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It's Time to Remove the Costly Integration Ban

by

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On October 24, Congressman Bob Latta delivered keynote remarks at the Free State Foundation's event, "A New FCC or the Same Old, Same Old." Congressman Latta discussed the need to review and update existing laws and regulations to ensure that they reflect today's marketplace realities and promote continued innovation and growth in the Internet economy. He noted the remarkable development of the communications and technology sectors over the past few decades, and he urged Congress to undertake reform of FCC processes as well as a comprehensive review of the "outmoded" 1996 Telecommunications Act.

Congressman Latta targeted the FCC's so called "integration ban" as one area that is clearly ripe for reform, given the developments in the video marketplace since the enactment of the ban. Vigorous competition now characterizes the video and set-top box market segment, and the integration ban is now unnecessary and burdensome.

In the Telecommunications Act of 1996, Congress gave the FCC authority to create rules that would facilitate the ability of consumers to purchase "navigation devices" – set-top boxes, remote controls, and other equipment – from third-party retailers, rather than exclusively from cable providers. At the time, cable providers still dominated the multi-channel video marketplace, and Congress thought the FCC might promote competition by instituting regulations that would allow third parties to enter or grow in the video market. Under the authority granted to it by Section 629 of the Act, the Commission instituted rules that banned cable providers from offering customers set-top boxes that contained both security and navigation functions. This "integration ban" required that set-top boxes provided by either third parties or by cable providers be able to receive cable video content, so that consumers, in theory, would have greater choice in set-top box manufacturers, and competition in the market for such equipment would grow.

Despite whatever may have been the best intentions of Congress and the Commission, the integration ban did not cause competition to increase in the video device marketplace. Instead, innovation and change in technology, business models, and consumer needs have driven the growth and development of the video marketplace, including navigation devices. Today, the integration ban is merely hindering investment and innovation and should be removed.

This September Congressman Bob Latta and cosponsor Congressman Gene Green introduced a bipartisan bill, H.R. 3196, the Consumer Choice in Video Devices Act, to remove the integration ban. The bill would prohibit the FCC from "adopting any rule or policy prohibiting a multichannel video programming distributor from placing into service navigation devices for sale, lease, or use that perform both conditional access and other functions in a single integrated device." The bill also "repeals any such rule or policy adopted by the FCC prior to enactment of this Act." Upon introducing the bill, Congressman Latta stated: "In today's ultra competitive video marketplace, cable operators have no incentive to make it more difficult for their customers to use their preferred devices to access their video programming services."

In July of this year, the FCC released its *15th Annual Video Competition Report*, which stated that by the end of last year, cable providers represented only 55% of the more than 100 million households that subscribe to all multichannel video programming distributors ("MVPDs") overall. Meanwhile telephone and direct broadcast satellite MVPDs gained marketshare, claiming about 8.4% and 33.6% of all MVPD subscribers respectively. At the end of 2012, 98.6% of subscribers or 130.7 million households had access to at least three MVPDs, 35.3% or 46.8 million households had access to at least four, and some areas had access to as many as five MVPDs.

Additionally, the online video distributor ("OVD") market segment continued to grow and evolve. OVDs allow consumers to access content through game consoles, OVD set-top boxes, smart TVs, and other technologies. The FCC's *15th Annual Report* cited an SNL Kagan study, which estimated that by the end of 2012, there would be 41.6 million Internet-connected television households, representing 35.4% of all television households. The *Report* also noted the continued growth of non-cable MVPDs, rapid deployment and adoption of other new technologies that enable time and space shifting, and other developments that offer further options for consumer video viewing.

Furthermore, consumers today can access the video content of cable providers through a wide range of devices, many of which bypass the CableCARD mandate. Video access devices available today include IP connected MVPD provided set-top boxes, multi-room DVR and home networking solutions, cloud-based user interfaces, mobile applications, portable media players, gaming consoles, Internet-connected smart phones and table computers, and home monitoring systems that act as extensions of cable MVPD networks. Many of these innovations are the result of consumer demand to access content while avoiding the high cost of leasing set-top boxes, which are encumbered by the CableCARD and its accompanying expenses. The integration ban has forced cable operators to include CableCARDs in equipment they supply even though the same access and security functions could be performed using less expensive technology.

Given the robust competition in the video marketplace today and the unnecessary costs imposed by the navigation device technological mandate, the integration ban should be lifted. Congressman Latta's bill offers one way for Congress to recognize that the competitive video market does not require such regulatory interference, and provides a way to promote continued innovation and growth in video services.

