

**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)

Comments of the



Matthew M. Polka
President
American Cable Association
One Parkway Center
Suite 212
Pittsburgh, Pennsylvania 15220
(412) 922-8300

Nicole E. Paolini-Subramanya
Christopher C. Cinnamon
Cinnamon Mueller
307 North Michigan Avenue
Suite 1020
Chicago, Illinois 60601
(312) 372-3930

Ross J. Lieberman
Vice President of Government Affairs
American Cable Association
4103 W Street, N.W., Suite 202
Washington, DC 20007
(202) 494-5661

Attorneys for the American Cable
Association

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I. Introduction

The American Cable Association (“ACA”) and its members strongly support the Commission’s initiatives to facilitate the delivery of digital broadcast signals to all Americans. Approximately 46% of ACA’s members already deliver digital broadcast signals to some or all of their subscribers. Approximately 75% expect to deliver digital broadcast signals by the February 17, 2009 digital transition.¹

That said, ACA files these Comments to place on the record its extreme concern about the proposals and conclusions reached by the Commission in its *Second FNPRM*.² As explained below:

- The Commission does not have the authority to implement its post-DTV transition proposal (“DTV Must-Carry Proposal”) for cable carriage of digital must-carry signals;³
- Even if the Commission had the authority to implement its DTV Must-Carry Proposal, the cost of implementation would be financially impossible for many independent cable operators;
- The Commission does not have the authority to require cable systems without HD capability to cablecast must-carry broadcast signals in HD format;⁴ and
- There is no evidence supporting the imposition of new measurements for material degradation.⁵

¹ These statistics are based on over one hundred ACA member responses to a June 2007 ACA Internet survey.

² See *In the Matter of: Carriage of Digital Television Broadcast Signals: Amendment to Part 76 of the Commission’s Rules, Second Further Notice of Proposed Rulemaking*, CS Docket No. 98-120, FCC 07-71 (rel. May 4, 2007) (“*Second FNPRM*”).

³ *Id.* at ¶ 17.

⁴ See *Id.* at ¶¶ 3, 12 and 17.

⁵ *Id.* at ¶ 12.

Far from encouraging the efficient delivery of digital signals, these expensive, burdensome - and, in some cases unconstitutional – approaches to the DTV transition could eliminate independent MVPD competitors from the small and rural markets served by ACA's members.

Accordingly, the Commission should revise its DTV Must-Carry Proposal as follows:

- Allow cable operators to convert digital signals into a format that they can cablecast to all their subscribers, and to choose whether or not to provide dual carriage for must-carry signals.
- Maintain the current standard for material degradation.
- Require broadcasters electing must-carry to pay the cost for conversion of digital signals to a format the cable operator can cablecast to all its subscribers.

By implementing ACA's recommendations, the Commission can help facilitate the digital transition in the smaller and rural communities served by ACA's members.

American Cable Association. ACA represents nearly 1,100 small and medium-sized cable companies that serve about 8 million cable subscribers, primarily in smaller markets and rural areas. ACA member systems are located in all 50 states, and in virtually every congressional district. The companies range from family-run cable businesses serving a single town to multiple system operators with small systems in small markets. More than half of ACA's members serve fewer than 1,000 subscribers. All ACA members face the challenges of upgrading and operating broadband networks in lower-density markets.

II. The Commission does not have the authority to implement its post-transition proposal for cable carriage of digital must-carry signals.

In its *Second FNPRM*, the Commission makes the following proposal for the carriage of must-carry signals post-DTV transition:

[C]able operators must either: (1) carry the signals of commercial and non-commercial must-carry stations in analog format to all analog cable subscribers, or (2) for all-digital systems, carry those signals only in digital format, provided that all subscribers with analog television sets have the necessary equipment to view the broadcast content. This requirement would be in addition to the requirement that the cable operator pass through the HD signal to cable subscribers of an HD package...⁶

For a cable operator with a cable system providing both analog and digital signals, this proposal amounts to double or triple must-carry: At a minimum, the cable operator would have to convert the digital signal into analog format for its analog subscribers.⁷ If the station had an HD digital signal, the DTV Must-Carry Proposal would obligate the operator to carry that signal also – a dual carriage requirement.⁸ If the station had an HD and SD signal, the DTV Must-Carry Proposal, combined with the Commission’s proposal on material degradation,⁹ would require the operator to carry both the HD and SD signal in addition to the analog signal¹⁰ – a triple carriage requirement.

