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

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

COMMENTS OF THE NATIONAL ASSOCIATION OF BROADCASTERS AND THE ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC.

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Executive Summary

The National Association of Broadcasters ("NAB") and the Association for Maximum Service Television, Inc. ("MSTV") hereby respond to the Commission's *Second Further Notice of Proposed Rulemaking* concerning the carriage of digital broadcast signals after the conclusion of the digital television ("DTV") transition in February 2009. The Commission sought comment on (1) implementing the statutory requirement that cable operators must make the signals transmitted by broadcasters electing mandatory carriage viewable by all of their subscribers after the end of analog broadcasting on February 17, 2009, and (2) the statutory requirement that cable systems provide local broadcast signals without material degradation and on what precisely constitutes material degradation. The Commission stressed that its interpretation of these statutory requirements would be mindful of the need to minimize the burden imposed upon consumers by the end of analog broadcasting.

NAB and MSTV applaud the Commission's efforts in this proceeding to put consumers first. We could not more strongly agree with the Commission about the importance of facilitating the digital transition in a consumer-friendly manner. To ensure that cable subscribers are not disenfranchised by the switch to digital-only broadcasting after the end of analog broadcasting, NAB and MSTV fully support the Commission's proposal to permit cable operators to choose between (a) downconverting the signals of digital must-carry channels for all analog cable subscribers and carrying both digital and analog signals for those channels on their systems, or (b) carrying local must-carry signals in digital only and providing cable subscribers with analog television sets with the necessary equipment to view those digital signals. This "viewability" proposal will promote Congress' goals of ensuring that the DTV transition is completed as promptly and smoothly as possible, while ameliorating adverse consumer effects

from the transition. The proposal, moreover, is clearly and fully supported by the provisions of the Cable Television Consumer Protection and Competition Act of 1992, and does not raise any constitutional concerns.

NAB and MSTV also strongly support the Commission's pro-consumer extension of signal degradation rules to digital carriage. Section 614 of the Communications Act of 1934 requires that cable operators carry *all* local television signals "without material degradation." We support the Commission's proposal to move away from a subjective standard for evaluating material degradation. Measuring signal degradation by subjectively comparing one program channel to another is not appropriate in the digital era, especially because the technology now exists to employ objective measurement techniques. Objective standards, not subjective comparative analyses, are the best way to protect cable subscribers' access to high quality digital broadcast television programs. More specifically, NAB and MSTV further support the Commission's proposal that, with respect to the carriage of digital signals, all content bits transmitted by a broadcast station must be carried by a cable operator to avoid material degradation. To provide some flexibility in assuring compliance with this standard, the Commission should allow measurement variations of no more than 1% of the content bits in a given program. Such a measurable, objective standard will ensure that every cable customer enjoys the full benefits of the DTV transition, including significantly improved picture quality.

Signal degradation rules must in addition apply to the downconversion of digital signals to analog. When downconverting at the headend, cable operators should be required to provide a quality NTSC signal that meets the ITU grade 4 standard and complies with the current signal-to-noise rules for the carriage of analog signals on cable systems. To the extent cable operators prefer to provide customers with new receiving equipment, that equipment must be consistent

with the standards established under the National Telecommunications and Information Administration's converter box program. In the context of downconversion at the cable headend, the broadcaster, not the cable operator, should determine the programs' format (*e.g.*, "centercut" or "letterbox"). Where cable operators provide subscribers with new equipment, that equipment must be capable of allowing the subscriber to select the appropriate downconverted format.

Finally, NAB and MSTV urge the Commission to enact a streamlined complaint process to address signal degradation complaints by broadcasters. Such a process will reduce administrative burdens on the Commission, and will help assure that the public's access to the highest quality broadcast programming is maintained.

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The National Association of Broadcasters ("NAB") and the Association for Maximum Service Television, Inc. ("MSTV")[1] submit these comments in response to the Commission's *Second Further Notice of Proposed Rulemaking* in this proceeding.[2] In this *Notice*, the Commission addressed issues concerning the carriage of digital broadcast signals after the conclusion of the digital television ("DTV") transition in February 2009. Specifically, the Commission sought comment on (1) implementing the statutory requirement that cable operators must make the signals transmitted by broadcasters electing mandatory carriage viewable by all of their subscribers after the end of analog broadcasting on February 17, 2009, and (2) the statutory requirement that cable systems provide local broadcast signals without material degradation and on what precisely constitutes material degradation. *Notice* at ¶¶ 3-4. The Commission stressed

[1] NAB is a nonprofit trade association that advocates on behalf of more than 8,300 free, local radio and television stations and also broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the Courts. MSTV represents over 500 local television stations on technical issues relating to analog and digital television services.

[2] *Second Further Notice of Proposed Rulemaking* in CS Docket No. 98-120, FCC 07-71 (rel. May 4, 2007) ("*Notice*").

that its interpretation of these statutory requirements would be "mindful of the need to minimize the burden imposed upon consumers by the end of analog broadcasting in order to facilitate the successful and timely conclusion of the DTV transition." *Notice* at ¶ 5.

NAB and MSTV could not more strongly agree with the Commission about the importance of facilitating the digital transition in a consumer-friendly manner. To ensure that cable subscribers "are not disenfranchised by the switch to digital-only broadcasting" after the end of analog broadcasting on February 17, 2009, *Notice* ¶ 16, NAB and MSTV fully support the Commission's proposal to permit cable operators to choose between (a) downconverting the signals of digital must-carry channels for all analog cable subscribers and carrying both digital and analog signals for those channels on their systems, or (b) carrying local must-carry signals in digital only and providing cable subscribers with analog television sets with the necessary equipment to view those digital signals. *Notice* at ¶ 17. This "viewability" proposal will promote Congress' goals of ensuring that the DTV transition is completed as promptly and smoothly as possible, while ameliorating adverse consumer effects from the transition. The proposal, moreover, is clearly and fully supported by the provisions of the Cable Television Consumer Protection and Competition Act of 1992 ("Cable Act"), and does not raise any constitutional concerns.

