furthermore, the report acknowledges that the video device market is undergoing continuous change. Video content owners, video device manufacturers, and MVPDs are the important sources of such change. And those market participants – not the Commission – are best positioned to further propel and adapt to ongoing change in the video device market.

Sensibly, none of the report’s proposals recommend adoption of the principle of “common reliance” upon which the Commission’s repealed “integration ban” regulations were based.⁸ Particularly in light of Congress’s repeal of the integration ban – not to mention the illogic of prohibiting a single device from providing both security and access functions – the Commission should absolutely refrain from re-imposing any regulatory mandates that require MVPDs to rely upon the same security and access solutions that apply to video devices supplied to consumers by

⁷ *Id.* at 7-9.

⁸ DSTAC Final Report, at 3.

third-parties. Indeed, the report recognized that it was “unreasonable” to expect all retail video devices to connect directly to all MVPD access networks.⁹

Downloadable security for video services is a multi-faceted and complex topic. And the FCC has a sorry history regarding regulation of video devices. Aside from the integration ban, the Commission should also learn from its experience with CableCARD – a \$1 billion set-top box regulatory regime that few consumers adopted and which was thrown out by the D.C. Circuit.¹⁰ The unsuccessful CableCARD experience provides further evidence of the practical limits to government controls over how video devices are designed and operate.

III. Video Content and Menu Display Controls Were Not Endorsed by the Report, are Outside Its Scope, and Pose First Amendment Problems

Unfortunately, the Commission staff’s instructions to the working group called for a report that would exceed the statute’s requirements. The preliminary instructions stated that the “committee shall develop” a method to disaggregate bundled content and menu products into outputs through a “black box” for third-parties to repackage “even if participants believe that those features should not be mandatory.”¹¹ Methods for disaggregating bundled video programming and menu contents are outside the scope of STELAR’s mandate.

Not surprisingly, the report reflects that members of the working group objected to the Commission needlessly bringing in technical and regulatory side issues. But whatever the practical effects the FCC’s actions may have on the report, the agency’s disregard of the rule of law is wrong in itself. And for this and other reasons, the Commission should not seek to impose new video device controls over video menu content and display functions.

⁹ *Id.* at 2

¹⁰ *EchoStar v. FCC*, 704 F.3d 992 (D.C. Cir. 2013).

¹¹ Commission staff, DSTAC Preliminary Instructions (Month, Day, 2015), available at: <https://transition.fcc.gov/dstac/fcc-staff-guidance.docx>. See also Commission Staff, DSTAC Follow-Up Instructions (April 27, 2015) (partially walking back its preliminary instructions by calling on the working group to make video and menu content disaggregation an alternative approach to be included in its report), available at: <https://transition.fcc.gov/dstac/fcc-staff-guidance-04272015.docx>.

Wisely, the report declined to endorse new controls on menu and content display. Such mandates would undermine market freedom to design products and services for consumers. In any event, neither regulatory controls of that kind nor heavy-handed influence by regulators evidenced by the Commission staff's instructions can be justified in light of the prevalence of innovation and competition in the video market. There is no evidence of harm to consumers that requires new video device design restrictions.

Moreover, video device design and function controls of the kind urged in the Commission staff's instructions and apparently urged by some members of Working Group 4 would be unmistakably contrary to First Amendment principles.¹² MVPD editorial choices regarding video programming content, arrangement, and menu displays are protected forms of free speech. Requiring video service providers to develop a method to disaggregate bundled content and menu products into outputs for third parties to reassemble and rebrand would infringe upon the editorial speech rights of video service providers. The First Amendment prohibits government from interfering with MVPDs' ability to select, control, and identify their respective messages and branded services.¹³

IV. The Commission Should Sunset Its Outdated Video Device Regulations

The Commission's regulation of video devices has long outlived its original reason for being – even assuming such regulation made sense when initially adopted. Section 629 passed Congress at a time when cable operators still had more than 90% market share for video subscription services. It was adopted during the days of VCRs and analog video technology. For

¹² See, e.g., DSTAC Final Report at 5-6 (summarizing alternative proposal by some WG-4 members).

¹³ The free speech problems posed by the Commission staff's instructions are regrettably reminiscent of the Commission's misguided 2010 AllVid plan. For further background, see Seth L. Cooper, "The AllVid Proposal's First Amendment Problem: Exploring the FCC's Constitutionally Defective Device Regulation," *Perspectives from FSF Scholars*, Vol. 6, No. 8 (March 30, 2011), available at: http://freestatefoundation.org/images/The_AllVid_Proposal_s_First_Amendment_Problem.pdf.

that matter, the Commission’s initial implementing order expressly rooted its video device regulations in 20th Century monopoly telephone attachment principles.¹⁴ Those principles are totally inapplicable to the competitive video market environment of 2015.

The Commission should consider an alternative course to imposing new regulations. It should finally eliminate its analog, VCR-era video device regulations. Section 629(e) contains a unique mechanism for sunseting video device regulations. It provides that regulations “shall cease to apply when the Commission determines that: (1) the market for the multichannel video programming distributors is fully competitive; (2) the market for converter boxes, and interactive communications equipment, used in conjunction with that service is fully competitive; and (3) elimination of the regulations would promote competition and the public interest.”¹⁵

The Commission has conceded the competitiveness of today’s MVPD market. Its *Effective Competition Order* (2015) readjusted some of its old cable regulations “for the first time in over 20 years, to reflect the current MVPD marketplace.”¹⁶ The *Order* acknowledged nationwide and local video market competitive conditions and, therefore, adopted a baseline presumption that local MVPD markets are effectively competitive. This acknowledgment of effective competition in MVPD services undermines a core analytical underpinning for video device regulations.

