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August 31, 2007

**VIA ECFS**

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

**RE: American Cable Association ("ACA"); Notice of Ex Parte Presentation; CS Docket No. 98-120**

Dear Ms. Dortch:

Under 47 C.F.R. § 1.1206(b), we electronically provide this notice of an ex parte presentation in the docket listed above. On August 30, 2007, the following persons met with Chris Moore, Legal Advisor to Commissioner Deborah Tate:

Patrick Knorr, ACA Chairman and General Manager, Sunflower Broadband
Matthew M. Polka, ACA, President and CEO
Jeffrey L. Abbas, National Cable Television Cooperative, President and CEO
Ross J. Lieberman, ACA, Vice President of Regulatory Affairs

The purpose of the meeting was to discuss ACA's concerns with the possible adoption by the Commission of the proposed DTV must carry regulations contained in *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). In particular, for thousands of smaller cable systems, the costs of the technology and equipment necessary to comply with additional DTV must carry obligations would be impossible to support.

The attached summary sets forth the concerns and information discussed at the meeting. We also attach a chart summarizing equipment and technology costs related to the proposed carriage obligations.

Sincerely,

/s/
Christopher C. Cinnamon

Enc.
cc: Matthew M. Polka
Ross J. Lieberman

**American Cable Association**
**August 30, 2007**

**DTV Mandates on Independent Operators Will Harm Consumers.**
**ACA Opposes the Proposed DTV Order.**

- Small and medium-sized cable operators have an interest in ensuring that their subscribers can receive the broadcasters' signals after the digital transition.

- Cable operators who provide service to smaller and rural markets have made significant investments in their facilities to offer more programming to their subscribers, including high definition networks and video on demand. In addition, these operators have launched advanced services, such as broadband and voice, giving rural consumers the "Triple Play." In many instances, these operators are the only providers of high-speed internet in their service areas.

- With respect to broadcast signals, many of ACA's largest members are offering the broadcasters' signals in high definition. Furthermore, ACA recently struck a deal with the Association of Public Television Stations (APTS) that, if adopted by members, would ensure that the public broadcasters' multicast feeds are available to independent cable subscribers.

- Small and medium-sized cable operators understand that to remain competitive, they must offer consumers a robust service. However, for the foreseeable future, it is both fiscally and technologically infeasible for *all* small and medium-sized operators to offer the broadcasters' signals in high definition, standard definition, and analog after February 17, 2009.

- The proposed DTV must carry order, which would require cable operators to carry the same broadcaster signals in three different formats, would put significant strain on small cable systems. In some cases, operators of these systems would be forced to cut back on their existing services, threatening their viability in the market, and in other cases these operators would be compelled to shut down these services. Moreover, the proposed DTV order threatens ACA's agreement with APTS because of cost and bandwidth constraints on small and medium-sized operators to carry commercial broadcast signals in three formats.

- Thousands of small cable systems continue to serve smaller markets and rural areas. Of the approximately 7,500 total cable systems in the United States, 3,000 of these systems serve no more than 250 subscribers.

- Many small cable systems cannot support the upgrade expense required to comply with a triple-carriage obligation. Based on current market prices, a small cable operator would have to invest $143,500 in equipment and labor to pass along seven must carry stations' high definition stream to its subscribers in high definition, standard definition, and analog. For a system that serves only 5,000 subscribers, these costs are significant. For smaller systems, the cost per subscriber to comply with a triple-carriage obligation would exceed the asset value of the entire cable system.

- It costs $26,500 in equipment and labor costs to pass along one must carry station's high definition stream to its subscribers in high definition, standard definition, and analog.
- It costs an additional $117,000 to pass along an additional six must carry stations' high definition stream in all three formats.

- One of the primary reasons for the high cost of carrying a broadcast signal in all three formats is because of the need for cable systems to purchase an expensive piece of equipment that can convert a high definition signal to standard definition and analog formats. Such a conversion requires a device that reformats the high definition signal from its 16:9 aspect ratio to the standard definition ratio of 4:3. The equipment costs approximately $12,000, and separate devices are needed to convert a single high definition signal into standard definition and analog. In order to comply with a triple-carriage requirement, the total cost per high definition signal is approximately $24,000, and this is for only one step in the conversion process. Compounding this problem is the lack of an agreed upon standard for this type of reformatting.

- This expense could be avoided if broadcasters would convert their high definition signals to standard definition at their facilities, and be required to provide a standard definition simulcast signal to cable operators at their head-ends either over the air, by IP, or by fiber. Such an obligation would serve the public interest because the cost of such a conversion for broadcasters is less than the conversion for cable operators, and the signal would only need to be converted once by the broadcaster rather than having every cable operator in the market purchase the same equipment to perform the same conversion in each of their cable systems.

- In comparison, a small cable operator would have to invest $65,500 in equipment and labor to pass along six must carry stations' standard definition stream to its subscribers in standard definition and analog. The lower cost is partially because there is no need to reformat a high definition signal to standard definition. However, for a system that serves only 5,000 subscribers, the costs are still prohibitive.
  - It costs $32,000 in equipment and labor to pass along one must-carry station's standard definition stream to its subscribers in standard definition and analog.
  - It costs an additional $33,000 in equipment and labor to pass along an additional six must carry stations' standard definition stream in the two formats.

- In circumstances where a must carry station offers both a primary signal in high definition and other multicast signals in standard definition, the costs would be even higher on a per subscriber basis.