NAB and MSTV also strongly support the Commission's pro-consumer extension of signal degradation rules to digital carriage. Section 614 of the Communications Act of 1934, as amended (the "Act"), requires that cable operators carry *all* local television signals "without material degradation." We support the Commission's proposal to move away from a subjective standard for evaluating material degradation. Measuring signal degradation by subjectively comparing one program channel to another is not appropriate in the digital era, especially

because the technology now exists to employ objective measurement techniques. Objective standards, not subjective comparative analyses, are the best way to protect cable subscribers' access to high quality digital broadcast television programs. More specifically, NAB and MSTV further support the Commission's proposal that, with respect to the carriage of digital signals, all content bits transmitted by a broadcast station must be carried by a cable operator to avoid material degradation. To provide some flexibility in assuring compliance with this standard, the Commission should allow measurement variations of no more than 1% of the content bits in a given program. Such a measurable, objective standard will ensure that every cable customer enjoys the benefits of the DTV transition, including significantly improved picture quality.

Signal degradation rules must in addition apply to the downconversion of digital signals to analog. When downconverting at the headend, cable operators should be required to provide a quality NTSC signal that meets the ITU grade 4 standard and complies with the current signal-to-noise rules for the carriage of analog signals on cable systems. To the extent cable operators prefer to provide customers with new receiving equipment, that equipment must be consistent with the standards established under the National Telecommunications and Information Administration's converter box program. In the context of downconversion at the cable headend, the broadcaster, not the cable operator, should determine the programs' format (*e.g.*, "centercut" or "letterbox"). Where cable operators provide subscribers with new equipment, that equipment must be capable of allowing the subscriber to select the appropriate downconverted format.

Finally, NAB and MSTV urge the Commission to enact a streamlined complaint process to address signal degradation complaints by broadcasters. Such a process will reduce

administrative burdens on the Commission, and will help assure that the public's access to the highest quality broadcast programming is maintained.

I. THE COMMISSION'S PROPOSAL TO ENSURE THAT ALL CABLE SUBSCRIBERS CAN VIEW LOCAL BROADCAST STATIONS AFTER THE DIGITAL TRANSITION IS SOUND AS A MATTER OF LAW AND POLICY.

NAB and MSTV wholeheartedly endorse the Commission's goal of ensuring that cable subscribers "are not disenfranchised by the switch to digital-only broadcasting," *Notice* ¶ 16, as well as its conclusion that cable operators have a critical role to play in ensuring that the DTV transition is successful. Just as the Commission recognized more than seven years ago that "cable carriage can play an important role . . . during this transition period by providing continued service to viewers who would otherwise be deprived of broadcast service,"[3] so too is it entirely appropriate to require cable providers to ensure that all local broadcast must carry stations remain viewable by all cable subscribers after the conclusion of the DTV transition in February 2009.

NAB and MSTV believe that the Commission's proposal to ensure that no cable subscribers are denied access to their local stations by permitting cable operators to choose to either (a) downconvert the signals of digital must-carry channels for all analog cable subscribers and carry both digital and analog signals for those channels on their systems, or (b) carry local must-carry signals in digital only and provide cable subscribers with analog television sets with the necessary equipment to view those digital signals, *see Notice* ¶ 17, will both further the objectives of the 1992 Cable Act and ameliorate adverse consumer effects from the DTV transition. For the reasons discussed below, the Commission's viewability proposal will promote Congress' paramount objective with respect to the DTV transition – ensuring that the DTV

[3] *See Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, 15 FCC Rcd 20845, ¶ 65 (2000).

transition is completed as promptly and smoothly as possible, with as little disruption as possible to consumers. The proposal, moreover, is clearly and fully supported by the provisions of the 1992 Cable Act, and does not raise any constitutional concerns.

A. The Commission's Viewability Proposal Furthers the Statutory Purposes of the Cable Act and the Congressionally Required DTV Transition, and Promotes Consumer Welfare.

NAB and MSTV applaud the Commission's efforts in this proceeding to put consumers first. The Commission is absolutely correct that its proposal would advance Congress' broader goals in the DTV transition – namely, that "every consumer," including cable subscribers, "should enjoy the benefits of the digital transition." *Notice* at ¶ 18. First, the Commission's proposal to ensure that cable subscribers with analog sets can continue to receive local broadcasters' signals will help minimize the impact of the digital transition on cable subscribers who have not purchased (and, in some cases, may not be able to purchase) a digital television set, or who will continue to use one or more analog sets even if they have purchased a digital receiver. Second, a critical part of encouraging innovative digital programming is ensuring that cable operators not be allowed, if they choose to downconvert broadcasters' digital signals to analog, to downconvert only certain stations that they deem more "desirable," and carry the remaining stations only in digital.[4]

The Commission is also correct that its viewability proposal is an important part of the DTV transition. Under the same law that set February 17, 2009 as the end of the DTV transition, Congress also chose to reduce the burdens on consumers from the transition by making available

[4] Alternatively, cable operators should not be permitted to carry some local signals in analog only, while providing signals of others in both digital and analog formats. The Commission correctly concludes that the signals of all stations after the transition must be carried in digital format, thus advancing the ultimate complete conversion to digital.

coupons with which consumers can buy digital-to-analog converter boxes for the analog television sets in their homes.[5] And the National Telecommunications and Information Administration ("NTIA"), the entity responsible for distributing coupons for DTV converter boxes for television viewers with analog sets, has publicly stated that it *assumes* that cable operators will ensure that subscribers with analog sets continue to receive local broadcast stations; its website informs the public that "[t]elevision sets connected to cable . . . do not require converters" to ensure the viewability of local stations after the end of the transition. *See* <http://www.ntia.doc.gov/dtvcoupon/faq.html>. The Commission similarly is telling consumers, "[a]nalog-only TVs should continue to work as before with cable and satellite TV services." <http://www.fcc.gov/cgb/consumerfacts/digitaltv.html>. Only two-thirds of the $1.5 billion federal subsidy for converter boxes is available to customers with subscriptions to multichannel video programming distribution services; the remaining $500 million is limited to households that receive broadcast stations only over the air.[6] By ensuring that large numbers of cable subscribers with analog sets will not find themselves without access to their local broadcast stations on February 18, 2009, the Commission's viewability proposal will help assure that the end of the DTV transition creates as little disruption as possible for consumers, and will also reduce the burden on the federal converter subsidy program.

The conversion to digital television is a mammoth undertaking, and the Commission's proposal recognizes that cable operators must – as have local broadcasters – take part in both the transition and in reducing disruption to consumers. The Commission's proposed rule – allowing

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[5] *See* Deficit Reduction Act of 2005, Pub. L. No. 109-171, 120 Stat. 4, § 3005 (Feb. 8, 2006) (codified in pertinent part at 47 U.S.C. § 309(j)(14)(A) ("Deficit Reduction Act")).

