

Before the  
**Federal Communications Commission**  
Washington, D.C. 20554

In the Matter of	)	
	)	
Video Device Competition	)	MB Docket No. 10-91
	)	
Implementation of Section 304 of the	)	
Telecommunications Act of 1996	)	
	)	
Competitive Availability of Navigation Devices	)	CS Docket No. 97-80
	)	
Compatibility Between Cable Systems and	)	PP Docket No. 00-67
Consumer Electronics Equipment	)	

**COMMENTS OF MASSILLON CABLE TV, INC.**

Massillon Cable TV, Inc. (“Massillon”) hereby submits its comments in response to the Notice of Inquiry (“NOI”) in the above-captioned proceedings.

**I. Background**

Massillon enjoys a slightly different perspective from most Multichannel Video Providers (“MVPDs”) in regard to navigation devices because Massillon has already responded to the FCC’s encouragement to transition to an all-digital/no-analog system. This transition, called our “DTV Rollout,” was accomplished in 2009 through the use of low-cost digital-to-analog converters granted by a Memorandum Opinion and Order released on March 19, 2008 (CSR-7229-Z).

Completion of the DTV Rollout has enabled consumers in Massillon’s service areas to enjoy additional television program networks, including almost 100 linear HD signals, more than 200 linear SD networks and 45 digital music streams. Massillon also offers a wide variety of Video On Demand programming through a variety of set-top converters that range from simple SD converters to advanced HD/DVR devices. The spectrum recaptured during the DTV Rollout also enabled Massillon to activate DOCSIS 3.0 High Speed Data service. This offers both higher Internet speeds along with more robust and reliable service. Massillon continues to offer residential telephone service to area residents as well.

**II. All-Digital Lesson**

One of the important lessons we learned during our DTV Rollout applies directly to the present proceeding. As we approached the end of our transition, we became concerned that a larger-than-expected number of customers had delayed requesting the set-top boxes needed to retain full access to video services. We feared a last-minute rush that would overwhelm our capacity to distribute converters and/or respond to requests for installation. It never came. We soon learned the reason. The difference between the number of converters we expected to distribute and the number we actually distributed was due to consumers using digital TV sets without any type of converter or a CableCard. This outcome reflects Commissioner Baker's statement accompanying this NOI:

*"We should be mindful that not all consumers want the latest technology: over 100 million televisions in cable households today are not connected to a set-top box at all. Consumers may also prefer certain conveniences-lower upfront costs, ease of installation and upgrade-that come with leasing boxes."*

While Commissioner Baker may have been referring primarily to analog TV sets, our experience shows that consumers have similar preferences (not to use a set-top converter and "other conveniences") when using their new, digital TV sets as well.

Conventional thinking assumes that all consumers with digital TV sets will connect some type of set-top box when they subscribe to an MVPD service. That is false. When given a choice, many consumers choose to use their digital TV set without a set-top box. As Commission Baker correctly states, they do this for a variety of reasons:

- Cost certainly is a factor. Set-top converters, especially those with separable security, are expensive. Households with multiple sets choose different set-tops for different rooms to manage their monthly spending. The ability to use a digital TV set without incurring any monthly expense is a major factor, especially if the consumer has the ability to choose to do so on a room-by-room basis.
- Complexity is another area of concern. Set-top boxes add another layer of complexity with a different remote control and multiple menu options. Some consumers prefer the simplicity of using their digital TV set with the remote that was provided.
- Aesthetics is another factor. Many consumers want to install their digital TV set in a location that may not be suitable for a set-top box. Wall-mounted TV sets, small counter tops and other locations make the use of a digital TV set without a set-top box a benefit.
- Parental control is also a concern. Set-top converters typically include access to program content (like PPV, VOD and premium movie channels) that some parents may not want in a child's room, regardless of the sophistication of the parental controls provided. A digital TV set with access to a limited range of networks provides an absolute guarantee against access to unwanted networks.
- Ease of installation is very desirable for many consumers. The ability to purchase a digital TV set and successfully connect it yourself appeals to many.

