

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

In the Matter of)
)
Carriage of Digital Television Broadcast) CS Docket No. 98-120
Signals: Amendment to Part 76 of the)
Commission's Rules)

REPLY COMMENTS OF THE



NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION

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The National Cable & Telecommunications Association (“NCTA”) hereby submits its Reply Comments in the above-captioned proceeding.

INTRODUCTION

NCTA’s Comments explained that the cable industry is committed to working with local broadcasters to make the broadcasters’ digital transition seamless for customers to cable systems. Voluntary efforts will ensure that cable customers will not experience the disruption that over-the-air viewers may face after February 17, 2009. But mandatory dual carriage of must-carry stations, as proposed in the *Notice*, would be unlawful and will impede rather than facilitate this smooth transition. So, too, would a requirement to increase capacity devoted to must-carry signals in the form of a “carry all the bits” requirement.

Must-carry represents a significant intrusion into the rights of cable operators, programmers and their customers. As NCTA and others showed, today even a single channel must-carry requirement is on shaky constitutional grounds.¹ But the broadcasters have relentlessly sought to commandeer even more cable capacity for those broadcast stations with

¹ NCTA Comments at 15-16 and Appendix A at 12; Time Warner Inc. Comments at 15-17; Comcast Corp. Comments at 27.

little marketplace appeal. The Commission has twice rebuffed these efforts, and it should do so again here.

The apparently endless demands of some of the least viewed over-the-air television stations should not compel how cable operators best smooth the way for their cable customers after February 17, 2009. Nor should broadcasters' least efficient methods for transmitting digital programming over their 6 MHz of free public spectrum be allowed to dictate how cable operators maximize use of their privately constructed bandwidth, while still providing high-quality signals to viewers.

Cable operators have every incentive to ensure that their customers are not adversely affected by the broadcasters' digital transition. Imposing a host of new burdensome requirements to accommodate the interests of must-carry stations would be a classic case of the tail wagging the dog, to the detriment of cable customers and the digital transition alike.

I. THE COMMISSION SHOULD NOT IMPOSE A DUAL CARRIAGE REQUIREMENT

Not surprisingly, NAB/MSTV and other broadcasters use this proceeding as another opportunity to resurrect their nearly two decade-old campaign for mandatory dual carriage. This time, they argue dual carriage is really not mandatory, but voluntary, based on the argument that operators have a "choice" in the matter.² Some choice. As cable commenters showed,³ there is

² Comments of National Association of Broadcasters and The Association for Maximum Service Television, Inc. at 12-13 (hereinafter "NAB/MSTV Comments").

³ NCTA Comments at 4-6; Time Warner Comments at 3 ("because many customers currently choose not to use set-top boxes on one or more of their television sets, most cable operators have not switched to all-digital distribution and may not do so for some time. Thus, to most cable operators and subscribers, the NPRM's single carriage proposal will be unavailable"); Comcast Corp. Comments at 5 ("ultimately, every TV in a cable household will need to be capable of digital reception, be connected to a digital cable converter box, or be connected to an over-the-air digital converter box. But that transition is not constrained by the 2009 'hard date,' and the pace of the transition to cable households can and should be dictated by the marketplace – not by Commission fiat."); American Cable Association Comments at 5-6 ("The experiences of ACA members that have converted to all-digital networks shows that the cost of this proposal is enormous.").

no other viable option offered in the *Notice*. Requiring the forced deployment of digital boxes to every analog television set in a cable household is not a real option in the foreseeable future, given the tremendous costs and business disruption a premature transition would cause cable customers.

A. Dual Must-Carry Would Disrupt Cable Customers

NAB/MSTV claims a new interest in dual carriage in order to protect *cable* customers from disruptions caused by the broadcasters' digital transition.⁴ Broadcasters no doubt have a legitimate interest in the disruption of the viewing habits of the more than fifteen million over-the-air analog households in the United States, who will lose access to *any* video programming on their analog sets unless those viewers take measures to ensure otherwise. The viewing habits and service offerings of the 65 million cable customers, though, need not be the broadcasters' concern. As Comcast's comments point out, worries about cable customers being "disenfranchised" by the broadcast digital transition are "bogus: no cable operator will allow its subscribers to become 'disenfranchised' since to do so would be economically irrational."⁵

Cable customers vote with their checkbook every month about whether to continue to pay for their video service. Cable operators therefore have every incentive to minimize the impact of the transition on their customers. The impact, however, will not be minimal if operators are forced to make even more room for lightly-viewed over-the-air broadcasters by adding a 6 MHz carriage burden per must-carry station on top of the existing forced digital carriage requirement.