[6] *See* "Government Reduces Transition Plan for End of Analog TV," Commwebnews.com, Mar. 12, 2007, *available at* 2007 WLNR 4689631.

cable operators a choice in how they provide local must carry signals to subscribers with analog receivers, but requiring that must carry signals be viewable on both analog and digital receivers – appropriately achieves Congress' core goal of universal availability of local broadcast signals while permitting cable operators flexibility in achieving that goal. In sum, the proposal helps assure that viewers are not disenfranchised by the DTV transition.

B. The Commission's Proposal to Allow Cable Operators to Choose How to Serve Analog-Only Subscribers After the Transition Is Supported by the Cable Act, and Is Clearly Constitutional.

The Commission has a clear statutory mandate for requiring cable operators to ensure that must-carry channels are viewable after the DTV transition by all of their subscribers – including those that own analog televisions. Under Section 614(b)(7) of the Communications Act, all signals carried pursuant to must carry "shall be viewable via cable on all television receivers of a subscriber which are connected to a cable system by a cable operator or for which a cable operator provides a connection." 47 U.S.C. § 534(b)(7).[7]

The viewability provision of the Act is certainly among the provisions Congress directed the Commission to adapt to the digital environment. When "the Commission prescribes modifications of the standards for television broadcast signals," as it did when it adopted the DTV standard, it also shall "establish any changes in the signal carriage requirements of cable television systems necessary to ensure cable carriage of such broadcast signals of local

[7] The Commission is correct (*Notice* n. 33) that analog television sets will, after the transition, continue to be "television receivers" for purposes of the viewability provision. If a cable operator provides any video service to an analog set or a connection to an analog receiver for video service, then that set falls squarely within Congress' expectations that must carry signals will be provided universally to all cable subscribers. Certainly, when Congress directed the Commission to modify its must carry rules in Section 614(b)(4)(B), it did not expect the Commission to use that authority to eliminate Congress' core goal of universal availability of local must carry signals. Redefining "receiver" to exclude analog sets that otherwise receive video from cable operators would thus be directly contrary to Congressional intent.

commercial television stations which have been changed to conform with such modified standards." 47 U.S.C. § 534(b)(4)(B).[8] As the Commission has previously held, it has no authority under the Cable Act "to exempt any class of subscribers from this requirement." *Implementation of the Cable Television Consumer Protection and Competition Act of 1992*, 8 FCC Rcd 2965, ¶ 34 (1993); *see also Implementation of the Cable Television Consumer Protection and Competition Act of 1992*, 9 FCC Rcd 6723, ¶ 15 (1994) (noting that "Congress made clear its intent that all subscribers have access to local commercial broadcast signals," and reaffirming that no category of cable subscribers may be excepted from the viewability requirement). Based on these two provisions, there is no doubt that the Commission not only is empowered, but is *required*, to ensure that *all* cable subscribers – including those with analog television sets – will continue to be able to view must-carry local broadcast signals after February 17, 2009.

The Commission's proposed rule – giving cable operators the flexibility to choose between carriage of the broadcaster's digital signal and a downconverted analog signal, or carrying only the digital signal and making converter boxes available to subscribers with analog sets – is an effective means of ensuring that must-carry signals are viewable by all cable subscribers. Any alternative that would permit cable operators to pick and choose among local

[8] Section 3002 of the Deficit Reduction Act prescribed that the digital transition must occur by February 17, 2009. The cable industry has previously acknowledged in this docket that under even the most narrow plausible reading of Section 614(b)(4)(B), that date will be when broadcast signals "have been changed" such that the Commission must "establish any changes in the signal carriage requirements of cable television systems necessary to ensure cable carriage of such broadcast systems of local commercial television stations which have been changed to conform with such modified standards." First Report and Order, *Carriage of Digital Television Broadcast Signals*, 16 FCC Rcd 2598, ¶ 14 (2001) (citing NCTA Comments at 10-11 and Time Warner Comments at 31). While broadcasters have long argued that Section 614(b)(4)(B) was triggered when the Commission adopted the DTV technical standard in 1996, it cannot be contended that the mandate to modify the must carry rules for advanced television can be delayed any longer than February 17, 2009.

signals for differing treatment would not achieve that result and would disenfranchise many viewers.

Permitting cable operators to use the downconversion option as a license to pick which must-carry channels to offer to their subscribers only in digital and which to offer only in analog would fly in the face of Congress' explicit objectives in the Cable Act. As an initial matter, such discrimination by cable operators would violate a specific prohibition in the Cable Act, which requires the Commission to ensure that, "to the extent technically feasible, the quality of signal processing and carriage provided by a cable system for the carriage of local commercial television stations will be no less than that provided by the system for carriage of any other type of signal." 47 U.S.C. § 534(b)(4)(A). If after the end of the DTV transition, cable operators could elect to carry the broadcast signals of some stations in digital *and* analog formats, even as they carried the signals of other local stations only in analog format, they would be violating this provision. But just as importantly, they also would be assuming for themselves the power to pick winners and losers among digital broadcast stations, in contravention of Congress' intent that this choice remain in the hands of viewers alone. *See Turner Broad. Sys., Inc. v. FCC*, 512 U.S. 622, 633 (1994) (noting that enactment of Cable Act was motivated in part by Congress' finding that cable operators, "as owner of the transmission facility" that provides broadcast signals to its subscribers, have "the power and the incentive to harm broadcast competitors").

As a result, the Commission should clarify that when a cable operator chooses one of the two viewability options – carriage of both digital and analog signals from all local must-carry broadcasters, or carrying local signals in digital and offering converter boxes to subscribers with analog receivers – it must apply that choice across the board with respect to all local must-carry broadcast stations. To do otherwise would thwart Congress' goal in the 1992 Cable Act to

provide a content-neutral way to assure the American public's access to a wide array of information sources.

Moreover, the proposed rule is plainly permissible both as a matter of statutory and constitutional law. The Commission's proposal to require that cable operators ensure that all must carry signals are viewable on all sets for which the cable operator provides service allows cable operators to choose how to achieve that goal, taking into account their particular circumstances. Cable systems may choose, for example, to keep an analog tier and continue to provide local television signals (and perhaps many cable channels as well) to analog receivers in a format that does not require additional equipment. Other operators may instead conclude that the cost of providing subscribers who have analog sets with set-top converters is justified by the reduction in capacity used for local signals.[9] By maximizing the flexibility given cable operators, consistent with achieving Congressional goals, the Commission's proposal is intended to, and would, minimize the burden on any particular cable operator.