Consumers choosing to use their advanced, digital TV sets in a seemingly un-advanced manner is not merely anecdotal. An October 2009 Magid Associates study revealed that 34% of households with HDTV sets did not subscribe to any HD services, by choice.<sup>1</sup> Forty-two percent (42%) of the “sideliners” admit that the HD “options are not worth the fees.”<sup>2</sup> One third (33%) cite cost and affordability as the primary reasons for not buying HD service.<sup>3</sup>

Clearly, consumers want the ability to choose how they use their digital TV set. The truth of the matter is that all of these factors combine in a complex balancing act in every consumer’s mind, WHEN THEY HAVE THE CHOICE. The proposal in this proceeding seems to remove that choice completely. If the Commission establishes rules that require every MVPD to install some type of gateway device, the Commission will limit consumer choice, increase consumer cost and relegate one of the most ubiquitous navigation devices to the scrapheap.

The NOI consistently suggests that one of the goals of this proceeding is to empower consumers to make choices regarding their home entertainment. The industries involved and many consumers are excited to use new and varied options for home entertainment. The integration of over-the-top, IP-video, Video On Demand, DVR and consumer-generated content with current linear video services are all great, but the Commission should not overlook the fact that, as Commissioner Baker noted, “*not all consumers want the latest technology.*” **Believe it or not, some people just want to watch TV.**

### III. The Consumer Continuum of Choice

The one-size-fits-all approach that flows from assuming every cable consumer wants advanced services is not the best solution for consumers. Video consumers can be best served by supporting a Consumer Continuum of Choice.

- LEVEL I: LOW-COST DIGITAL-TO-ANALOG SET-TOP BOX - US consumers still own and operate hundreds of millions of analog TV sets. Consumers can continue to use this huge investment into the digital age by using set-top converters with analog outputs. These enable consumers to use their analog TV set until they CHOOSE to invest in a digital TV set. These set-top boxes can provide the same function for cable TV consumers as the DTV boxes provide for over-the-air consumers. The FCC can encourage cable operators to recapture analog spectrum to reuse for High-Definition networks, DOCSIS 3.0 High Speed Data and other advanced services by continuing to authorize low-cost set-top converters.

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<sup>1</sup> Frank N. Magid Associates, *Magid Study Reveals That Cable & Satellite Operators Are Missing Out On At Least 14 Million US Households Who Have HDTV Sets, But No HDTV Programming*, PR Newswire, Dec. 30, 2009.

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

- LEVEL II: ClearQAM DIGITAL SIGNALS - Current digital TV sets are a navigation device. They contain a tuner that is capable of receiving digital cable TV signals without a set-top box or CableCard. Massillon customers enjoy 100 digital TV networks (including 12 HD signals) and 45 digital music streams WITHOUT A SET-TOP BOX OR CABLECARD. This level of consumer choice is available today, but threatened in the future.
- LEVEL III: LOW-COST DIGITAL-TO-DIGITAL SET-TOP BOX – A low-cost digital-to-digital set-top box is an essential element for digital TV use. Many consumers want to expand their HDTV viewing options without the expense of a full-function (and full-cost) HD/DVR set-top. This level of consumer choice is not available today.
- LEVEL IV: FULL-COST SET-TOP BOX – The ultimate in consumer choice is a full-function set-top box with access to the widest possible array of video choices, including SD and HD linear video, PPV, VOD and integration with over-the-top, Internet video, interactive chatting, online games and all the other imaginable (and as yet unimagined) services. This level of consumer choice is available today and constantly evolving.

#### IV. Embracing ClearQAM

ClearQAM is, simply put, the transmission of unencrypted digital signals. This is a very common practice in today's cable TV systems. Typically, the transmission of standard definition digital Basic and cable programming service tier ("CPST") signals is unencrypted, just as their analog counterparts are typically unencrypted. This enables "cable-ready" TV sets to receive them without a set-top box. Many consumers will choose to use their digital TV set in the same manner as their "cable-ready" analog set if given the choice.<sup>4</sup>

The threat to ClearQAM comes mainly from program networks that may require their signals to be encrypted. The requirement to encrypt a few pivotal CPST signals could easily lead to all CPST signals being encrypted. This would put a quick end to ClearQAM and the consumers' right to choose how they use their digital TV set. It also would lead to a vast increase in cost for consumers since every digital TV set would require a set-top box. Low-cost CableCards are not an option for most consumers since, as this NOI correctly states, most digital sets are not equipped with a CableCard option.

Successful ClearQAM operation also requires cable operators to understand and embrace the Program System and Information Protocol (PSIP) standard. PSIP enables ClearQAM signals to be organized and labeled in an orderly fashion on the consumer's digital TV set. This level of continuity is essential to convenient consumer use.