As Comcast's comments explain, "it would directly and immediately diminish the bandwidth that cable operators can use to meet evolving consumer needs for programming and

⁴ *Id.* at 5.

⁵ Comcast Corp. Comments at 16.

other services; it would also impede video competition.”⁶ Time Warner observes that “under the proposed dual carriage requirement, consumers would lose. Mandated carriage in both analog and digital format of every must-carry station would require allocation of additional cable spectrum. Any spectrum allocated to duplicative must-carry signals is unavailable to other services that consumers may value more highly.”⁷

Double carriage of the identical content from lightly-viewed stations inevitably will crowd out more valuable program offerings. It will diminish the ability of cable programmers like Discovery Communications to reach audiences with additional high-definition (“HD”) content.⁸ It will increase the difficulty in launching and securing carriage for new services, including those specifically targeting minority audiences.⁹ As Time Warner shows, “additional spectrum demand from must-carry signals would be particularly strong in major urban areas, where the number of must-carry stations, particularly from geographically distant areas, is high. Compelled duplicate carriage of such stations would result in no digital carriage, or any carriage at all, for many cable programmers.”¹⁰

Small systems, too, will face significant disruptions from a dual carriage requirement. Block Communications, a small cable operator and broadcaster, explains that “beyond the First Amendment, from a business perspective, this proposal shifts transition costs to our cable operations and customers. We will need to pay for conversion equipment and allocate additional channels, all for the same programming.”¹¹ Time Warner points out that many smaller systems

⁶ *Id.*

⁷ Time Warner Inc. Comments at 4.

⁸ Discovery Communications, Inc. Comments at 6.

⁹ *Id.* at 7.

¹⁰ Time Warner Inc. Comments at 6.

¹¹ Comments of Block Communications, Inc., at 4. *See also* ACA Comments at 3-4.

“are in rural areas where cable systems often are not upgraded to 750 MHz or even transmit only analog signals.”¹²

For all these reasons, the Commission should not buy the broadcasters’ argument that dual carriage is necessary to protect the interests of cable customers. It is only their own interests that they are looking after. Dual carriage would be a gift to must-carry broadcasters that would *disserve* cable customers who already are guaranteed delivery of must-carry broadcasters’ digital signal. Moreover, as we now discuss, such a grant of additional channels on cable systems is neither required nor warranted under the law.

B. Dual Carriage is Not Required to Satisfy the “Viewability” Requirement

Concerns about the added burdens of dual carriage on cable operators and programmers led the FCC to twice reject the broadcasters’ pleas for such carriage during the transition. But NAB/MSTV now tries to justify an even more burdensome dual carriage obligation – one where, in addition to carriage, operators also would be required, at their own expense, to *create* the second identical version of the broadcaster’s over-the-air digital signal.¹³ This time, they argue, those burdens are “clearly mandated” by the “viewability” provision of Section 614(b)(7).¹⁴

It would have been irrational, poor public policy and unconstitutional if Congress in 1992 had passed a law that imposed this burden on cable operators and programmers. Section 614, after all, was drafted with an express concern that operators *not* be forced to carry duplicative programming from *different* local commercial television stations.¹⁵ It would be more than passing strange if Congress intended to require mandatory carriage of duplicative programming

¹² Time Warner Comments at 6.

¹³ NAB/MSTV Comments at 11.

¹⁴ *Id.* at 7.

¹⁵ 47 U.S.C. § 534(b)(5).

from the *same* television station. Congress did not do so: the viewability provision, as NCTA's initial comments demonstrated, contains no such charge. Instead, all that is required in the digital context, as the FCC determined in 2001, is that operators transmit the HD signal in HD, and allow customers to lease a box from the operator, if they so desire, to enable them to watch a digital must-carry signal on an analog set.