With respect to the headend downconversion option, the Commission recognized in the *Second Report and Order* in this proceeding that the Cable Act does not "preclude[] the *mandatory* simultaneous carriage of both a television station's digital and analog signals." Second Report and Order, *Carriage of Digital Television Broadcast Signals*, 20 FCC Rcd 4516, ¶ 13 (2005) (emphasis added). Here, the Commission only proposes to give cable operators the *option* of providing to viewers both the digital signal and a downconverted analog signal if they

[9] Of course, if a cable operator provides set-top converters for all analog receivers, it could then maximize the resulting efficiencies by eliminating the analog tier altogether and providing cable programming only in digital as well. Indeed, in other proceedings, the Commission is encouraging cable system digital conversion. *See*, *e.g., Consolidated Requests for Waiver of Section 76.1204(a)(1) of the Commission's Rules*, CS Docket No. 97-80, DA 07-2921 (rel. June 29, 2007) at ¶¶ 55-59 (granting waivers of the set-top box integration rule to permit migration to all-digital networks).

elect not to make converter boxes available to analog set owners.[10] To the extent that cable operators choose the downconversion option, however, they should be required to cover its rather modest costs. As the Commission suggests, *see Notice* ¶ 19, its prior interim downconversion policy, which required digital-only broadcasters prior to the end of the transition to pay for downconversion performed *at their request* by cable operators, is different from the post-transition proposal, which envisions that *cable operators* will elect to donwnconvert broadcasters' signals, and they should then be obliged to provide the necessary equipment.[11]

Likewise, the second option – ensuring that all cable subscribers that have analog sets have converter boxes – is an entirely appropriate and bandwidth efficient way of ensuring the viewability of digital broadcast signals for these cable subscribers. While the Commission declined six years ago to require cable operators to make converter boxes available before the

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[10] The Commission does not propose a requirement that cable operators convert more than one stream in a local broadcaster's digital signal. While NAB and MSTV continue to argue that cable operators must carry all free bits in a broadcaster's digital signal carried in a digital format, that question has no bearing on cable operators' obligations with respect to subscribers using analog receivers.

[11] Some cable operators, in order to obtain better signal quality, already obtain local broadcast signals by using broadcasters' digital signals and downconverting them. The cost of doing so does not appear to be excessive. NAB and MSTV understand that many cable operators use consumer digital tuners to downconvert local signals. Digital/analog converters are expected to be available to consumers before the transition for less than 100 dollars. *See* http://www.dtvtransition.org/index.php?option=com_content&task=view&id=14&Itemid=27 (converters expected to cost between 50-70 dollars). Further, the Cable Act and the Commission's rules contemplate that local broadcasters are only required to bear extraordinary costs of providing a good quality signal to cable operators; the usual and ordinary costs – which for cable operators electing to downconvert analog signals will include the cost of converters – are to be borne by cable systems. *See, e.g., Implementation of the Cable Television Consumer Protection and Competition Act of 1992*, 8 FCC Rcd 4142, ¶ 11 (1993) (noting that "[b]roadcasters shall be responsible for the cost of . . . specialized antennas or equipment," but that "cable operators may not shift the costs of routine reception of broadcast signals to those stations seeking must-carry status.").

end of the transition (on the theory that cable subscribers with analog-only television sets could receive analog signals over the air), it also stated that any arrangements "not mandated through government regulation" that allow cable operators to provide such equipment to their subscribers would be entirely appropriate. First Report and Order, *Carriage of Digital Television Broadcast Signals*, 16 FCC Rcd 2598, ¶ 80 (2001). After the transition, when only digital signals will otherwise be available, the Commission's assumption will no longer apply.

Again, the offering of converter boxes by cable operators under the Commission's proposal would be entirely at the cable operator's choice. *Cf. Satellite Broad. & Commc'ns Ass'n v. FCC*, 275 F.3d 337, 365 (4th Cir. 2001) ("*SBCA*") (finding, with respect to the "carry one, carry all" rule of the Satellite Home Viewer Improvement Act ("SHVIA"), that "the particular form of carriage requirement imposed by SHVIA is not an excessive burden on satellite carriers because it leaves them with the choice of when and where they will become subject to the carry one, carry all rule"). The need for this option is particularly acute: consumers that have analog sets will be unable to receive over-the-air local broadcast signals after the transition, and if their cable providers choose not to downconvert digital signals to analog or provide them with converters, those subscribers will no longer receive those signals. Requiring cable operators that elect not to downconvert broadcasters' digital signals after the transition to provide converter boxes to their subscribers with analog receivers is necessary to ensure that those subscribers are not left without real access to local broadcast signals. The Cable Act's viewability requirement certainly contemplated that cable operators could have subscribers who do not have the capability of viewing all local must-carry signals.

Finally, old constitutional arguments previously raised by cable operators about a requirement to carry both digital and analog signals are not applicable to this proposal giving

operators the alternative of providing converters to their subscribers with analog receivers. As an initial matter, any cable capacity issues that may have once given rise to First Amendment concerns are long a thing of the past. For example, in 1993, most cable systems were all-analog, and most systems operated with significantly less than 100 channels. In fact, in 1995 a high capacity system was defined by the Commission as a cable system with 54 or more channels, and less than half (47.9%) of all cable subscribers were served by such "high capacity" systems.[12]

The Supreme Court's prediction 13 years ago that "the rapid advances in fiber optics and digital compression technology [mean that] soon there may be no practical limitation on the number of speakers that may use the cable medium," *Turner I*, 512 U.S. at 639, has come to fruition. Cablevision recently announced that it will have the capacity to deliver 500 high-definition channels by the end of 2007,[13] and other cable operators such as Cox and Advance/Newhouse have indicated their plans to expand their capacity substantially as well.[14] This trend is occurring across the industry. Moreover, the carriage of digital broadcast signals takes up significantly less capacity than does carriage of the same signals in analog.[15]

Today, analog carriage, including both broadcast and cable networks, represents a small percentage of the total number of channels and spectrum capacity. For example, 18 basic

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[12] *See Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, 12 FCC Rcd 4358, ¶ 17 (1997).

[13] *See* "Mass Media Notes," *Communications Daily*, June 22, 2007.

[14] *See* "Cable Execs Stress Competitive Moves to Boost HDTV Carriage," *Communications Daily*, June 22, 2007.