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<sup>4</sup> Most cable operators are unaware of this fact because they still transmit analog signals. Our DTV Rollout experience clearly proves that many consumers are watching poorer-quality analog signals on their new, digital TV sets due to a lack of customer education by the salesperson and the absence of PSIP data on the ClearQAM digital signals.

In turn, successful PSIP operation requires consumer electronics manufacturers to incorporate a more consistent handling of PSIP within their digital TV sets. At the present time, different TV sets respond differently to the same PSIP data. This lack of consistent manufacturing standards leads to confusion among users.

The successful collaboration of program networks, cable operators and consumer electronics manufacturers to accept and incorporate existing standards (PSIP) holds the promise of developing a compelling, inexpensive and widely-installed consumer choice.

## V. ClearQAM Proposal

The solution to this matter rests in a balance among the desire to give consumers a choice, the needs of individual cable operators and the needs of program networks to protect their signals. The Commission correctly notes that there is a need to protect television signals. Different cable TV markets pose different challenges in terms of signal security and the cost of that security. Dense urban systems with high transient populations have a greater need for conditional access security to ensure against signal theft and reduce the cost of installation and disconnection. Other markets do not have these same challenges or needs.

Similarly, different service offerings have different needs regarding signal security. Basic signals (analog or digital) are always unencrypted.<sup>5</sup> Traditionally, analog signals for both Basic and CPST have been unencrypted. This enables “cable-ready” TV sets to function without a set-top box, increases consumer ability to choose and reduces consumer cost for set-top boxes. Other service levels typically are encrypted, whether analog or digital, to provide security for these higher-value service levels and afford customers with a simple way to add or remove those services.

Digital signals have developed along lines very similar to analog. Typically, digital versions of Basic and CPST signals are unencrypted. Other digital signals, including HD versions of CPST, are encrypted and require a set-top box.

Massillon’s proposal to empower consumer choice is for the Commission to find that it is contrary to public policy for a cable programmer to require that all Basic and CPST channels be encrypted. The individual systems should have the choice to control the signals based on the needs, challenges and opportunities in their individual markets.

This proposal is basically a continuation of the status quo in the current cable television program marketplace.

## VI. Completing the Continuum of Consumer Choice

This NOI frequently notes that many industries must work together in order to improve the US video landscape. If the valid goals espoused by the Commission in the

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<sup>5</sup> Cablevision has only encrypted Basic service with a waiver from the Commission.

NOI are to be achieved, then the decision of whether to preserve the option of ClearQAM, must be the operator's, not the programmer's.

It is true that most cable consumers continue to use set-top boxes leased from their cable operator. Many (whether they use an analog or digital TV set) choose a set-top box because they want the features it provides. As more cable operators recapture analog spectrum, many consumers will install set-top boxes on their existing analog TV sets because that will be the only way to continue to receive signals. However, when they choose to purchase a digital TV set, they can (if the Commission issues appropriate recommendations) have a choice. They can:

- Choose to use the digital TV set without a set-top box or CableCard. They will have access to some, but not all, services, but that will be their choice.
- Choose to use a limited-function digital set-top box or CableCard (or, hopefully, a successor to the CableCard). They will have access to more services but will also have to pay for the features delivered by the device.
- Choose to use a full-function digital set-top box. They can enjoy a full range of services.

The key to this complete Continuum of Consumer Choice is that the cable operator have the option of ClearQAM signals and that the FCC encourage consistent handling of the PSIP standard among cable operators and consumer electronic manufacturers.

## **VII. Responses to Specific Paragraphs of the NOI**

Paragraph 1 – Don't retreat. Dozens of manufacturers already produce commercially available devices capable of receiving MVPD signals. Millions are already in use. It is called a digital TV set. The QAM tuner included within each set can deliver hundreds of signals without a set-top box or CableCard. Why require that every digital TV set include a tuner if you also require every digital TV set to install an additional tuning device (set-top box or CableCard)? Don't relegate this investment in already-deployed digital tuners and this consumer option to the trash heap by mandating a standard that leads to full encryption of all signals.

Paragraph 2 – Not all MVPDs need to scramble their content in order to protect their networks from harm or theft of service. Some do, but others do not. Preserve the option of unencrypted signals by making a strong recommendation that:

- Standard Definition digital Basic and CPST signals may be unencrypted at the cable operator's option, and
- High Definition digital signals and Standard Definition signals above Basic and CPST must be encrypted at the program network's option.