Broadcasters argue that Section 614(b)(4)(B), the subsection dealing with the "signal quality" of "advanced television," provides the FCC with the additional authority to reinterpret the "viewability" provision to force dual carriage.¹⁶ Whatever that section means about adapting the signal quality rules to "ensure cable carriage of such broadcast signals of local commercial stations *which have been changed to conform with such modified standards,*" nothing in that provision suggests that the FCC has discretion to *force* a cable operator to *change that signal back* to an analog format and carry that *along with* the signal a station transmits over-the-air, in perpetuity.¹⁷ Instead, the House Report makes clear the limited nature of this "advanced television" signal quality provision: the Commission was permitted to "establish *technical standards* for cable carriage of such broadcast signals which have been changed to conform to such modified standards."¹⁸ No more.

Nor can NAB/MSTV point to any Commission precedent interpreting the viewability requirement that would justify forcing operators to create and carry a duplicative analog version of the broadcaster's over-the-air digital signal. Broadcasters claim that the Commission previously has recognized that it has no authority to "exempt any class of subscribers from this

¹⁶ NAB/MSTV Comments at 7 ("The viewability provision is certainly among the provisions Congress directed the Commission to adapt to the digital environment.")

¹⁷ Comcast Comments at 24.

¹⁸ H.R. Rep. No. 92-268, 102d Cong. 2d Sess. 94 (emphasis supplied) (hereinafter "House Report").

requirement.”¹⁹ But NAB/MSTV takes this statement out of context. There the FCC spoke to the question of whether operators and commercial customers could agree to a specialized channel line-up that excluded certain must-carry signals.²⁰ In other words, the issue was whether certain must-carry signals would be available *at all* to certain commercial customers. But in this case, all must-carry signals post-transition will continue to be available to *all* cable households on a cable system. And those signals will be viewable should customers with analog television sets choose to purchase or lease the necessary equipment from their cable operator. Section 614 demands no more.

C. Operators Do Not Need to Provide Identical Treatment to Broadcast Signals to Comply With the Viewability Requirement

Most cable operators today provide customers with a mix of analog and digital programming. Some digital programming is from certain broadcasters that transmit a high definition and/or standard definition digital signal and whose analog signal is also being carried. Indeed, cable operators already voluntarily carry digital broadcast signals (in addition to the analog signal) from 999 different television stations.²¹

NAB/MSTV, however, would adopt a rule that would have the effect of prohibiting this routine practice post-transition, arguing that it conflicts with the “viewability” requirement. NAB/MSTV urges the Commission to adopt a rule that would force cable operators to carry *every* broadcaster’s digital signal in both digital and analog if the operator chooses to provide

¹⁹ NAB/MSTV Comments at 8.

²⁰ *Memorandum Opinion and Order*, 9 FCC Rcd. 6723, 6726 (1994) (explaining NAB position as “there is no basis for distinguishing between residential and commercial subscribers, and that Section 614(b)(7) provides no basis for allowing cable operators to *delete must-carry signals from the commercial subscriber channel line-up.*”) (emphasis supplied).

²¹ NCTA Research, based on company data.

any “desirable”²² broadcaster in analog; alternatively, NAB/MSTV advocates for a rule barring operators from carrying some broadcast signals *only* in analog if they carry the signals of any other broadcast station in both analog and digital.²³

But this new rationale for the same old dual carriage plea is a twisted view of the public interest. What possible reason could there be for forcing cable customers to lease or to buy a converter box for each of their analog television sets just so that they are able to watch programming they may have absolutely no interest in watching? Must-carry stations have had fourteen years of guaranteed analog cable carriage, along with favorable tier and channel positioning, to try to attract an audience. The public interest would not be served by depriving cable customers of the ability to see some television signals on analog television sets without a set-top device, simply because must-carry stations think it would give “desirable” stations a leg up in cable homes. Cable operators are in the best position to assess the interests of their customers and should be able to choose to provide broadcast signals post-transition in the formats that make the most sense for their customers, just as they have done during the pre-transition period.

The viewability provision is not to the contrary. In fact, Congress specifically contemplated and expressly permitted – rather than prohibited – cable operators to provide *some* broadcast signals in a way that might require cable customers to obtain equipment that they might not need to see *other* broadcast signals.²⁴ NAB/MSTV also tries to hang its argument on the “no material degradation” provision of Section 614.²⁵ But that provision, too, fails to support

²² NAB/MSTV Comments at 5.