[15] *See* Petition for Reconsideration of the National Association of Broadcasters and the Association for Maximum Service Television, Inc., CS Docket No. 98-120 (filed Apr. 21, 2005), at 13-14 (citing Merrill Weiss Group, *Analysis of Cable Operator Responses to FCC Survey of Cable MSOs*, Attachment A to the Reply Comments of NAB/MSTV/ALTV, CS Docket No. 98-120 (filed Aug. 16, 2001)). *See also* NAB, *Ex parte, Multicast Carriage Will Not Affect Cable's Ability to Carry Other Program Networks*, CS Docket No. 98-120 (filed June 12, 2006).

channels represent only about 4.2% of the total number of channels and only about 6.8% of the total "downstream" spectrum of the typical cable system. In 1993, the same number of channels represented nearly one third (33%) of the capacity of a "high capacity" cable system.[16]

The current mix of "downstream" TV channels and spectrum usage on a typical 750 MHz cable system, according to ABI Research, are as follows:[17]

Applications	No. of Channels	Spectrum (MHz)
Basic	18	48
Expanded Basic	60	360
Analog Premium	5	30
Digital	300	150
HDTV	12	24
VOD	30	18
DOCSIS Data	38 Mbps (data rate)	6
DOCSIS Voice	38 Mbps (data rate)	6
Totals	**~425 channels**	**~700 MHz**

According to ABI Research, cable operators will spend about $80 billion worldwide from 2007 to 2012 on bandwidth and spectrum expansion.[18] ABI Research also predicts that over the next five years the typical cable system capacity will increase as follows:[19]

Applications	Channels (Today)	Channels (Future)
Basic	18	20
Expanded Basic	60	70
Analog Premium	5	5
Digital	300	360
HDTV	12	54
VOD	30	60

[16] The basic service tier figure includes local broadcast signals as well as PEG channels and potentially others. For instance, in its Washington, D.C., metropolitan systems, Comcast includes WGN, USA, QVC, ABC Family and C-SPAN in its "limited basic tier."

[17] *Id.*

[18] *See* Michael Arden & Stan Schatt, *Cable Television Infrastructure: Headend, Plant, Spectrum, Backhaul, STB and Revenue Analysis*, ABI Research (2007).

[19] *Id.*

DOCSIS Data	38 Mbps (data rate)	76 Mbps
DOCSIS Voice	38 Mbps (data rate)	76 Mbps
Upstream	9	12
Total Spectrum	**756 MHz**	**990 MHz**

As the ABI Research analysis reflects, technological advances continue to dramatically increase cable systems' ability to carry a wide variety of content, including digital broadcast programming at the highest possible quality. These increases put cable operators in an ever-improving position to promote the digital transition and provide their customers with the highest-quality local broadcast programming available.

Even if cable operators could demonstrate that carriage of both digital and analog signals after February 2009 somehow constrained their capacity in a meaningful way (which clearly they could not), the Commission's proposal to give them the alternative of providing converter boxes to their subscribers with analog receivers would resolve any constitutional questions. *See Turner Broad. Sys., Inc. v. FCC*, 910 F. Supp. 734, 743 n.22 (D.D.C. 1995) ("if the burden to the cable industry [from must-carry] were much smaller, then the First Amendment would not even be implicated."), *aff'd*, 520 U.S. 180 (1997); *SBCA*, 275 F.3d at 365 (especially in light of satellite operators' "choice [as to] when and where" they became subject to the carry one, carry all rule for carriage of broadcast signals, court found that rule to be narrowly tailored and consistent with First Amendment). As the Supreme Court noted in *Turner II*, the constitutional issue related to *mandatory* carriage of broadcasters' signals only. *See Turner Broad. Sys., Inc. v. FCC*, 520 U.S. 180, 215-17 (1997). For these reasons, signals that are carried in both analog and digital, now and after the transition, cannot be viewed as a "burden" on cable for First Amendment purposes.

II. THE COMMISSION SHOULD ADOPT RULES TO ENSURE THAT MATERIAL DEGRADATION OF LOCAL DIGITAL TELEVISION SIGNALS DOES NOT OCCUR.

Congress required in Section 614 of the Communications Act that cable operators carry *all* local television signals "without material degradation." 47 U.S.C. § 534(b)(4)(A). In this proceeding, the Commission considers the "material degradation" standard in the context of the unique issues that are presented by digital broadcasting.[20]

In the analog environment, the Commission implemented this mandate by requiring: (1) that a commercial broadcast signal "be provided no less than the same quality of signal processing and carriage provided for carriage of any other type of standard television signal," and (2) by specifying the minimum signal-to-noise ratio required for the retransmission of local broadcast signals on cable systems.[21]

NAB and MSTV support the Commission's efforts, consistent with its obligations under Section 614(b)(4)(B) of the Act, to adapt these standards to digital television.[22] The Commission has already taken the first step in that process, finding in 2001 that "a broadcast signal delivered in HDTV must be carried in HDTV."[23] In this proceeding, the Commission takes the next step in adapting its rules by updating its technical standards for determining material degradation to reflect the transition to digital technology.

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[20] These comments are limited to certain specific issues raised in the *Notice*. NAB and MSTV do not address here other circumstances, including cable's practice of stripping multicast services from a broadcaster's signal, that also constitute material degradation.

[21] 47 C.F.R. §§ 76.62(b)-(d), 76.605(a)(7).

[22] *See* 47 U.S.C. § 534(b)(4)(B). *See also Notice* at ¶ 10.

[23] *Carriage of Digital Television Broadcast Signals*, 16 FCC Rcd. 2598, ¶ 73 (2001) ("*First R&O*").

At the outset, we support the *Notice*'s proposal (at ¶ 12) to move away from a subjective standard for evaluating material degradation. The use of digital technology makes signal quality issues even more important and complex than they were in the analog environment, and the technology now exists to objectively determine if a DTV signal has been materially degraded. The Commission should move forward with its proposal to leverage this technology to create a reliable and predictable standard that protects consumers from degradation of their broadcast signals.

Moreover, as we will discuss below, measuring signal degradation by subjectively comparing one program channel to another is not appropriate in the digital era. Objective standards, not subjective comparative analysis, are the best way to protect cable subscribers' access to high quality digital broadcast television programs. Before proceeding with specific recommendations, however, we will first address the question of the nature and scope of the material degradation rules. Consistent with Section 614, signal degradation rules must apply to *all* local television stations.