The Video Marketplace Was Drastically Different When the Integration Ban Was Introduced

Under the 1996 Telecommunications Act, Congress gave the FCC authority to regulate video devices. When it implemented the Act in 1998, the Commission adopted rules under Section 629, which banned cable operators from offering customers set-top boxes that contained integrated security and navigation functions. The rules required MVPDs to separate security and non-security functions in their leased devices and rely on the same conditional access mechanism that consumer electronics manufacturers use (commonly referred to as "common reliance"). The integration ban was supposed to go into effect on January 1, 2005, but it was extended twice and challenged by the cable industry. The ban went into effect July 1, 2007.

The presumed intention of granting the Commission power to institute the integration ban was to open the market for third-party "navigation devices," i.e. cable boxes, given Congress's stance that the cable companies could control the market for set-top boxes. Congress had looked to the retail market for home telephone equipment and hoped to create a similarly vigorous market for devices used with video programming services. At the time, cable was still the dominant video provider, satellite TV companies were just beginning to enter the video distribution market in earnest, and Internet video was not available.

In the 1990s, cable providers possessed dominant market power in the video market. In the FCC's *Second Annual Video Competition Report* released December 11, 1995, the Commission found that there had been no actual entry by new providers into multichannel video programming distribution markets in their local telephone service areas. In its *Third Annual Video Competition Report* released January 2, 1997, which reported on the video marketplace as it existed in 1996, the FCC still found that cable providers dominated the video marketplace. The Commission found that local markets for the delivery of video programming were still "highly concentrated" and "could permit the exercise of market power by incumbent cable systems." Ten years later, cable providers had lost a great deal of market share, but still held the dominant position in the video market. The Commission's *Thirteenth Annual Video Competition Report*, which assessed competition for 2006, found that "the largest MVPD remains a cable operator," and that approximately 68% of all MVPD households subscribe to cable providers. The integration ban went into effect the following year.

When the Commission adopted and implemented the integration ban nearly 10 years ago, the cable industry arguably still dominated the MVPD market, even as its market share was eroding. Despite the good intentions of the Commission to promote competition, the integration ban failed to achieve its intended purpose of increasing options for consumers among set-top boxes. Instead, the video marketplace has developed into a competitive environment thanks to other innovations in technologies and business models, which have rendered the integration ban unnecessary and even burdensome.

The Integration Ban Has Not Achieved Its Intended Purpose

The integration ban has drawn criticism since its introduction. Set-top boxes were initially designed to offer integrated security without using a piece of costly equipment to separate security and navigation functions. Hence, the integration ban and the subsequent CableCARD mandate imposed additional hurdles that have always been technologically unnecessary.

In 2003, the FCC required cable operators to stop using integrated set-top boxes and specified a technological standard: CableCARDs. The CableCARD is inserted into the set-top box and decrypts the content delivered by MVPDs to the home so that the customer can receive the channels for which he or she has a subscription on whatever set-top box he or she leases from the cable provider, or purchases at retail.

In *Charter Communications, Inc. v. FCC*, the cable industry challenged the integration ban claiming the ban "will result in substantial public harms with no countervailing public benefit." Confronting that challenge in its *Second Report and Order on the Commercial Availability of Navigation Devices*, the FCC admitted, "consumers will face additional costs in the short term," but argued that the costs would decrease over time as more consumers used CableCARD-ready technologies. Unfortunately, the Commission's vision for the navigation device market did not come to fruition.

According to NCTA, over 42 million CableCARD-enabled set-top devices have been leased to cable customers, while only 600,000 CableCARDs have been requested by cable customers for use in devices purchased from third-parties. The FCC cited NCTA's figures in its latest *Video Competition Report*, as the table below shows.

Deployment of CableCARDs (Cumulative)

Year (as of June)	CableCARD Deployment for Use in Retail Devices – Top 10 Cable Operators	Operator-supplied Set-top Boxes With CableCARDs
2006	170,000	
2007	271,000	
2008	372,000	6,232,800
2009	437,800	14,085,000
2010	520,000	21,000,000
2011	582,000	29,300,000
2012	618,000	36,000,000

* Source: FCC 15th Annual Video Competition Report, citing Letters from Neal M. Goldberg, Vice President and General Counsel, NCTA, to Marlene H. Dortch, Secretary, FCC, CS Docket No. 97-80 (filed June 29, 2006, June 25, 2007, June 23, 2008, June 26, 2009, June 23, 2011, June 30, 2011, July 30, 2012).