⁶ *Id.* at ¶ 17.

⁷ The Communications Act requires cable operators to carry must-carry signals on the basic tier. 47 U.S.C. § 534(b)(7).

⁸ In the *Second FNPRM*, the Commission states that the proposal “would be in addition to the requirement that the cable operator pass through the HD signal to cable subscribers of an HD package.” *Id.* at ¶ 17.

⁹ *Id.* at ¶¶ 12-15.

¹⁰ See *Id.* at ¶ 13 (“Our option of carrying all content bits is responsive to the Petitions for Reconsideration filed in this docket in which broadcasters requested that we require cable operators to carry ‘the entire

But Commission and Supreme Court precedent is clear – a dual carriage requirement burdens cable operators’ First Amendment interests substantially more than is necessary to further the governments interests in free over-the-air local broadcast television. Accordingly, imposing the carriage requirements outlined in the DTV Must-Carry Proposal would fail First Amendment scrutiny under the Commission’s own precedent.¹¹

That said, ACA shares the Commission’s concern that consumers be able to view broadcast signals following the DTV transition. ACA therefore proposes that the Commission allow cable operators to convert digital broadcast signals into a format that they have the ability to cablecast to all their subscribers and to choose whether to provide dual carriage for digital must-carry signals.¹²

The Commission also lacks authority to implement the second prong of its DTV Must-Carry Proposal: The Communications Act provides no authority for the Commission to require cable operators to install a digital set-top box on every analog television set.

qualified digital bit stream of each station in the format in which the broadcaster originally transmitted it...”) (emphasis added). That said, ACA disagrees with the Commission’s apparent conclusion that conversion of a signal constitutes material degradation. See Section IV *infra*.

¹¹ See *In the Matter of: Carriage of Digital Television Broadcast Signals: Amendments to Part 76 of the Commission’s Rules, Second Report and Order and First Order on Reconsideration*, 20 FCC Rcd. 4516 (2005) at ¶¶ 2 and 15, citing *Turner Broadcasting System, Inc. v. FCC*, 520 U.S. 180, 218 (1997); *In the Matter of: Carriage of Digital Television Broadcast Signals, Amendments to Part 76 of the Commission’s Rules, First Report and Order and Further Notice of Proposed Rulemaking*, 16 FCC Rcd. 2598 (2001) at ¶ 3.

¹² As explained in Section IV below, such a conversion would not constitute material degradation under 47 U.S.C. § 534(b)(4)(A).

Even if the Commission did have authority to implement the second prong of its DTV Must-Carry Proposal, the cost of implementation would be beyond the reach of most independent cable operators.

III. Many independent cable operators could not support the costs of implementing the DTV Must-Carry Proposal.

In the second prong of its DTV Must-Carry Proposal, the Commission would require that:

... all-digital systems...carry those signals only in digital format, provided that all subscribers with analog television sets have the necessary equipment to view the broadcast content. This requirement would be in addition to the requirement that the cable operator pass through the HD signal to cable subscribers of an HD package...¹³

The experience of ACA members that have converted to all-digital networks shows that the cost of this proposal is enormous.

One ACA member with 2,250 subscribers reports investing \$1,000 per subscriber - \$2,250,000 in capital costs – to put a set-top box on each analog television set.¹⁴

Another operator with 4,000 subscribers reports that it budgeted \$1,400,000 in capital costs and \$250,000 in labor – or \$412 per subscriber - to put a set-top box on every analog TV.¹⁵ And these costs were for integrated set-top boxes. The integration ban in 47 C.F.R. § 76.1204(a)(1) significantly increases the cost of putting a digital set-top box on each analog TV.¹⁶

¹³ *Second FNPRM* at ¶ 17.

¹⁴ This operator reports that its subscribers average four TV sets each.

¹⁵ This operator also reports that “[s]ubscriber reaction to [digital set-top boxes] on each TV is mixed, but network capacity is driving us.”

¹⁶ It is well-established in the Commission’s set-top box docket (CS Docket No. 97-80) that separable security raises the cost of digital set-top boxes by at \$50 - \$100 per unit.

Most independent cable operators are not able to make such a large investment. In a June 2007 ACA Internet survey, 86.6% of respondents answered that it would be “difficult” or a “business killer” if they were required to provide a set-top box for each of their subscribers’ analog TVs.¹⁷

In short, the substantial cost of the Commission’s DTV Must-Carry Proposal for all-digital systems would prevent many – if not most – independent cable operators from transitioning to all-digital networks.

