

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In the Matter of)
)
Nagra USA’s Request for Waiver of Sections) CSR-_____
76.1204(a)(1) and 76.640(b)(4)(ii)(A) of the)
Commission’s Rules)
)

To: The Commission

PETITION FOR WAIVER

I. INTRODUCTION AND SUMMARY

Pursuant to Sections 1.3 and 76.7 of the Commission’s rules and Section 629(c) of the Telecommunications Act of 1996, Nagra USA, Inc. (“Nagra”) respectfully requests a three-year waiver of the Commission’s integration ban and certain interface requirements as applied to products supplied by digital cable system operators, for certain operator-supplied navigation devices with home networking interfaces, if the device class described below falls under Sections 76.1204 and 76.640(b)(4).¹ A grant of this waiver petition is in the public interest.

Nagra is one of the largest independent suppliers in the world of conditional access systems and other content management tools for digital television providers. Nagra is a major supplier of conditional access systems to MVPDs both in the United States and globally. Nagra and its partners supply digital cable system operators a variety of equipment used in their networks; among these are conditional access security systems and set-top boxes/navigation devices.

¹ 47 C.F.R. 1.13; 47 C.F.R. 76.7; 47 U.S.C. 549(c).

Nagra believes that the use of home IP networks to distribute video and other MVPD services within a home is both increasing and a very important consumer market trend which should be encouraged. To encourage this development, consumers need to be able to acquire devices which transmit video content onto a home network, as well as devices which can receive such content. As it stands today, networked televisions (and other similar devices) constitute a large part of the market for televisions and reception devices. However, portions of the Commission's existing rules may hinder development and supply of devices that transmit content on to the home network. As a result, the public interest would be served by granting this waiver request.

II. HOME NETWORKING OF ENTERTAINMENT CONTENT IS BECOMING WIDESPREAD

Today's video device marketplace is growing wider and more varied, and a large and growing number of consumer electronics devices, including televisions and other devices have home networking interfaces and connect to users' home networks and internet connection.

A. CONNECTED TELEVISIONS AND SMART VIDEO DEVICES

There are a significant and growing number of televisions in the market with IP home networking interfaces, and every BD-Live or 3D BluRay player has an IP home networking interface. The Digital Living Network Alliance now lists in excess of 12,487 DLNA-certified products, including televisions, BluRay players and other devices.²

Typically, consumers view cable television via a set-top box connected to a television, or (much less frequently) via other means (*e.g.*, a Digital Cable Ready television). Increasingly, televisions are equipped with home networking interfaces ("connected televisions"), which are capable of receiving audiovisual content via a networking interface (*e.g.*, Wi-Fi or IEEE 802.3 Ethernet).

² See <http://www.dlna.org/consumer-home/look-for-dlna/product-search> (last visited June 29, 2012).

Connected televisions are a large and growing segment of the marketplace. More than 25% of televisions shipped world-wide in 2011 and the first quarter of 2012 have Internet connectivity.³

B. OTHER DEVICES

In addition to these traditional entertainment devices, there is now a broad class of devices which present free, subscription, pay-per-view and video-on-demand content to consumers via an IP home networking device.

Hand-held tablet devices and smartphones are generally connected (or capable of being connected) to the home network. Each of these devices is or can be a personal entertainment display – lacking only connectivity to MVPD subscription video content.⁴ The breadth and reach of these devices will expand as the content available grows.

III. GATEWAY DEVICES FURTHER THE GOALS OF SECTION 629

The Commission stated an “objective in this proceeding [is] ‘to ensure that the goals of Section 629 are met without fixing into law the current state of technology.’”⁵ As a part of the rules

³ Press Release, DisplaySearch, Networking Becomes Key Feature for Flat Panel TVs (Nov. 2, 2011) available at <http://bit.ly/MGI1ZB>; Informatv, *Connected Television Market Share Grows* (June 17, 2012) available at <http://bit.ly/N3eyGW>.

⁴ We note that some MSOs are delivering content to some devices, on limited or proprietary bases, generally requiring proprietary software supplied by the MSO. Press Release, Comcast Corporation, *Comcast Announces Launch for Xfinity TV App for iPad with the Ability to Watch TV Shows and Movies Anytime, Anywhere* (Nov. 15, 2010), available at <http://www.comcast.com/About/PressRelease/PressReleaseDetail.ashx?PRID=1020&SCRedirect=true>; Press Release, Time Warner Cable, *Any Room Can Be the TV Room with Time Warner Cable's New iPad App* (March 15, 2011), available at <http://ir.timewarnercable.com/phoenix.zhtml?c=207717&p=irol-newsArticle&ID=1539201>; Press Release, Cablevision Systems Corp., *Customers Can Enjoy Cable Television Service Including Hundreds Of Channels, Video On Demand, Enhanced And Searchable Guide Information And DVR Controls On Their Tablet Device, Which Functions As A Television In The Home* (Apr. 2, 2011), available at <http://www.prnewswire.com/news-releases/cablevisions-new-optimum-app-delivers-the-full-cable-television-experience-to-an-ipad-in-the-home-119117379.html>.