²³ *Id.* at 5 and n. 4.

²⁴ 47 U.S.C. § 534(b)(7) (imposing notification obligation if certain broadcast stations carried on the system cannot be received without a converter box).

²⁵ NAB/MSTV Comments at 9.

its claim. To the contrary, the House Report was well aware that a cable system might carry different types of signals, resulting in differences in quality of carriage.²⁶

Thus, there is no authority for a dual carriage requirement hidden in the viewability or material degradation provision of the 1992 Act. And absent express authority, the FCC has no generalized authority to dictate cable marketing practices, and it should refrain from the broadcasters' suggestion to ground a dual carriage rule on this new basis.²⁷

D. Broadcasters Propose an Unconstitutional Dual Carriage Regime

Even if there were some ambiguity about how to interpret the Act to accommodate must-carry broadcasters post-transition, the Commission's discretion is *not* unlimited where the decision impacts the First Amendment rights of operators and programmers. The Commission still must interpret the Act in a manner that avoids constitutional conflicts. The broadcasters give remarkably short shrift to the constitutional shortcomings of the Commission's must-carry proposal.

The Supreme Court has made clear that any must-carry requirement affects the protected speech rights of cable operators and programmers and is subject to at least intermediate First Amendment scrutiny.²⁸ And the Commission has twice found that requiring cable operators to carry both the analog and digital signals of must-carry broadcast stations would be

²⁶ House Report at 94 ("In adopting this provision, the Committee realizes that differences in quality are expected among the different types of signals (*i.e.*, digital v. analog, AM v. FM, etc.) processed and carried on a cable system.").

²⁷ 47 U.S.C. § 544(f) prohibits the FCC from "impos[ing] requirements regarding the provision or content of cable services, except as expressly provided in [Title VI]." Moreover, the FCC has no authority to override Congress' intent to limit the scope of operators' must-carry obligation with respect to low power stations. Therefore, contrary to the comments of United Communications Corp., the FCC cannot and should not use this proceeding to expand the category of low power stations eligible for must-carry rights.

²⁸ See *Turner Broadcasting Sys., Inc. v. FCC*, 512 U.S. 622 (1994) ("*Turner I*"); *Turner Broadcasting Sys., Inc. v. FCC*, 520 U.S. 180 (1997) ("*Turner II*").

unconstitutional under the intermediate scrutiny standard.²⁹ Yet the broadcasters summarily dismiss the notion that requiring cable operators to carry must-carry stations in both analog and digital formats – or, alternatively, to transform their systems to “all-digital” by forcing deployment of digital set-top boxes for the millions of analog television sets in cable households – raises any significant First Amendment problem at all.

The broadcasters suggest that any First Amendment problems with dual carriage have disappeared, first, because “any cable capacity issues that may have once given rise to First Amendment concerns are long a thing of the past,”³⁰ and, second, because “the Commission’s proposal to give [cable operators] the alternative of providing converter boxes to their subscribers with analog receivers would resolve any constitutional questions.”³¹ But as NCTA’s initial comments – and the analysis provided by constitutional law expert Charles Cooper³² – showed, neither of these arguments holds water.

Although the broadcasters have pretended otherwise for years, the Supreme Court has never suggested that the First Amendment problem with must-carry requirements is primarily a matter of capacity. For purposes of the First Amendment, the “burden” that must-carry requirements impose is measured not simply in terms of the amount and portion of capacity used but in terms of the extent to which such requirements suppress protected speech. As the Supreme Court said in *Turner*, “At the heart of the First Amendment lies the principle that each

²⁹ *First Report and Order*, 16 FCC Rcd. 2598, 2600 (2001); *Second Report and Order and First Order on Reconsideration*, 20 FCC Rcd. 4516, 4524 (2005).

³⁰ NAB/MSTV Comments at 13.

³¹ *Id.* at 15.

³² C. Cooper, B. Koukoutchos and J. Massey, “Both Prongs of the Commission’s Proposed Digital Carriage Requirement Would Violate the Constitution,” Appendix A to NCTA Comments.

person should decide for himself or herself the ideas and beliefs deserving of expression, consideration, and adherence.” *Turner I*, 512 U.S. at 641.