IV. The Commission cannot require that cable systems without HD capability cablecast HD broadcast signals in HD format.

Throughout the *Second FNPRM*, the Commission reiterates its earlier finding that the material degradation prohibition in 47 U.S.C. § 534(b)(4)(A) requires that a cable system cablecast in HD broadcast signals delivered in HD.¹⁸ The Commission indicates that this requirement applies even to cable systems that are not capable of cablecasting HD signals.¹⁹ The Commission has no authority to impose such a requirement on non-HD cable systems.

This is because conversion of an HD digital signal to SD or analog does not run afoul of the Communications Act’s prohibition on “material degradation” so long as the quality of signal processing and carriage on the system are not “less than that provided by the system for carriage of any other type of signal.”²⁰ In other words, if no HD

¹⁷ Moreover, as a policy matter, subscribers should be able to choose whether or not they want a set-top box.

¹⁸ *Second FNPRM* at ¶¶ 3, 12 and 17.

¹⁹ See *Second FNPRM* at note 23 (citing the burden on small systems to carry an HDTV signal if the system is not otherwise providing HDTV programming, but presuming that such system would be required to carry HD broadcast signals in HD).

²⁰ See 47 U.S.C. § 534(b)(4)(A).

signals are being cablecast on a system, a cable operator can convert an HD broadcast signal to the same format as the other signals on the cable system without rendering the quality of signal processing and carriage of the broadcast signal “less than that provided by the system for carriage of any other type of signal.” Further, conversion of a signal from digital to analog is not “material degradation” of a signal - it is merely a technical change in the signal. In its *First Report and Order*,²¹ the Commission found that technical changes did not constitute “material degradation.”²²

Accordingly, the Commission has no statutory authority under the “material degradation” provision of Section 534(b)(4)(A) to require cable operators to upgrade their cable systems to be able to cablecast HD broadcast signals.

Moreover, the cost to upgrade a cable system to provide HD broadcast signals is out of reach for many ACA members. ACA members serving 1,000 or fewer subscribers report that upgrading their facilities to provide HD signals can cost anywhere from \$25,000 - \$500,000.²³ Understandably, a significant percentage of ACA members will not have the capability to cablecast HD broadcast signals by February 17, 2009²⁴ – the cost of upgrading to HD could put many of them out of business. In short, the Commission’s proposed HD carriage obligation could have the unintended effect of

²¹ *In the Matter of: Carriage of Digital Television Broadcast Signals, Amendments to Part 76 of the Commission’s Rules, First Report and Order and Further Notice of Proposed Rulemaking*, 16 FCC Rcd. 2598 (2001).

²² *Id.* at ¶ 72.

²³ Based on responses to a June 2007 ACA Internet survey by cable operators serving 1,000 or fewer subscribers. The cost varies based on the number of systems involved and existing cable system architecture.

²⁴ In a June 2007 ACA Internet survey, 26.6% of responding ACA members reported that they will not be providing HD broadcast signals on any of their systems by February 17, 2009.

eliminating independent MVPD competition from many of the small and rural markets served by ACA's members. Cable systems without HD functionality must be permitted to convert HD broadcast signals to a format that they are technically capable of cablecasting.

V. There is no evidence supporting the imposition of new measurements for material degradation.

In its *Second FNPRM*, the Commission proposes to “move from a subjective to objective measure” for material degradation based on “carriage of bits in the broadcast signal.”²⁵

This is a solution in search of a problem. ACA has been unable to locate a single complaint filed by a broadcaster alleging material degradation.²⁶ Moreover, in its *First Report and Order*, the Commission found that:

[T]he issue of material degradation is about the picture quality the consumer receives and is capable of perceiving and not about the number of bits transmitted by the broadcaster if the difference is not really perceptible to the viewer. Such an interpretation is consistent with the language of the Act, which applies to material degradation, not merely technical changes in the signals....²⁷

The *Second FNPRM* provides no rationale for the Commission calling into doubt this well-reasoned finding in the *First Report and Order*.

In this instance, the Commission should take heed of the old adage – if it ain't broke, don't fix it.

²⁵ *Second FNPRM* at ¶ 12.

²⁶ See also *Statement of Commissioner Jonathan S. Adelstein, Second FNPRM* (“I do not believe we have a record of any complaints alleging material degradation”).