⁵ *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, 20 FCC Rcd 6794, 70 FR 36040, 36049 (2005), quoting *Implementation of* (continued)

implementing Section 629, the rules include a home networking interface requirement for certain cable set-top boxes as of December 1, 2012.⁶

The Commission has not required gateway availability as a part of the implementation of Section 629. However, we believe that it is in the public interest that such devices be made available by operators to consumers, in order to support the growing number of network-connected televisions and other devices. Such availability would serve to increase the nascent market for competitive retail navigation products, and better serve those consumers who have acquired such devices.

IV. OTHER ANCILLARY BENEFITS

In addition to helping to meet the goals of Section 629 and fostering competition among retail devices that access MVPD, deployment of gateway devices would serve to increase energy efficiency in the delivery of MVPD services.

Presently, nearly every television connected to cable television is required to have a set-top box as well. Such a situation requires two separate digital devices (with attendant power supplies, etc.). In contrast, use of gateways coupled with the consumers' connected televisions would eliminate the need for a set-top box for each television, yielding a net decrease in power consumption. Furthermore, most set-top boxes also contain a CableCARD which consumes significant power and has not fulfilled its purpose of meeting the goals of Section 629.

Gateways in particular pose a slightly different challenge when faced with a CableCARD requirement. CableCARD devices are limited in the number of simultaneous streams that they can decode. For the original version of the CableCARD ("S-Card"), certain devices included *two* CableCARD slots (and two CableCARD devices when operated in this mode) in order to decrypt

Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices, 13 FCC Rcd 14775, 14781 (1998).

⁶ 47 C.F.R. 76.640(b)(4)(iii).

two streams. A revised CableCARD specification (“M-Card”) increases the number of streams a single card can decrypt, but it is still limited, and may therefore need multiple M-Card devices.

As energy efficiency is a present concern in both public policy and national infrastructure, increasing energy efficiency of cable service delivery is in the public interest.

V. CONTEMPLATED GATEWAY PRODUCT

Nagra has a large array of products for digital pay television, both produced under our own name and brand or by partners in other arrangements (such as involving a partnership between Nagra, a set-top box manufacturer and a MSO). Nagra also has partnerships with silicon manufacturers to embed necessary functions in chips used in set-top boxes. Elsewhere in the world, Nagra is developing a product which receives pay television programming via networking connection(s) to the outside world, and delivers that content to standards-based devices in the home (like smart televisions and iPads).

Such a device may be required to comply with Sections 76.1204(a)(1) and 76.640(b)(4)(ii)(A) of the Commission’s rules. If it is required to comply with Sections 76.1204(a)(1) and 76.640(b)(4)(ii)(A) of the Commission’s rules, such a device would require a waiver as it would not have a CableCARD nor would it have HDMI or DVI output – in fact, it has no uncompressed outputs at all. On the other hand, if such a device is not subject to these sections, we ask that the Commission clarify this point.

A. SECTION 76.1204(a)(1)

Section 76.1204(a)(1) of the rules prohibits a MVPD from placing into service new navigation devices that “perform both conditional access and other functions in a single integrated

device.”⁷ This “common reliance” requirement was intended to allow the market to supply navigation devices from “unaffiliated manufacturers, retailers, and other vendors.”⁸

Originally, this requirement created a situation where conditional access functions would be separate from navigation functions, and unaffiliated parties could manufacture devices to which the conditional access function could be added by, *e.g.*, a plug-in card (like a CableCARD).

In the contemplated device, unaffiliated parties would be able to supply navigation devices. A gateway device, such as described *supra*, performs the conditional access functions and *only part* of the navigation functions.⁹ Devices from unaffiliated parties will be possible, and such devices would perform the parts of the navigation functions not performed by the gateway (including decoding audio and video and presenting them to the consumer).

The existing CableCARD regime, originally contemplated in the 1990s, split a receiver into “conditional access” and “other,” and requires use of a plug-in card which has various disadvantages discussed in great detail over the years in the record. The contemplated gateway product would serve the same goals, namely enabling unaffiliated parties to manufacture devices that are able to navigate and display MVPD services. However, instead of requiring a plug-in card and strict “conditional access”/“other” separation, would utilize commercially available and standardized mechanisms to physically separate the gateway and the “smart video” device, and connect them with an IP interface. The contemplated device satisfies the same goal in a modern way, more reflective of the state of the industry and consumer demand.

⁷ 47 C.F.R. 76.1204(a)(1)

⁸ *Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices*, Report and Order, 13 FCC Rcd 14775, 63 FR 38089 (1998) at 49.