Thus, even if it were true that cable operators had unlimited capacity on their systems to carry every broadcast and non-broadcast program service available, forcing cable operators to carry certain program services that they would otherwise choose not to carry would still severely infringe those operators’ protected speech – and the First Amendment rights of cable program services that do not have such must-carry rights.³³ Forcing operators to carry such a station *twice* compounds the burden on operators’ editorial discretion and the unfair governmental discrimination against cable program networks.

In any event, as NCTA’s initial comments showed, the broadcasters’ cavalier dismissal of capacity issues for today’s cable operators bears no relationship to the real world. We explained at length that “[c]able operators have defined channel capacity, capacity that is even more constrained since continued analog service consumes a large portion of bandwidth of the typical 750 MHz system. At the same time, video and non-video uses for that capacity are exploding.”³⁴ And the comments of other cable operators further confirm that this is the case. For example, as Time Warner points out,

On the video front, there are more than 500 national video-programming services and an additional 100 or so regional video-programming services. The average 750 MHz cable system has capacity for only about 80 analog services in the spectrum between 50 and 550 MHz and (accounting for other services) only another 100 or so standard definition services in the digital spectrum between 550 and 750 MHz. Analog channel space is particularly scarce: cable operators in recent years have added very few new services to analog tiers. But channel space in the digital-basic tier is becoming increasingly scarce as well. Thus, cable

³³ Indeed, we showed that, in light of the changed circumstances in the video marketplace and in TV set technology, such forced carriage would likely now be subject to “strict scrutiny” – the most stringent and unforgiving standard of First Amendment review. *See* NCTA Comments at 15-16.

³⁴ NCTA Comments at 19.

programmers are locked in a fierce battle for carriage, with many programmers being unable to secure any carriage (analog or digital) for all their services.³⁵

With these capacity constraints, any must carry requirement – much less a *dual* carriage requirement – would not only force cable operators to carry services that they would prefer not to carry, but it would also prevent them from carrying other services that they would choose to provide to their customers. It's understandable why the broadcasters would like to wish these constraints away. But the facts get in the way: it's still the case – as it has been virtually throughout cable's history – that even as cable operators invest billions (with no government subsidies or guarantees) to expand the capacity of their systems, the number of program services available continues to exceed the number of available channels.

The broadcasters' second argument – that giving operators the alternative option of the forced deployment of digital boxes to *all* their customers with analog sets and becoming “all-digital” eliminates any constitutional problems with the dual carriage requirement – is, as we (and Cooper) have shown, a non-starter. First of all, as discussed above, implementing this approach by February 17, 2009, is, for most operators, not a real option – a “Hobson's Choice,” as Cooper put it.³⁶ But even if it were feasible, the government may not force a speaker to pay a fee or incur a heavy burden for the “privilege” of exercising its First Amendment rights. This would be true even if the burden – in this case, the alternative of a forced digital box solution – were not itself an intrusion on protected speech.³⁷

But as we showed, requiring operators to convert to this alternative *is*, of course, a direct intrusion on their First Amendment rights. It is a restriction on the *manner* in which they choose

³⁵ Time Warner Comments at 5.

³⁶ Cooper at 35.

³⁷ See NCTA Comments at 23.

to provide their content to customers – a restriction that affects the value of their service to customers and will affect their ability to reach many customers.³⁸

For a cable operator who wishes to offer an analog service as well as a digital service, based on pricing, packaging, and content considerations, an all-digital “alternative” robs the operator of its preferred method of distributing content. Only half of all cable customers have digital set-top boxes today and even a smaller percentage of television sets in cable customers’ homes are equipped with such boxes. Forcing all customers to connect all their sets to converter boxes (and to incur the costs of such an equipment expenditure) in order to ensure that they are able to watch must-carry stations (whether they want to or not) is sure to affect customers’ satisfaction with and willingness to purchase cable service. Unless this requirement itself furthered an important government interest without unnecessarily burdening the right of operators to offer and to package services in the manner of their choosing, it would be unconstitutional as a standalone rule. And offering a choice between two unconstitutional alternatives is not itself a constitutionally permissible approach.