²⁷ *First Report and Order* at ¶ 72 (emphasis added).

V. Broadcasters asserting must-carry rights should bear the cost of converting their signals into a format that the cable operator can cablecast to all subscribers.

Approximately a quarter of ACA members will be unable to provide any digital broadcast signals on one or more of their cable systems by the February 17, 2009 DTV transition.²⁸ This is because the cost of upgrading small cable systems to provide digital signals presents a significant financial hardship for many cable operators.²⁹ These operators will therefore be required to convert broadcasters' digital signals to analog format. Similarly, operators without HD capability will be required to convert HD broadcast signals to SD format.

But the cost for the equipment to convert a broadcaster's signal to another format is also steep – one ACA member with approximately 100,000 subscribers reports incurring costs of \$4,390.25 per channel to convert a broadcast signal from HD or SD digital to analog format.³⁰ If the cable system is analog only, the operator will often incur an additional \$50,000-\$100,000 in upfront costs to purchase equipment to perform grooming, combining and compression. Obviously, many smaller cable businesses cannot support the costs of converting must-carry signals. These businesses should not be placed in jeopardy by regulatory fiat.

²⁸ In a recent ACA Internet survey, 24.6% of responding ACA members reported that they will not be providing digital broadcast signals on any of their systems by February 17, 2009. Note that many of these members do provide digital cable programming services through Comcast's HITS Quicktake, HITS²HOME or HITS Classic services.

²⁹ ACA members responding to a June 2007 ACA Internet survey reported the per-headend cost of upgrading to digital services to be between \$10,000 and \$2.6 million per headend, with a mean upgrade cost of \$290,000 per headend.

³⁰ The member also reports a cost of \$3,211.25 per channel to convert a signal from HD digital format to SD digital format. We attach as Exhibit 1 a list of the equipment purchased by this operator for format conversion, and the itemized costs.

Accordingly, ACA recommends that broadcasters electing must-carry should be required to pay for the cost of conversion of digital signals into a form that the cable operator can cablecast to all its subscribers.

IV. Conclusion.

A viable independent cable sector is critical to the provision of competitive advanced digital services to smaller and rural communities.³¹ The proposals made in the *Second FNPRM* could have the unintended effect of eliminating independent cable competitors from low-density service areas. Accordingly, ACA urges that the Commission revise its DTV Must-Carry Proposal as follows:

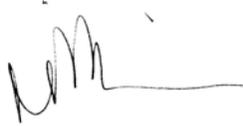
- Allow cable operators to convert digital signals into a format that they can cablecast to all their subscribers, and to choose whether to provide dual carriage for must-carry signals.
- Maintain the current standard for material degradation.
- Require broadcasters electing must-carry to pay the cost of conversion of digital broadcast signals into a format that the cable operator can cablecast to all its subscribers.

By implementing ACA's recommendations, the Commission can help facilitate the digital transition in the smaller and rural communities served by ACA's members.

³¹ Despite the cost of providing digital broadcast signals, 46.4% of ACA members responding to a June 2007 Internet survey already provide these signals on some or all of their systems. 38.4% provide HD signals on some or all of their systems.

Respectfully submitted,

AMERICAN CABLE ASSOCIATION

By:  _____

Matthew M. Polka
President
American Cable Association
One Parkway Center
Suite 212
Pittsburgh, Pennsylvania 15220
(412) 922-8300

Nicole E. Paolini-Subramanya
Christopher C. Cinnamon
Cinnamon Mueller
307 North Michigan Avenue
Suite 1020
Chicago, Illinois 60601
(312) 372-3930

Ross J. Lieberman
Vice President of Government Affairs
American Cable Association
4103 W Street, N.W., Suite 202
Washington, DC 20007
(202) 494-5661

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EXHIBIT 1

COST OF FORMAT CONVERSION FOR DIGITAL BROADCAST CHANNELS

HD or SD digital-to-analog format conversion:

Equipment Required	Cost
1 K-Tech 8vsb processor, model 150E (provides NTSC video/audio)	\$3,521.00
1 DX Wide-Band Modulator DSM-220	\$869.00
Total Cost Per Channel: \$4390.00	

HD to SD format conversion:

Equipment Required	Cost
1 Wegener DT-720 8vsb processor to ASI	\$2,351.25
1 Motorola SEM, digital QAM modulator	\$6,880.00 (\$860 per channel because equipment modulates 8 QAMs)
Total Cost Per Channel: \$3,211.25	