This demonstrates that the mandate of CableCARD technology in cable-owned set-top boxes is unnecessary and wasteful. Although the integration ban may have been intended to promote third-party competition in the navigation device market, this attempt to manage the market through regulation has clearly not achieved the wished-for outcome by the FCC. Although the cable industry may have dominated the marketplace when the integration ban and the CableCARD mandate were implemented, competition and technology have developed that render FCC regulation of set-top boxes unnecessary and burdensome.

The Integration Ban Is Burdensome and Unnecessary in Today's Competitive and Swiftly Changing Video Marketplace

Today, the video marketplace is characterized by diverse technological and service offerings, rapid innovation and growth, and competition among various providers. The Commission itself recognized the healthy state of the video marketplace in its recently released *15th Annual Video Competition Report*: "Today the [set-top box] marketplace is more dynamic than it has ever been offering consumers an unprecedented and growing list of choices to access video content."

Consumers today can access the video content of cable providers through a wide range of devices, many of which bypass the CableCARD mandate. Video access devices available today range include IP connected MVPD provided set-top boxes, multi-room DVR and home networking solutions, cloud-based user interfaces, mobile applications, portable media players, gaming consoles, Internet-connected smart phones and table computers, and home monitoring systems that act as extensions of cable MVPD networks. Many of these innovations are the result of consumer demand to access content while avoiding the high cost of leasing set-top boxes, which are encumbered by the CableCARD and its accompanying expenses. The integration ban has forced cable operators to include CableCARDs in equipment they supply even though the same access and security functions could be performed using less expensive technology.

Additionally, consumers are increasingly accessing video provided by non-cable operators, also bypassing CableCARD-encumbered set-top boxes entirely. The market for video content providers has diversified vastly. In his testimony before the House Subcommittee on Communications and Technology last year, NCTA President and CEO Michael Powell explained that such video consumption trends are changing the future of the video marketplace.

For example, Nielsen reported that consumer use of the Internet to watch video increased 79.5% between the 3rd quarter of 2008 and the 3rd quarter of 2011. According to Comscore's latest Digital Future in Focus Report, 2012 was a "pivotal year for video media." Last year, online video markets attracted an average of 75 million viewers every day. Further, more than 450 billion consumers viewed U.S. video content on a desktop computer, bypassing the television and navigation devices entirely. This statistic represents an all-time high and an increase of 7% in views since 2011.

In July of this year, the FCC released its *15th Annual Video Competition Report*. The Commission also acknowledged the growing presence of the online video distributor ("OVD") industry. OVDs allow consumers to access content through game consoles, OVD set-top boxes, smart TVs, and other technologies. The FCC's *15th Annual Report* cited an SNL Kagan study, which estimated that by the end of 2012, there would be 41.6 million Internet-connected television households, representing 35.4% of all television households. The FCC's *Report* also noted the continued growth of non-cable MVPDs, rapid deployment and adoption of other new technologies that enable time and space shifting, and other developments that offer further options for consumer viewing.

Meanwhile, by the end of last year, cable providers represented only 55% of the more than 100 million households that subscribe to all multichannel video programming distributors ("MVPDs") overall. Telephone and direct broadcast satellite MVPDs gained marketshare, claiming about 8.4% and 33.6% of all MVPD subscribers respectively. At the end of 2012, 98.6% of subscribers or 130.7 million households had access to at least three MVPDs, 35.3% or 46.8 million households had access to at least four, and some areas had access to as many as five MVPDs. Additionally, satellite and telecommunications video providers held over 40% of the traditional pay-TV marketplace.

Despite these notable changes in subscribership, consumer habits, and technological offerings, cable video distributors have been the main service subject to the integration ban. As the video marketplace has developed, the integration ban has been applied inconsistently across competing technology platforms, as the table below published by NCTA shows.