II. THE COMMISSION SHOULD NOT REVISE ITS “MATERIAL DEGRADATION” RULE

A. The Prohibition Against Material Degradation Should Not Extend to Stations Choosing Retransmission Consent

Section 614(b)(4) provides that “the signals of local commercial television stations that a cable operator carries shall be carried without material degradation.” As NCTA’s initial comments showed, this requirement applies only to carriage of digital must-carry stations.³⁹ The Commission made that clear in 2001, where it explained “*in the context of mandatory carriage of digital broadcast signals*, a cable operator may not provide a digital broadcast signal in a lesser

³⁸ *Id.* at 23-24.

³⁹ NCTA Comments at 30 n. 69.

format or lower resolution than that afforded to any digital programmer (*e.g.*, non-broadcast cable programming, other broadcast digital program, etc.) carried on the cable system....”⁴⁰

NAB/MSTV now asks the FCC to extend this government protectionism – designed to assist the weakest commercial television stations – to the local television signals that invoke retransmission consent and have thereby voluntarily opted for a negotiated carriage arrangement.⁴¹ NAB/MSTV points to the Commission’s implementation of the analog must-carry requirements, where the Commission referenced several different subsections of Section 614(b) in its initial implementation (including Section 614(b)(4)(A)) and applied them to stations opting for retransmission consent.⁴² But as even NAB/MSTV is forced to concede,⁴³ the FCC has never found the provision relevant here – Section 614(b)(4)(B) – to apply to retransmission consent stations. It should not extend that protectionism here.

The 1992 Act does not do so. Rather, Section 325, the retransmission consent provision, expressly states that “if an originating television station elects ... to exercise its right to grant retransmission consent under this subsection with respect to a cable system, *the provisions of section 614 shall not apply to carriage of the signal of such station by the cable system.*”⁴⁴ The legislative history confirms Congress’s intent that stations electing retransmission consent would not automatically be granted the statutory benefits contained in Section 614; instead they would

⁴⁰ First Report and Order, 16 FCC Rcd. 2598 (2001) at ¶ 73 (emphasis supplied).

⁴¹ NAB/MSTV Comments at 16.

⁴² *Id.* at 18 (*citing First Report and Order*). On reconsideration, the FCC expressly reaffirmed only the right of all local stations to be entitled to “carriage in the entirety,” but did not address NCTA’s arguments in its reconsideration petition regarding the inapplicability of other provisions of Section 614 to retransmission consent stations. *See Memorandum Opinion and Order*, 9 FCC Rcd. 6723, 6745 (1994).

⁴³ NAB/MSTV Comments at 18 n. 25.

⁴⁴ 47 U.S.C. § 325(b)(3)(C)(4)(emphasis supplied).

bargain for these terms and conditions with cable operators.⁴⁵ The structure of the Act reinforces this view: Section 614(b) is entitled “Signals *Required*” (emphasis added).

Retransmission consent stations can and do negotiate for the terms and conditions of digital carriage, including terms relating to technical matters.⁴⁶ No public policy reason justifies an additional thumb on the scale in favor of these sizable players in the video marketplace during their negotiations with operators.

B. The Commission Should Not Require Carriage of All “Content Bits”

NCTA’s initial comments showed that there is no reason for the FCC to jettison its existing non-discrimination standard. And replacing that standard with a “carry all bits” requirement would be particularly counterproductive. The existing standard strikes a proper balance between ensuring that customers obtain a high quality digital broadcast picture and allowing cable operators to efficiently use their privately-constructed plant. Forcing cable operators to cede more capacity to must-carry broadcasters than necessary to avoid materially degrading their signals will interfere with additional editorial choices. As Time Warner’s Comments explain, “a ‘content bits’ rule would also violate the rights of cable programmers and cable operators under the First Amendment. A ‘content bits’ approach would allow must-carry signals to consume more bandwidth to provide the same picture quality. Clearly, such an approach would fail the tailoring requirement of intermediate scrutiny: that the burden imposed be ‘no greater than is essential to the furtherance of [the Government’s] interest.’”⁴⁷

⁴⁵ See e.g., S. Rep. No. 92, 102d Cong., 1st Sess. 37 (“Section 325 makes clear that a station electing to exercise retransmission consent with respect to a particular cable system *will thereby give up its rights to signal carriage and channel positioning established under Section 614 and 615 for the duration of the three-year period. Carriage and channel positioning for such stations will be entirely a matter of negotiation between the broadcasters and the cable system.*”)(emphasis supplied).

⁴⁶ Comcast’s Comments show that it has agreements with various retransmission consent broadcasters that address issues of “material degradation.” Comcast Comments at 10.