Paragraph 3 – It is not universally true that CableCard consumers "...experience additional installation and support costs and pay higher prices than those who lease set-top boxes." In Massillon's systems, CableCard installation and support prices are no different than any other installation charge. Installation and support fees are not based upon the monthly cost of the product being installed. Rather, they are based on the cost

of a technician, a vehicle and the time required to install the service. It is assumed that a CableCard installation is as simple as putting a card into a slot. It is not. Differences among TV sets make each CableCard installation different. And, CableCard customers pay far less than those who lease a set-top box (\$2.00/mo versus as much as \$7.00/mo).

Paragraph 5 – The Commission is urged to make two recommendations to encourage operators to transition their systems to all-digital. First, make it the cable operator’s decision whether to continue the availability of ClearQAM signals and encourage the consistent use of PSIP by cable operators and electronics manufacturers. Second, authorize the use of low-cost, limited-function HD set-top converters to expand the Consumer Continuum of Choice.

Paragraph 7 – It is important for MVPDs to retain control over their system security. However, different MVPDs have different security needs. I urge the Commission not to restrict the ability of some MVPDs to continue to offer ClearQAM signals by recommending (or creating by default) a regime that requires encryption of all signals.

Paragraph 8 – It is true that most cable customers continue to use a set-top box leased from their cable operator rather than a CableCard. However, it is important to note that the majority of TV sets in cable households have no set-top box at this time. These are analog TV sets used to receive unencrypted analog signals. As these analog sets are replaced with digital sets, most consumers will install a set-top box but not because they want one. Rather, they will install a set-top box because it is the only way they can continue to view their current services. ClearQAM signals and PSIP, if they are properly supported, will enable digital sets to function in the same manner as analog sets by providing access to Basic and CPST signals without a set-top box or CableCard (and without the associated cost).

Paragraph 9 – The “additional complication” with the CableCard process is not entirely the fault of the cable industry. Different TV sets responded differently to CableCards. Cable operators did not design or manufacture those TV sets, yet we bore the brunt of the criticism, the expense of the installation and burden of customer education that rightfully should have been shared by the manufacturer or “big box” store that sold the TV set. If the Commission chooses to create a new conditional access standard, it is important that the standard be a true standard (with no latitude for variation). This, and only this, will eliminate these additional complications.

Paragraph 11 – It would be far less confusing for consumers to require an accurate reflection of the cost of a CableCard<sup>6</sup> than to confuse millions of existing set-top box users with mathematical gymnastics on their monthly invoice. What purpose is served if a monthly charge for a CableCard appears on a set-top box invoice if the cost for the associated set-top box declines by the same amount? Only confusion and frustration will

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<sup>6</sup> We have been unable to find any body of evidence that suggests current CableCard charges do not accurately reflect the cost of CableCards.

result. The consumer cannot eliminate the cost of the CableCard by providing their own. The consumer cannot eliminate the cost of the set-top box by providing their own. Nor can the consumer eliminate the set-top box cost by purchasing a digital TV with a CableCard option because they are not available at retail stores.

Professional installation of CableCards is typically required because consumers cannot accomplish the steps on their own. Simplification of the CableCard installation process can only be achieved with standardization of TV sets. The location of the CableCard slot, menu selections and on-screen displays, remote control commands and all other steps in the process must be the same for all manufacturers. Otherwise, professional installation will be required most of the time. I agree that CableCard self-installation should be available under the same conditions as set-top box self-installation. However, most consumers are unwilling to accept the terms that a failed self-installation requires a scheduled work order and an installation charge (as opposed to a free emergency service call). It should be clearly understood that a self-installation attempt is not a way to push to the front of the installation queue and have a technician complete the work at no charge.

Paragraph 12 – CableCards are obviously outdated. New standards exist that enable conditional access without an expensive external device.

Paragraph 13 – The recommendations about CableCards embodied in the National Broadband Plan are, with some qualifications, a common-sense approach to continuing the use of CableCards. Many cable operators already do these things. However, Massillon proposes that the Commission expand the nature of access to linear channels to include greater choice for consumers by recommending the continued use of ClearQAM channels and utilizing the PSIP standard.