⁹ The gateway device would have, *e.g.*, tuner(s), demodulator(s) and similar components that receive the cable services, but not, *e.g.*, audio/video CODECs and other components that are necessary to present the services to a consumer.

B. SECTION 76.640(b)(4)(ii)(A)

Section 76.640(b)(4)(ii)(A) requires a leased high-definition set-top box to include “a DVI or HDMI interface.”¹⁰ This requirement (and that of Section 76.640(b)(4)(i)) was adopted by the Commission to “set a baseline for connectivity ensuring that cable subscribers are able to fully enjoy the range of services offered by their cable provider in a secure, digital format.”¹¹ The Commission later recognized the advantages of home networking interfaces, and adopted rules in Section 76.640(b)(4)(iii) which require compliance with home networking standards.¹²

Waiver of Section 76.640(b)(4)(ii)(A) would continue to ensure that consumers are able to fully enjoy the range of services provided by their cable provider, as those services would be made available via a means similar to that described in Section 76.640(b)(4)(iii). Furthermore, because the gateway device described does not have audio/video decoders (to decompress the signal), it has no means to create the signals that are carried over DVI or HDMI connections. A gateway does not have decoders because the compressed data is carried over the home network and decompressed by the client device (such as a television).

VI. CONCLUSION

Developing a product for the marketplace in the United States is a complex, expensive and time-consuming enterprise, and we are planning on investing the resources to bring the gateway device to the United States. However, though the device planned would serve the public interest, and advance the marketplace towards the goals of Section 629, because it does not have a HDMI or DVI output, and does not have a CableCARD, such a device would require a waiver from of Sections 76.1204(a)(1) and 76.640(b)(4)(ii)(A) of the Commission’s rules.

¹⁰ 47 C.F.R. 76.640(b)(4)(ii)(A).

¹¹ *Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices*, Report and Order, 18 FCC Rcd 20885, 68 FR 66776 (2003) at 24.

¹² *Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, Compatibility Between Cable Systems and Consumer Electronics Equipment*, Report and Order, 25 FCC Rcd 14657, 76 FR 40263, 76 FR 44279 (2010) at 39-44.

A. WAIVER WOULD SERVE THE PUBLIC INTEREST

A waiver for a gateway product would allow MVPDs to deploy gateway devices, which would both provide better service to consumers that already have a home networking-enabled television or other device, and simultaneously provide an incentive to the marketplace to continue to innovate and market products that integrate home networking capabilities. Furthermore, use of waivers coupled with connected televisions and thin client receivers would decrease the power consumption associated with delivery of MVPD services. In many cases, consumers already own devices which can utilize a gateway, including some connected TVs, tablets, PCs and smartphones.

Moreover, a waiver would provide another avenue by which the goal and mandate of Section 629 may be met.

B. WAIVER WOULD ENABLE A NEW OR IMPROVED MULTICHANNEL VIDEO SERVICE, TECHNOLOGY OR PRODUCT

A waiver for a gateway product would allow MVPDs to deploy gateway devices which are necessary to provide cost-effective, new, and improved avenues for access to MVPD-supplied programming, products and services.

C. PRAYER FOR RELIEF

If the device class described is required to comply with Sections 76.1204(a)(1) and 76.640(b)(4)(ii)(A), for the reasons stated above, we request that the Commission issue a waiver from 76.1204(a)(1) and 76.640(b)(4)(ii)(A) of the Commission's rules for a limited time of three years, products which meet the following requirements: (1) is a gateway device with MVPD network reception and audio/video transcoding capabilities; (2) does not have uncompressed outputs and does not have MPEG and/or AC-3 decoders; (3) has one or more home networking interfaces which complies with open industry standards and specifications for home networking (such as DLNA); (4) optionally provides a remote (e.g., rendered) user interface via open industry standards and specifications; and (5) provides such home networking service output to all devices, without discrimination and without requiring licenses, certification, approval, assent or testing (beyond that

required by other aspects of the device).¹³ If such a device is not required to comply with these sections, we request that the Commission clarify this point.

For the reasons described above, the requested waiver is in the public interest under Section 76.7, or alternately is good cause under Section 1.3 of the Rules, or alternately is necessary to provide a new or improved multichannel video service under 47 U.S.C. 549(c).

Respectfully submitted,

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¹³ Some aspects of a smart video device compliant with, *e.g.*, DLNA home networking requirements may require licenses, contractual obligations and/or certification. However, policing such aspects is not and should not be the purview of the gateway device. For example the DLNA North American commercial video profile (DLNA CVP-1) requires a device to have DTCP capability, which has the effect of requiring a license from DTLA for DTCP, and the license has a set of compliance and robustness requirements, but enforcement of this license requirement and license terms is and should be the responsibility of DTLA, not a gateway device, gateway device manufacturer or MVPD.