A. The Prohibition Against Material Degradation Applies Equally to Retransmission Consent and Must Carry Stations.

In the analog world, the Commission's rules preventing material degradation of a broadcast signal applied equally to stations carried pursuant to retransmission consent agreements or must carry rules. Section 614(b)(4)(A) of the Communications Act prohibits cable operators from materially degrading the signals of "local commercial television stations" that a cable operator carries.[24] The statutory protection against material degradation applied to the carriage of *all* local stations. As the Commission determined when it adopted the analog carriage rules in 1993, this statutory provision applies on its face to all local commercial

[24] 47 U.S.C. §534(b)(4)(A); *Notice* at ¶ 10.

television stations, whether they are carried on the cable system pursuant to the must carry or the retransmission consent regime:

> [W]e also now review the three other provisions of Section 614(b) whose plain language indicates applicability to more than just television signals carried pursuant to the must-carry rules. Section 614(b)(3)(A) and (b)(4)(A) each refer to "local commercial television stations," and Section 614(b)(9) refers to "a local commercial television station." Using the same "plain language" approach we used in analyzing Section 614(b)(3)(B), we find that these three provisions, in fact, apply to all local commercial television stations carried by a cable system, and not just to must carry stations.[25]

As a matter of statutory construction, the material degradation standards adopted by the Commission in this proceeding must apply equally to all local commercial television stations, regardless of whether they are carried pursuant to the must carry or retransmission consent provisions of the statute.

This approach is particularly appropriate as the Commission seeks to adjust its non-degradation rules to digital, pursuant to Section 614(b)(4)(B). In the analog world, the application of these rules to the carriage of *all* local television stations ensured that cable subscribers received the best possible broadcast picture from *all* local television stations. This policy justification is even more compelling in the digital context because the provision of high quality digital broadcast pictures is one of the fundamental objectives of the digital transition. As the Commission acknowledged, "the ultimate goal of Congress is that every customer" – including cable customers – "should enjoy the benefits of the digital transition." *Notice* at ¶ 18.

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[25] Report and Order, *Implementation of the Cable Television Consumer Protection and Competition Act of 1992,* 8 FCC Rcd 2965, 3004 (1993). Section 614(b)(4)(B), which requires the Commission to adapt its rules for digital television "at such time as the Commission prescribes modifications of the standards for television broadcast signals," similarly refers to "local commercial television stations" but presumably was not referenced because it was not implemented at that time.

Accordingly, consistent with statutory requirements as well as sound policy, the signal degradation rules established in this proceeding must apply to *all* local digital broadcast signals that are carried on cable systems, regardless of whether the stations are carried pursuant to a retransmission consent agreement or must carry requirement.

B. A Cable Operator Should Not Be Allowed to Degrade the Signal of a Local Digital Broadcast Television Station by Failing to Deliver All Content Bits from the Station's Signal.

NAB and MSTV support the Commission's proposal that all content bits transmitted by the broadcaster must be carried by a cable operator to avoid material degradation. *Notice* at ¶ 12.[26] The technology exists to reliably and objectively measure the retransmission of a broadcast digital signal over a cable system.[27] The Commission's standard should therefore provide that material degradation will occur if content bits are present in the broadcast signal and those bits are not delivered to cable subscribers. When content bits are not passed through, the signal is, by definition, degraded, and bit measurement technology allows broadcasters and cable operators to

[26] For the purpose of this rule, "content bits," which contain specific information, are distinguished from "null bits," which are "empty of any content." *Notice* at ¶ 14 n.27. Because null bits, by definition, lack any information, the deletion of such bits by a cable operator will have no impact on the image that is seen by cable subscribers. Null bits are easily identified because, according to the MPEG-2 standard, they must be included only in 188-byte transport packets that have been assigned a packet identification ("PID") header that is reserved just for carrying packets with null bits. Thus, cable headend equipment can easily filter out null bits in a broadcast DTV transmission by looking for packets with the reserved null packet PID of 0x1FFF and discarding them before retransmission on the cable system.

[27] A number of technologies are available to measure the loss of digital content bits compared to a source broadcast signal. These measurements could be accomplished, for example, through the use of Triveni Digital's StreamScope, Textronix's MTM400 MPEG Transport Stream Monitor, and K-Will's VP21H Video Quality Evaluation System. These technologies and others respond to the Commission's concern as to how cable operators might distinguish between content bits and "null bits." *Notice* at ¶ 14.

directly identify that situation.[28] This approach would provide a measurable and quantifiable basis for broadcasters and cable operators to protect the public's access to broadcast signals at the highest possible quality.[29]

We recognize, however, that the techniques used to measure material degradation may have some minor variations. Accordingly, to provide some flexibility in assuring compliance with the standard, NAB and MSTV believe that the Commission should allow measurement variations of no more than 1% of the content bits in a given program.[30] Variations of greater than 1% could result in significant degradation to the program. Allowing for a 1% variation per program would allow the Commission to specify an outer bound for degradation that provides some accommodation for bit loss without resulting in the material degradation of broadcast signals. *See Notice* at ¶ 14.

1. A Comparative Signal Degradation Standard Is Not Sufficient to Protect Consumers in the Digital Age.

In the *Notice*, the Commission seeks comment on whether it should prohibit cable operators from treating cable programming services more favorably than broadcast signals for purposes of material degradation. *See Notice* at ¶ 12 (citing *First R&O* at ¶ 73). This prohibition

[28] There may be circumstances in which a digital signal becomes degraded despite the fact that all bits are passed through. The Commission should commit to addressing such degradation on a case-by-case basis under the enforcement scheme established by Section 614.

[29] The *Notice* inquires whether cable operators should be permitted to use compression, statistical multiplexing, rate shaping, or other techniques in the carriage of digital broadcast signals. *Notice* at ¶ 14. Cable operators' use of these technologies in the carriage of digital broadcast signals must be consistent with the approach outlined above and cannot be at the expense of their obligation to deliver digital television signals in accordance with Section 614.

[30] It is important that this approach be applied on a program-by-program basis. For purposes of determining whether there has been material degradation with respect to a broadcaster's high-definition program, for example, a cable operator would have to show that 99% of the content bits in the high-definition program stream were delivered.

is clearly required by the statute.[31] However, a comparative standard alone is not sufficient. Accordingly, where there is a loss of content bits in violation of the material degradation standard, it would not be sufficient "for the cable operator to demonstrate that the broadcast station's digital signal carriage does not differ from other broadcast or non-broadcast programmers." *Notice* at ¶ 15. While carriage of a broadcaster's signal in any manner less favorable than another signal would clearly constitute material degradation, that standard merely represents a floor for the Commission's material degradation standard.