According to the *Sixteenth Video Competition Report* (2015), “cable MVPDs accounted for approximately 53.9 percent of MVPD subscribers at the end of 2013,” while “combined shares of the two DBS MVPDs accounted for approximately 33.9 percent of MVPD subscribers,” and

¹⁴ *Further Notice of Proposed Rulemaking and Declaratory Ruling*, Implementation of Section 304 of the Telecommunications Act of 1996; Commercial Availability of Navigation Devices, MB Docket No. 97-80, available at: https://apps.fcc.gov/edocs_public/attachmatch/FCC-00-341A1.pdf.

¹⁵ 47 U.S.C. § 629(e).

¹⁶ Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, *Sixteenth Report*, MB Docket No. 14-16 (rel. Apr. 2, 2015), at 10, ¶ 25, available at: https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-41A1.pdf.

“all telco MVPDs accounted for approximately 11.2 percent of MVPD subscribers.”¹⁷ As of 2013, more than 99% of households had access to at least three competing MVPD providers and approximately 35% had access to at least four competing providers.¹⁸

Today’s video market is also marked by continuous technological innovation. Digital video services in hi-definition – and now ultra HD – have replaced one-way cable analog, with two-way functionality such as video-on-demand, time-shifting, TV-Everywhere, and whole homing now readily available. Consumers now enjoy Internet-connected HD DVRs, as well as cloud-based DVRs. Video viewing choices through gaming consoles and mobile viewing choices through at home-Wi-Fi connections and public hot spots are also offered to consumers. Doubtless, choices for video programming content have grown significantly since the early 1990s, with wider variety of niche and premium content increasingly available.

Emergence of online video distributor (OVD) services and streaming media devices clinches the case for finally sunseting device regulations. OVDs – relying on broadband Internet connections and enabling viewing through mobile devices, gaming consoles, PCs, or media streaming devices – are rapidly growing rivals to MVPDs. The *Sixteenth Report* stated: “From year-end 2012 to year-end 2013, the total number of MVPD video subscribers posted its first-ever, full-year decline, falling from 101.0 million to 100.9 million households.”

The *Sixteenth Report* cited an estimate that “as of 2013, more than 53 million U.S. households watched online programming with at least one Internet-connected device, including computers, game consoles, streaming media players, television sets, and Blu-ray players, with an average of 4.8 such devices per online viewing household.”¹⁹ And more recent reports indicate OVD subscriptions total 100 million or more – equal to MVPD subscriptions at the end of

¹⁷ *Id.* at 11, ¶ 27.

¹⁸ *Id.*, at 15, ¶ 31.

¹⁹ *Sixteenth Report*, at 142, ¶ 299 (internal cite omitted).

2013.²⁰

The rapid rise of OVD services coincides with the emergence of the streaming media device market. These Internet-capable devices are unaffiliated with MVPDs and growing in popularity with consumers. According to a recent market research report,²¹ nearly 20% of U.S. broadband households have at least one streaming media device. Among broadband households in the U.S., almost 20% have a streaming media device – whether the Roku 3, Amazon Fire TV, or Apple TV. Meanwhile, 8% of U.S. broadband households have a smaller stick device for streaming media to TVs or PCs, like the Google Chromecast or Amazon Fire TV Stick. The report estimates global sales of streaming media devices will reach 86 million in 2019.

To put these figures in perspective, a recent industry update indicates that the nine largest cable operators have deployed more than 53 million video devices to cable subscribers.²² At the same time, “there have been over 617,000 CableCARDs deployed for use in retail devices by the nine largest incumbent cable operators.”²³ Obviously, MVPD consumers overwhelmingly prefer leasing devices from their provider rather than making separate trips to the store to purchase unaffiliated video devices. And consumers interested in alternatives are inclined toward innovative new devices developed and marketed outside the purview of the FCC’s old device regulation regime.

²⁰ See Tenzin Pema, “Netflix Now Boasts More Than 65 Million Subscribers,” Reuters (August 15, 2015), at: http://www.huffingtonpost.com/2015/07/16/netflix-subscribers_n_7808782.html; Joan E. Solsman, “Hulu closes in on 9 million paid subscribers,” c|net (April 29, 2015), at: <http://www.cnet.com/news/hulu-closes-in-on-9-million-paid-subscribers/#>; Patrick Seitz, “Amazon Prime now tops Netflix in U.S. subscribers,” Investors.com (January 27, 2015), at: <http://news.investors.com/technology-click/012715-736533-amazon-prime-has-more-subscribers-than-netflix.htm>; *Sixteenth Report*, at 10, ¶ 31.

²¹ See Parkes Associates, Press Release: “Parks Associates: Amazon, Apple, Google, and Roku Dominate Streaming Media Device Market With 86% of Sales,” (Aug. 20, 2015), available at: <http://www.marketwired.com/press-release/parks-associates-amazon-apple-google-roku-dominate-streaming-media-device-market-with-2049258.htm>.

²² NCTA, Letter – “Re: CS Docket No. 98-80 (Commercial Availability of Navigation Devices)” (Jul. 31, 2015), available at: <http://apps.fcc.gov/ecfs/document/view?id=60001119614>.

²³ *Id.*

Of course, new OVD services as well as many new streaming devices integrate with MVPDs to offer complement services. But those new services and devices also offer an independent alternative for video viewing. OVDs and media streaming devices constitute video market segments in competition with the traditional MVPD market and MVPD-provided device market segments. The disruptive presence of OVDs and the streaming media devices also challenges the rationale for intrusively regulating MVPD-provided video devices.

V. Conclusion

For the foregoing reasons, the Commission should act in accordance with the views expressed herein.

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