Paragraph 14 – The market-based solution for Unidirectional Digital Cable Products (“UDCPs”) is working. The private market dynamic has accompanied technological change throughout the history of the television industry. I have a Motorola UHF receiver from the 1950’s in my office. It was a private market solution to the fact that early TV sets received only VHF signals. The creation of UHF TV signals engendered a private market solution. A few decades later, VHF/UHF TV sets could not receive cable signals beyond Channel 13. “Cable-compatible” TV sets of the 1980s could only receive 36 cable channels. The private market found a way to resolve this with simple converters. The fact that UDCPs can only receive static linear signals is no different. Early adopters of new technology always run the risk that future changes will render the object of their desire less than fully useful. HD-DVD (the failed competitor to Blu Ray), Betamax, laser discs, ¾” tape, reel-to-reel tape all found a market share but eventually faded. Analog UDCPs have very little future in a digital world. Digital UDCPs without CableCard slots face a similar fate. UDCPs with CableCard slots work, but will need a private market solution to receive switched digital signals. The Commission should not become involved.

Paragraph 15 – A requirement to list the fee for CableCards as a line item would be an unnecessary disruption. As the NOI correctly notes, there are very few devices in existence that can accommodate a CableCard. Fewer still are actually equipped with CableCards. In our system, only 1% of customers have a CableCard-equipped device, while almost 50% have two-way, set-top boxes. The effort to create a new line item and explain the increase for the cost of the CableCard and the off-setting decrease for the cost of the set-top box would accomplish very little since virtually no one has the ability to choose to install the CableCard option. Even if a customer noticed the lower monthly cost of the CableCard, they do not own a set capable of accepting one and would not be able to find one to purchase if they tried.

Paragraph 16 – As noted elsewhere, the cost of CableCard installations is not universally significant. Beyond that, installation costs are based upon the cost of a qualified technician, a vehicle and the time required driving to the home, installing the equipment, providing training and responding to questions. Anyone who has had a plumber come to clear a simple drain clog, or an electrician reset a simple circuit breaker, or a phone technician simply hang up a phone off the hook in the basement feels that a \$75 trip charge is too much, but that is what it costs.

The need for a professional installation also is not universal for either CableCards or set-top boxes. There are legitimate reasons why a cable operator may insist on professional installation of both. Signal quality is the most obvious. Scheduling a professional installation ensures that the service will work properly. Many self-installations are accomplished with low-quality material and/or workmanship. They often result in inconsistent or sub-standard service. A professional installation means a quality, long-term service experience.

Most cable operators find that the lack of consistent steps and prompts among TV set manufacturers typically results in a failed self-installation attempt for CableCards. Such a failure leads to a service call to the customer's home following a phone call from an exhausted and frustrated homeowner. They don't call the manufacturer. They don't call the big box store. They don't call the salesperson. They call the cable operator as the closest and most responsive link in the chain.

Self-installation of set-top boxes is different. The only variable, other than the customer's skill level, is the quality of the signal in the home. The set-top box will perform in a known and consistent manner each and every time. Therefore, it is easier to allow customers to attempt a self-installation of a set-top box. A failed set-top box installation leads to the same result, a service call, but it happens less often.

It is appropriate to recommend that self-installation of CableCards be offered when self-installation of set-top boxes is offered, provided it is clearly understood that a failed self-installation should result in a scheduled work order with an appropriate charge (as opposed to a free emergency service call).

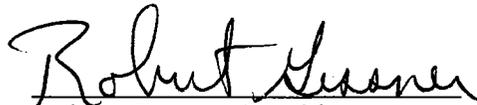
Paragraph 17 – It is appropriate to require cable operators to offer multi-stream CableCards for devices that are capable of accepting them.

Paragraph 22 – The availability of one-way navigation devices, especially if they are capable of processing HD signals, will encourage cable operators to hasten their transition to digital and cause cable consumers to more rapidly accept HD service throughout their homes. Low-cost, one-way set-top boxes are a crucial element in the Consumer Continuum of Choice. The availability of low-cost, one-way devices does not substantially affect the marketplace for CableCard devices since a low-cost, set-top box and a CableCard provide essentially the same function, namely decrypting linear program networks.

### **VIII. Conclusion**

The CableCard regime was developed to provide cable consumers with an additional choice for receiving TV signals. Now, even more consumer choices are available at a lower consumer cost. The Consumer Continuum of Choice described above would offer consumers yet another choice (the ability to watch a wide array of linear program streams without a CableCard or set-top box). Massillon urges the Commission to expand its vision of consumer choice and strongly recommends the continued availability of ClearQAM signals and the consistent, systematic use of the PSIP standard by cable operators and electronics manufacturers.

Respectfully submitted,



Robert Gessner, President  
Massillon Cable TV, Inc.

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Massillon Cable TV, Inc.  
814 Cable Cable Court, NW  
Massillon, Ohio 44648

330-833-4134