A comparative approach may have been acceptable in the analog context, where a quantitative and direct measure of degradation was not available. In the digital world, by contrast, picture quality is an even more important competitive consideration, and more precise measurement is possible. Broadcasters transmit signals that are, in many cases, higher quality than the signals of cable-only programming channels, and the Commission's material degradation standard should ensure that subscribers have access to this higher-quality content. This principle is especially critical in the case of high definition ("HD") programming. The Commission's 2001 decision that HD broadcast signals must be carried in high definition, *First R&O* at ¶ 73, reaffirmed in the *Notice* (at ¶¶ 3, 10), reflects that principle, and acknowledges that a comparative standard alone is not sufficient to avoid material degradation in the digital environment. The Commission has found that "the ultimate goal of Congress is that every customer should enjoy the benefits of the digital transition." *Notice* at ¶ 18. The public's interests are poorly served if the standard for assessing material degradation ensures nothing more than meeting the "lowest common denominator." To the contrary, ensuring that cable

[31] *See* 47 U.S.C. § 534(b)(4)(A) ("the quality of signal processing and carriage provided by a cable system for the carriage of local commercial television stations will be no less than that provided by the system for carriage of any other type of signal").

operators provide subscribers with access to high-quality broadcast content (particularly HD content) can create a valuable competitive incentive, encouraging cable operators and non-broadcast programming providers to increase the quality of their own offerings.

The Commission has observed that "[t]he prohibition against material degradation ensures that cable subscribers who invest in a HDTV are not denied the ability to view broadcast signals transmitted in this improved format." *Notice* at ¶ 5. In other words, the material degradation prohibition promotes the digital transition, and protects consumers' expectations that they will be able to access the highest-quality digital broadcast programming without any quality compromises by cable systems. A rule allowing cable operators to degrade broadcast digital programming, simply because they degrade the quality of non-broadcast programming, would frustrate that policy.

2. Downconversion of Digital Signals to Analog Must Also Be Accomplished Without Material Degradation.

As discussed above, NAB and MSTV agree with the Commission that, consistent with Section 614, cable operators have a post-transition obligation to deliver broadcast signals to analog subscribers in a format that they can receive and view on the receiving equipment in their homes, either through downconversion to analog or (for all-digital systems) provision of the necessary equipment to allow analog subscribers to receive the digital signal. *Notice* at ¶¶ 16-17. And, we note further that where digital signals are downconverted to analog, the Commission should require that the resulting analog-formatted programming ("analog-converted programming") is not "materially degraded" using a standard appropriate for analog technology.

Unfortunately, using the existing analog material degradation standard alone is not sufficient because of the downconversion process. There are two specific issues. First, when downconverting a digital signal to analog, the downconverted broadcast signal must be of

sufficient NTSC technical quality. Moreover, once the signal is downconverted to analog, the signal must meet the traditional signal-to-noise rules applicable to the carriage of analog broadcast signals. Second, there must be no discrimination when digital pictures are reformatted to meet the aspect rations of analog television sets.

a. The digital-to-analog downconversion process must ensure a quality NTSC signal.

Because downconversion is an issue not previously addressed by the FCC's rules, the Commission should adopt a standard to ensure that material degradation does not occur in the downconversion process itself. Where downconversion of a digital broadcast signal is performed at the cable headend, the Commission should require that the resulting analog-converted programming provide a picture that meets, at a minimum, the ITU Grade 4 standard. Once converted, the Commission should require that the downconverted signal meet the signal-to-noise ratio requirements of Section 76.605 of the Commission's rules, as well as the requirement that the analog-converted programming be delivered to cable subscribers with a quality that is equal to or better than that of any other broadcast or non-broadcast signals provided to analog subscribers.[32]

If the programming is converted in the subscriber's home, the Commission should require cable operators to provide subscribers with equipment that downconverts the broadcaster's digital signal in compliance with the standards adopted for converter boxes that qualify under the coupon program administered by the National Telecommunications and Information Administration.[33] In particular, such devices should downconvert broadcast signals

[32] *See* 47 C.F.R. §§ 76.62(b), 76.605(a)(7).

[33] National Telecommunications & Info. Admin., *Rules to Implement & Administer a Coupon Program for Digital-to-Analog Converter Boxes*, 72 Fed. Reg. 12097 (2007); 47 C.F.R. § 301.5.

at the same quality and with the same features as are present in NTIA-compliant converter boxes.[34]

b. Broadcasters and their viewers, not cable operators, should be able to determine the format in which the programming is downconverted.

When digital programming is broadcast in a 16:9 format, downconversion of the signal to analog generally requires that the program be reformatted to fit the 4:3 analog aspect ratio. To ensure that this aspect-ratio conversion process does not result in material degradation or discrimination against broadcast signals, broadcasters or their viewers, as applicable, should be able to determine the format in which their downconverted programming is displayed on an analog television set.[35] This decision should not be left to cable operators' sole discretion.

Allowing cable operators, rather than broadcasters or viewers, to determine the particular format in which analog-converted programming is displayed can materially degrade and otherwise disadvantage broadcast signals as compared to other signals provided on the cable system. Such a result is contrary to the express purpose of the Cable Act and the Commission's rules.[36] Where an analog-converted program is displayed in letterbox format, while other

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[34] *See* 47 C.F.R. Pt. 301, Tech. Apx. 1 & 2.

[35] Three formatting options are generally available: (1) letterboxing, where the full 16:9 programming is reduced in size to be shown on the 4:3 screen, and black bars are shown at the top and bottom of the screen; (2) center-cutting, where a 4:3 section at the center of the 16:9 programming is cut, and the remainder is discarded; and (3) postage-stamping, where a 4:3 image is transmitted in a 16:9 format so that it appears on a 16:9 screen as a center-cut image with black bars on both the right and left side of the screen, but, on a 4:3 screen, the image is also letterboxed so that black bars also appear at the top and bottom of the screen.

[36] *See* 1992 Cable Act at §§ 2(a)(14) ("Cable television systems and broadcast television stations increasingly compete for television advertising revenues."), 2(a)(15) ("[T]here is an economic incentive for cable systems to terminate the retransmission of the broadcast signal, refuse to carry new signals, or reposition a broadcast signal to a disadvantageous channel position. There is a substantial likelihood that absent the reimposition of such a requirement, additional local broadcast signals will be deleted, repositioned, or not carried.").

programming is available in a full screen format, viewers may find the letterbox analog-converted programming to be less appealing. At the same time, however, center-cutting a broadcaster's analog-converted programming provides a full-screen picture, but also results in the removal of content from either side of the picture.