Integration Ban Inconsistency

90% of Cable Customers Still Burdened by the Ban
But Other Large MVPDs Unaffected

Video Provider	Customers	Subject to Integration Ban
Comcast	21.9 million	Y
DirecTV	20.1 million	N
DISH Network	14.1 million	N
Time Warner Cable	12.1 million	Y
Verizon Communications	4.9 million	Y
AT&T	4.8 million	N
Cox Communications	4.5 million	Y
Charter Communications	4.1 million	Y*
Cablevision Systems	3.2 million	Y*
Bright House Networks	2.0 million	Y

*Limited relief granted to allow non-CableCARD approaches

Today 90% of cable customers are still paying more to lease set-top boxes due to the regulations imposed on their cable provider by the integration ban. However, customers who subscribe to competitor multichannel video providers are not subject to the ban, and thus are not burdened by the additional fees associated with the CableCARD when leasing set-top boxes. The marketplace has developed so that cable providers are in robust competition with other MVPDs, yet the integration ban has been applied differentially.

Although the Commission has tried to reform the integration ban in ways that render it relevant to today's video marketplace, innovation and changing consumer needs continue to outpace the FCC's regulations. On October 14, 2010, the Commission adopted rules to eliminate four impediments to consumer adoption of CableCARDs. On October 21, 2010 Free State Foundation Adjunct Fellow Seth Cooper published a *Perspectives* discussing these changes, and recognized that they would not ameliorate the effects of the "Commission's unnecessary and costly plan for expanded technocratic control of the video navigation device market."

Later in 2010, the Commission began to explore a replacement for the CableCARD mandate referred to as "AllVid." The AllVid *Notice of Inquiry* proposed the concept of an adapter that could act either as a small "set-back" device for connection to a single smart video device or as a gateway allowing all consumer electronics devices in the home to access multichannel video programming services in addition to any other services to which the devices might have access. In its *Notice of Inquiry*, the Commission expressed hope that "unlike CableCARD technology, this adapter could support the development and marketing of retail smart video devices that attach to any MVPD service anywhere in the United States."

However, updates and small changes to the FCC's approach to the video market will still result in unnecessary, burdensome, and costly regulations: the video marketplace, because it is competitive and healthy, will continue to evolve and outpace the Commission's efforts to manage it. Free State Foundation Adjunct Fellow Seth Cooper properly argued in his October 2013 *Perspectives* that the video marketplace and its consumers would benefit most from deregulation of the video device market:

> Section 629 of the Communications Act, the primary source of FCC authority over video devices, was premised on early 1990s assumptions of cable monopolies. But cable operator market share has dropped to near 60%, with competition from DBS, telco entrants, and now online video distributors (OVDs). Relying on those same outdated premises to impose a new government framework controlling how video devices are designed and operate surely creates a mismatch with actual competitive conditions in the broadband era . . . .
>
> Consumer welfare should not be sacrificed to regulations protecting competitors. With the growth of competitive and innovative video service options for consumers, government controls over how video devices are designed or should operate are unjustifiable. Offerings like the TWC App or the Enhanced Mobile FiOS App are products of marketplace innovation, not regulation. And an AllVid-like regime of intrusive regulations would also have the effect of restricting consumer access to future video viewing innovations.

The Commission's integration ban regime suffered a setback on January 15, 2013, when the D.C. Circuit vacated the Order adopting the CableCARD standard. Unfortunately, the Court did not vacate the Order that requires cable operators to separate security and base that separate security on a commonly used interface or technical standards.

At FSF's recent seminar, Congressman Latta discussed the status of the video marketplace today and the negative effects of the integration ban. In his remarks, Congressman Latta cited FCC figures, which show that the integration ban has forced consumers to pay higher prices for leased boxes. For instance, the integration ban imposes over $50 in additional costs on each leased box resulting in over $1 billion in increased costs without any additional benefit since the ban went into effect in 2007. The integration ban also imposes additional energy consumption costs amounting to roughly 500 million kilowatt-hours per year, based on EPA figures,

The Commission itself acknowledged in its latest *Video Competition Report*, "despite the CableCARD standards, consumer adoption of retail CableCARD-compatible devices has not matched the Commission's expectations." It is clear that the innovation and increased competition that have taken place in the video marketplace since the implementation of the integration ban require its repeal.

Free State Foundation Scholars Have Long Recognized the Shortcomings of the Integration Ban

For years Free State Foundation scholars have urged the FCC to waive the integration ban. On December 2, 2006, Free State Foundation President Randolph May penned a *Wall Street Journal* letter to the editor which discussed the harmful potential of the integration ban. Even then, Mr. May predicted the ban would impose unnecessary costs on consumers, due to causing increased lease fees for digital set-top boxes:

> In the competitive multichannel video marketplace that now exists, "integration bans" don't make sense. The service providers have every incentive not only to allow, but to encourage, the use of whatever equipment will maximize the value of their service platform in the eyes of consumers.