⁴⁷ Time Warner Inc. Comments at 27.

The broadcasters would increase the signal carriage burden by changing the standard to force cable carriage of all – or at least 99% – of the broadcasters’ “bits.” Other than a claim to entitlement, broadcasters provide no evidence that this change is needed to protect against “material degradation.” Instead, NAB/MSTV simply asserts that “when content bits are not passed through, the signal is, by definition, degraded....”⁴⁸ But that “definition” appears only in NAB/MSTV’s lexicon. No technical reason has been shown at all that *any* perceptible degradation occurs – much less “*material*” degradation, which is all the statute prohibits – if fewer than all the bits transmitted over the air are retransmitted over the more efficient cable plant.

NAB/MSTV offers no relationship between its proposal to “allow measurement variations of no more than 1% of the content bits in a given program”⁴⁹ and degradation of the signal. And indeed there is none. The claim that carriage of 99% of the content bits is necessary to protect against degradation is directly contrary to the widespread practice of using digital compression to deliver video programming. Broadcasters, DBS operators,⁵⁰ and cable operators all use digital compression, which reduces the number of “content bits” in a way that is virtually imperceptible to the human eye.

NAB/MSTV’s claim that there are objective measurement techniques⁵¹ is equally specious. Those techniques might show whether a cable system has retransmitted all “bits” in a digital broadcast signal, but that is all. These measurements reveal little about whether an HD

⁴⁸ NAB/MSTV Comments at 19.

⁴⁹ *Id.* at 20.

⁵⁰ DBS operators avail themselves of more advanced compression than the typical cable operator. DBS uses advanced video coding (“AVC”) or MPEG-4 to deliver local broadcast stations by satellite. *See e.g.*, “Tandberg Television MPEG-4 AVC HD Advanced Encoding Platform Chosen for DIRECTV’s HD Expansion,” <http://tandbergtv.com/newsview.ink?newsid=204>; “EchoStar Rolls Out New HDTV Receiver,” <http://www.multichannel.com/article/CA6448926.html>.

⁵¹ NAB/MSTV at 19.

picture is degraded over a cable system that retransmits fewer than all the bits. NCTA's comments and the comments of others show that there is no such effective tool to objectively measure video degradation today. This is confirmed by CEA: it, too, is "not aware of any automated, objective measure of video degradation which faithfully matched human visual perception."⁵²

The existing non-discrimination standard ensures that must-carry broadcasters' digital signals will be shown with the same high quality as digital cable programmers, while not unduly stifling technological advancements that enable operators to provide those pictures in the most efficient way possible over the cable transmission path.⁵³

C. The Commission Should Refrain From Adopting New Rules for Digital Signals Presented in an Analog Format

In a further effort to micromanage and restrict cable system transmissions, NAB/MSTV urges the FCC to force operators to satisfy a new technical self-invention for analog signals that operators might create from broadcasters' digital signals. The broadcasters would require a new analog signal degradation test: "analog-converted programming" would be required to provide a picture that meets, at a minimum, the "ITU Grade 4 standard"; to meet the signal-to-noise ratio

⁵² CEA Comments at 10. AT&T's Comments (at 5) suggest that measurement tools "still are in the early stages of development.... Establishing specific standards or measurement tools now would derail further developments of these and other tools."

⁵³ CEA also argues that the FCC should restrict cable technological developments. It urges the FCC to ban encryption of digital broadcast signals and to interfere with operators' use of improved compression and switched digital technologies. CEA Comments at 6-10. These arguments have nothing to do with the issue of material degradation and instead arise under Section 629 of the Act. Congress made clear in adopting Section 629 that the FCC was to "avoid actions which would have the effect of freezing or chilling the development of new technologies and services." S. Conf. Rep. No. 104-230 at 181 (1996). The Commission, moreover, has previously rejected similar CEA arguments, explaining that "cable operators are free to innovate and introduce new products and services without regard to whether consumer electronics manufacturers are positioned to deploy substantially similar products and services." *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, 20 FCC Rcd. 6794, 6809 (2005). The "material degradation" provision of Section 614 is not to the contrary. As NCTA's Comments showed, the FCC has explained that this provision was *not* meant to "imped[e] technological advances and experimentation by the cable industry...." NCTA Comments at 27 (*citing Implementation of the Cable Television Consumer Protection and Competition Act of 1992*, 8 FCC Rcd. 2965, 2990 (1993)).

requirements of Section 76.605 of the rules; and be delivered “with a quality that is equal to or better than that of any other broadcast or non-broadcast signals provided to analog subscribers.”⁵⁴ None of these added regulatory burdens is a good idea or lawful to impose.