To ensure that broadcasters' digital signals are not "materially degraded" or otherwise discriminated against through aspect-ratio conversion, the Commission should require that broadcasters and viewers − not cable operators − be in control of the process. Specifically, 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 convert the aspect ratio of their programming. When downconversion is performed at the home, cable operators must provide equipment that meets the downconversion specifications established by NTIA in connection with its converter box program.[37]

A rule putting broadcasters and viewers in control of the format of downconverted programming is necessary to give full effect to Congress's goal of preventing cable operators from disadvantaging broadcasters in cable carriage. *See* Cable Act at § 2(a)(15). Such a rule would allow broadcast programming to be provided to viewers on a basis that is no less favorable than other programming a cable operator carries, and would prevent the cable operator from materially degrading a broadcast signal through unacceptable formatting.

C. The Commission Should Establish a Streamlined Enforcement Mechanism for Violations of the Prohibition on Material Degradation.

For its material degradation standard to be effective, the Commission must establish a workable enforcement approach. Section 614(d) of the Act sets forth the enforcement scheme

[37] *See* 47 C.F.R. Pt. 301, Tech. Apx. 1, ¶ 2 ("Equipment shall support 4:3 center cut-out of 16:9 transmitted image, letterbox output of 16:9 letterbox transmitted image, and a full or partially zoomed output of unknown transmitted image.").

that Congress envisioned for broadcast signal carriage violations. The Commission should adopt material degradation enforcement rules that are consistent with Section 614(d) and give effect to Congressional intent by including a meaningful objective standard for enforcement that will make formal dispute resolution predictable and create incentives for informal resolution of disputes without the routine need for Commission action.

1. NAB and MSTV Support Pre-Complaint and Complaint Procedures That Are Consistent with Section 614.

If a broadcaster determines by bit measurement technology that content bits are not passed through to cable subscribers, the broadcaster should notify the cable operator in writing of the violation. Consistent with Section 614(d)(1), the cable operator will have 30 days after the notice is served to correct the violation or provide an adequate response. 47 U.S.C. § 534(d)(1). If the cable operator fails to comply, the broadcaster will be entitled to file a complaint at the Commission, *id.*, which should be granted if the broadcaster demonstrates that the number of content bits were not delivered to subscribers or that the signal was otherwise materially degraded. Congress adopted this initial approach in the hope that most material degradation complaints could be resolved privately, without the need for Commission action. This becomes more feasible on a routine basis with the Commission's move to a more definitive objective standard for degradation that is linked to bit loss.

NAB and MSTV support the Commission's proposal that, "when a broadcast station files a carriage complaint concerning material degradation, the cable operator must pass through all of the content bits during the pendency of the complaint." *Notice* at ¶ 15. This requirement is necessary to prevent a cable operator from retaliating against a broadcaster for filing a material degradation complaint and to ensure that, notwithstanding any dispute between a broadcaster and a cable operator, the public's access to high-quality broadcast programming is protected.

As described above, because the loss of content bits in a DTV signal inherently causes material degradation, a broadcaster's finding of bit loss should be dispositive with respect to the question of whether the cable operator failed to fulfill its Section 614 obligations. A cable operator should be able to rebut a complaint alleging bit degradation only if it can prove that no content bits were, in fact, lost or removed from the signal.[38]

NAB and MSTV also encourage the Commission to adopt rules specifying the remedial actions it will require if it finds that a cable operator did not meet its obligation to carry a digital broadcast signal without material degradation. Specifically, if the Commission finds a cable operator in violation, it should order the cable operator to carry the broadcast signal without material degradation, establish an expedited timetable for the offending cable operator to comply, and set a forfeiture if the cable operator fails to satisfy that timetable. If the Commission determines that the cable operator knowingly caused or allowed content bits to be lost or removed from the broadcast signal, however, it should impose a forfeiture in proportion to the cable operator's total period of noncompliance.[39]

2. The Commission Should Not Require Broadcasters to Enter Negotiations with Cable Operators About the Degradation of their Signals.

Because the loss of content bits inherently degrades a broadcast signal, NAB and MSTV oppose the *Notice*'s suggestion that broadcasters − even stations electing mandatory carriage − be required to enter into negotiations with cable operators over a cable operator's desire to strip bits from the signal. *Notice* at ¶ 15. By adopting the objective measurement approach proposed

[38] We recognize that variations in bit count may be due to measurement techniques. In this regard, a variation in content bits of less than 1% per program would not be considered material degradation.

[39] *See* 47 C.F.R. § 1.80 (providing for forfeitures for violation of the cable broadcast carriage rules).

above, the Commission would establish a permissible and predictable process for signal processing techniques without the need for subjective negotiation about the permissibility of any particular technology.

Although Section 614 protects broadcasters against discrimination by cable operators, it also ensures that the public can receive non-degraded broadcast programming via cable. Requiring broadcasters to negotiate with cable operators over material degradation may result in the public losing access to high-quality programming and would dramatically undermine the effectiveness of the material degradation standard. Section 614 and the public interest demand better.

NAB and MSTV oppose the *Notice*'s proposal to allow cable operators to initiate material degradation negotiations and then unilaterally terminate them. Under the proposal, broadcasters would have just 30 days to file a formal complaint in order to prevent continued degradation of their signals. *Notice* at ¶ 15. This structure places the burden of preventing material degradation on the broadcaster, when in fact Section 614 places the burden on the *cable operator* to carry the programming without degradation.

While broadcasters will certainly work to protect their nondegradation rights and the nondegradation rights of their viewers, a regulatory procedure that puts the affirmative burden on a broadcaster to act − within an extremely short period − or lose its statutory right against material degradation forever is impermissible. Section 614 contains no such limitation on the ability of broadcasters to protect their signals from material degradation. A mandatory negotiation and shot clock for filing of a complaint would therefore be inconsistent with the statute and would unnecessarily increase the administrative burdens on both broadcasters and the Commission.

III. CONCLUSION

NAB and MSTV applaud the Commission's efforts in this proceeding to put consumers first. To ensure that cable subscribers "are not disenfranchised by the switch to digital-only broadcasting" after February 17, 2009, *Notice* at ¶ 16, NAB and MSTV urge the Commission to adopt its "viewability" proposal, which is supported by the Cable Act, promotes Congressional DTV goals, and does not raise any constitutional concerns. We also strongly support the Commission's pro-consumer extension of broadcast signal degradation rules to digital carriage. Adoption of an objective standard for measuring material degradation will ensure that cable customers enjoy the full benefits of the DTV transition, particularly improved picture quality. The adoption of a streamlined complaint process to address any signal degradation complaints by broadcasters will also help assure that the public's access to the highest quality broadcast programming is maintained.

Respectfully submitted,

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