The Commission's past regulations of video services were designed to address marketplace factors: technological limitations on information delivery outlets and a lack of competition. Regulatory schemes such as the integration ban, must carry and retransmission consent, network non-duplication and syndicated exclusivity, commercial leased access, and cable television rate regulation were intended to promote competition in areas where certain players dominated the marketplace. However, neither of those marketplace factors stated above exist today. Today, innovation cycles are much shorter and faster then they were nearly 10 years ago, consumers may access content through a plethora of outlets, and the video marketplace is diverse and competitive. In a *Perspectives* published on April 29, 2013, Catholic University Law Professor and FSF Adjunct Senior Fellow Donna Gregg stated, although well-intentioned, video services regulations have "not only placed unreasonably heavy restrictions and burdens on the regulated video service providers but also led to unfortunate unintended consequences."

The failure of each of these regulatory schemes to achieve the intended goals of the Commission demonstrates that the FCC should not attempt to manipulate the video marketplace. When a market achieves a certain level of competition, it is better for the market to drive innovation than for the Commission to prescribe technological solutions in an attempt to predict the development of devices or the direction of consumer needs.

As Research Fellow Seth Cooper explained in his October 2013 *Perspectives* advocating for the deregulation of the video device market:

> The FCC has ample means to set policy better suited to today's competitive video market. It can remove the regulatory barriers that prohibit or at least inhibit MVPDs from offering innovative, integrated video devices to consumers. Section 629 of the Communications Act contains a provision that requires the FCC to sunset set-top box regulations if it finds that the market is "fully competitive."

Section 629 is one of the unique sections in the Communications Act because it includes a sunset provision. The very presence of this provision indicates that even at the time Congress gave the Commission authority to regulate video devices, Congress clearly recognized that marketplace competition could develop in a way that would render FCC regulation unnecessary.

The FCC should sunset set-top box regulations. Alternatively, Congress should pass a bill like Congressman Latta's, which would implement much-needed deregulatory reform for the benefit of consumers and for the video marketplace.

Conclusion

The time is right for the Commission to sunset the regulations adopted under Section 629, specifically the integration ban. The integration ban is just one example of a regulation devised by the FCC that has been outrun by technological and marketplace developments. Although there is still much more work to be done, and because of the extent of the dramatic marketplace changes since 1996, Congress may ultimately need to comprehensively overhaul the Communications Act by adopting a new free market-oriented model that breaks thoroughly with the past. Nonetheless, a bill like Congressman Latta's is a step in the right direction. The Consumer Choice in Video Devices Act provides one way to eliminate unnecessary regulation, to reform the Communications Act to better reflect the state of competition, technology, and consumer demands of today, and to foster continued innovation and growth in video marketplace.

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Further Readings

Congressman Bob Latta, Keynote Remarks, "A New FCC or the Same Old, Same Old," *FSF Event* (October 24, 2013).

Seth L. Cooper, "Consumers Would Benefit from Deregulating the Video Device Market," *Perspectives from FSF Scholars*, Vol. 8, No. 26 (October 4, 2013).

Seth L. Cooper, "FCC Report Reconfirms the Reality of the Video Market's Competitiveness," *FSF Blog* (July 25, 2013).

Donna Coleman Gregg, "'Low Ranking' Counterproductive Video Regulations Offer Valuable Lessons," *Perspectives from FSF Scholars*, Vol. 8, No. 11 (April 29, 2013).

Seth L. Cooper, "Digital-Era Video Devices Shouldn't Be Subject to Analog-Era Regulations," *FSF Blog* (April 12, 2013).

Seth L. Cooper, "Video Competition Should Lead FCC to End Old Regulation," *FSF Blog* (May 4, 2011).

Seth L. Cooper, "FCC's 'AllVid' Regulation of Video Devices All Wrong," *FSF Blog* (January 26, 2011).

Seth L. Cooper, "The FCC's Continuing, Costly Video Navigation Device Regulations," *Perspectives from FSF Scholars*, Vol. 5 No. 25 (October 21, 2010).

Randolph J. May, "Letter to the Editor," *Wall Street Journal*, *Perspectives from FSF Scholars*, Vol. 1, No. 9 (December 2, 2006).

Randolph J. May, "Don't Inflict Analog Era Equipment Rules on the Digital Age," *Perspectives from FSF Scholars*, Vol. 1, No. 7 (October 2006).