As described above, the Commission has no authority to require a cable operator to create and to carry an analog version of a broadcaster’s over-the-air digital signal. Therefore, if an operator chooses to create a second format for that signal, the analog version of the digital signal would not be a must-carry signal subject to the prohibition against material degradation.

Even if the newly-created analog version were subject to that requirement, the Commission already has rules implementing the “no material degradation” provision for analog signals. And those rules for fifteen years have adequately ensured that operators provide a good quality analog signal to their customers.⁵⁵ The Commission need not superimpose new standards on the existing technical standard, standards which are in no way deficient for these purposes. Broadcasters offer no reason to believe an operator will provide anything other than the best analog signal quality possible if it chooses to continue to offer must-carry signals in an analog format along with the mandatory digital format.

NAB/MSTV also seeks to stretch regulation not only to cover carriage of analog signals post-transition but also to cover even the set-top devices that operators lease to their customers for making digital signals viewable on analog sets.⁵⁶ No such authority exists anywhere in the

⁵⁴ NAB/MSTV Comments at 23.

⁵⁵ 47 C.F.R. §76.62(b) (“Each such television broadcast signal carried shall be carried without material degradation, and, for analog signals, in compliance with technical standards set forth in subpart K of this part.”) NAB/MSTV proposes that the FCC adopt a requirement to require an analog-converted signal to meet “at a minimum, the ITU Grade 4 standard.” NAB/MSTV Comments at 23. NAB/MSTV never explains what that standard is. But so far as we can determine, there is no such objective standard. Rather, the ITU scale is based on a “*subjective* assessment of the quality of television pictures.” <http://www.itu.int/rec/R-REC-BT.500/en>.

⁵⁶ NAB/MSTV (at 23) argues that operator-supplied boxes must comply with the standards adopted for boxes that qualify for the converter coupon programming. Cable-supplied set-top devices, of course, do not benefit from that program, nor are they regulated under those rules.

law for such regulation. All that Section 614 requires is that operators notify their subscribers of the availability of a box to view all broadcast stations that otherwise cannot be viewed.⁵⁷

Nothing in that provision grants the FCC authority to regulate the features or functions of operator-supplied boxes that may be used in connection with analog television sets.

Broadcasters also would like to dictate how an operator-created analog version of a digital broadcast signal would appear to cable customers. NAB/MSTV argues that “where downconversion is performed by the cable operator at the headend, *broadcasters* must be able to designate the manner in which the cable operator will correct the aspect ratio of their programming.”⁵⁸ Of course, cable operators would like to work cooperatively with broadcasters to ensure cable customers have the best viewing experience possible. But nothing in the must-carry provisions remotely suggests that cable operators must cede control to the broadcasters to make this designation.

If a broadcaster chooses to send a cable operator a separate standard definition version of its must-carry over-the-air HD digital signal, then the broadcaster controls the format as it will be presented to analog customers. Cable operators today receive a separate standard definition digital version of certain cable programming services that they deliver to their analog customers in this manner. On the other hand, operators who, at their own expense, are creating a second version of the broadcaster’s over-the-air high definition digital signal and transmitting it in analog from the headend must be able to decide how best to serve the needs of their analog viewing customers. Operators cannot reasonably be expected to manually modify a signal’s aspect ratio, on a program by program basis, based on the whims of each must-carry broadcaster,

⁵⁷ 47 U.S.C. § 534(b)(7).

⁵⁸ NAB/MSTV Comments at 24-25 (emphasis supplied).

or worse, the thousands of programming agreements to which they might delegate this supposed authority.

CONCLUSION

For the foregoing reasons, and for the reasons stated in our initial comments, the Commission should not restrict cable operators' flexibility to best serve the needs and interests of cable customers after February 17, 2009. The FCC should reject calls for mandatory dual carriage or for changes in the existing material degradation standard.

Respectfully submitted,

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