- Many small cable operators also do not have the capacity to offer all broadcast stations in all three formats. Most cable systems with 552 MHz or less are already using all of their available capacity to provide video, broadband, and voice services.

- For cable systems with 552 MHz or less, an obligation to carry broadcast stations in digital and analog would mean that cable operators in rural and small television markets would have to take off existing channels from their channel lineup, or reduce the amount of bandwidth available for advanced services, such as broadband and VoIP. In order for a

cable system of 552 MHz to carry five must-carry stations in high definition, standard definition, and analog, a system would need an additional 18 MHz, assuming the signal is not delivered as part of a multicast stream, and the operator does not compress the signal. This would require a cable system to drop either three analog signals, 33 digital signals, six HD signals, or some combination.

- In a market with five must-carry stations, the cable operator is currently using 30 MHz of spectrum to provide these stations in analog.
- In order to carry these five must-carry stations in high definition, standard definition, and analog, the cable operator would need approximately 48 MHz.
  - 5 TV signals in high definition require approximately 15 MHz.
  - 5 TV signals in standard definition require approximately 3 MHz.
  - 5 TV signals in analog require 30 MHz.
- The difference between carrying five broadcast stations in all three formats after the transition compared with carrying them in analog before the transition is 18 MHz.

- If required to drop signals, a cable operator would have to keep those networks that are considered "must have" channels, which are often owned by the media conglomerates, as well as all the networks that are affiliated with these companies because of their tying practices. As a result, the signals most likely to be dropped as a result of a triple carriage obligation are the independents, like C-SPAN or the Weather Channel, which offer quality programming, but would not be considered "must have" programming.

- It is not feasible for small cable operators to upgrade their systems to all-digital in order to avoid the added bandwidth requirements of a triple-carriage requirement. In addition to the equipment required to upgrade a cable head-end to all-digital, which costs approximately $30,000, the cable operator would need to provide a digital set-top box for each analog set in each of their subscriber's homes. Most small cable operators cannot support the cost of deploying one or more digital set-top boxes, which costs a small cable operator approximately $240, to all of their subscribers who receive their service on an analog set without a box before February 27, 2009. Assuming that the average small cable subscriber would need approximately three boxes per household, an operator would need to spend approximately $720 per subscriber. This is too costly for most cable systems, regardless of their size.

- Even if small and medium-sized cable operators could deploy digital boxes to all subscribers, many cable television subscribers do not want to attach extra equipment to some of their analog sets. Some consumers do not want to pay the extra cost to lease a box, and others are not interested in the addition services that these boxes provide.

<u>Conclusion</u>: The FCC must reject the proposed triple-carriage order.

# EQUIPMENT AND LABOR COSTS PER SIGNAL TO COMPLY WITH A TRIPLE CARRIAGE REQUIREMENT

## HEADEND INPUT

**BROADCASTER DELIVERS HIGH DEFINITION SIGNAL**

| EQUIPMENT #1 | | EQUIPMENT #2 | | EQUIPMENT #3 | | EQUIPMENT #4 | | Capital Labor | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DTV Demod $1,500 | ASI | Format Converter (16:9 to 4:3) $12,000 | ASI | ASI Demod $1,500 | Analog video/audio | Analog Modulator $1,000 | Analog RF out | $500 | $16,500 | ANALOG SIGNAL | HEADEND OUTPUT |
| DTV Demod $1,500 | ASI | Format Converter (16:9 to 4:3) $12,000 | ASI | QAM Modulator* $1,000 | | | | $1,000 | $15,500 | STAND. DEF. SIGNAL | |
| DVT Processor $1,500 | QAM out | | | | | | | $500 | $2,000 | HIGH DEF. SIGNAL | |

*$7,000 upfront cost for a device that modulates between 6-8 channels.

Equipment: Vendor, Model
DTV Processor: RL Drake, DQT861
DTV Demod: Blonder Tongue, AQM
Format Converter: Vela, CineViewHDpro

QAM Modulator: Motorola, SEM V8
Analog Modulator: RL Drake, VM 2862

Groomer: Terayon, DM6400-2
ASI Demod: RL Drake, DD860

# EQUIPMENT AND LABOR COSTS PER SIGNAL TO COMPLY WITH A TRIPLE CARRIAGE REQUIREMENT

## HEADEND INPUT

**BROADCASTER DELIVERS STANDARD DEFINITION SIGNAL**

| EQUIPMENT #1 | | EQUIPMENT #2 | | EQUIPMENT #3 | | EQUIPMENT #4 | Capital Labor | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DTV Demod<br>$1,500 | Analog video/audio | Analog Modulator<br>$1,000 | Analog RF out | | | | $500 | $3,000 | ANALOG SIGNAL | HEADEND OUTPUT |
| DTV Demod<br>$1,500 | ASI | Groomer*<br>$1,500<br>***$20,000 upfront cost** for a device that grooms between 12-16 channels. | ASI | QAM Modulator*<br>$1,000<br>***$7,000 upfront cost** for a device that modulates between 6-8 channels. | QAM out | | $1,000 | $5,000 | STAND. DEF. SIGNAL | |
| N/A | | | | | | | | | HIGH DEF. SIGNAL | |

Equipment: Vendor, Model
DTV Processor: RL Drake, DQT861
DTV Demod: Blonder Tongue, AQM
Format Converter: Vela, CineViewHDpro

QAM Modulator: Motorola, SEM V8
Analog Modulator: RL Drake, VM 2862

Groomer: Terayon, DM6400-2
ASI Demod: RL Drake, DD860