

Before the
Federal Communications Commission
Washington, DC 20554

In the matter of

Implementation of Section 304 of the
Telecommunications Act of 1996

Commercial Availability of Navigation
Devices

Compatibility Between Cable Systems
and Consumer Electronics Equipment

CS Docket No. 97-80

PP Docket No. 00-67

**REPLY COMMENTS OF THE
ELECTRONIC FRONTIER FOUNDATION**

The Electronic Frontier Foundation (“EFF”) hereby submits these reply comments in connection with the Commission’s *Second Report and Order and Second Further Notice of Proposed Rulemaking*, FCC No. 03-225 (Sept. 10, 2003) (“*SFNPRM*”) in the above-captioned proceedings.

I. DOWN-RESOLUTION MUST BE PROHIBITED IN FAIRNESS TO CONSUMERS

The Commission in its *SFNPRM* sought comment on whether multi-channel video programming distributors (MVPDs) should be prohibited from imposing down-resolution on high-quality analog outputs for high-definition non-broadcast digital programming.¹

EFF applauds the Commission’s decision to prohibit down-resolution of digital broadcast television content when retransmitted by MVPDs.² Thanks to this decision, American consumers can rest easy that they will continue to have

¹ See *SFNPRM* at ¶ 82.

² See *SFNPRM* at ¶ 62-64.

access to their favorite high-definition network programming, whether they rely on analog or digital interfaces.³

It now falls to the Commission to address the issue of down-resolution as applied to non-broadcast content, including high-definition programs carried on popular channels like ESPN, HBO and Showtime. EFF joins CEA, HRRC, Consumer Electronics Retailers Association, Matsushita, Public Knowledge, and Consumers Union in urging the Commission to prohibit MVPDs from engaging in this unfair and unjustified practice.⁴

A. Moe Than Six Million American “Early Adopters” Rely on Analog Interfaces for Access to High-Definition Programming.

According to information compiled by the HRRC and CEA, six million HDTV or EDTV displays have been sold that rely *exclusively* on component analog video inputs for high-definition programming.⁵ In many cases, these display devices were among the most expensive video display devices on the market when purchased. The “early-adopter” consumers who purchased them have been instrumental to jump-starting the DTV transition that the Commission has advocated. If down-resolution is permitted, these “early adopters” will find themselves potentially cut off from non-broadcast high-definition programming on cable and satellite, forced to make due with picture quality little better than that afforded by traditional televisions.

The harm, however, extends well beyond the owners of these six million “analog-only” displays. Although HDTV-capable display devices are beginning

³ The April 2004 issue of *Home Theater* magazine indicates that over 60 programs are currently being broadcast in high-definition on major network each week, including *ER*, *The West Wing*, *Smallville*, *Angel*, *Gilmore Girls*, *Everybody Loves Raymond*, *Law & Order*, *Frasier*, *The Practice*, *Enterprise*, and *Alias*. Many, if not all, of these programs are already being carried by cable MVPDs in many markets.

⁴ See Comments of the Consumer Electronics Ass’n, FCC CS Docket No. 97-80/PP Docket No. 00-67 (filed Feb. 13, 2004) at 3-7 (“CEA Comments”); Comments of the Home Recording Rights Coalition, FCC CS Docket No. 97-80/PP Docket No. 00-67 (filed Feb. 13, 2004) at 4-6 (“HRRC Comments”); Comments of the Consumer Electronics Retailers Association, FCC CS Docket No. 97-80/PP Docket No. 00-67 (filed Feb. 13, 2004) at 1-3; Comments of Matsushita Electric Corp. of America, FCC CS Docket No. 97-80/PP Docket No. 00-67 (filed Feb. 13, 2004) at 2-3; Comments of Public Knowledge and Consumers Union, FCC CS Docket No. 97-80/PP Docket No. 00-67 (filed Feb. 13, 2004) at 3-5.

⁵ See CEA Comments, *supra*, at 4; HRRC Comments, *supra*, at 5.

to include the digital interfaces (such as DVI) that sport content protection restrictions preferred by the MPAA (such as HDCP), these devices also include component analog inputs. Many purchasers of these “analog/digital” devices will likely continue to rely on their *analog* interfaces for many years to come for at least two reasons. First, there are currently no home theater receivers capable of switching among digital video inputs.⁶ Accordingly, those who want to switch conveniently between their DVD player, cable set-top box, and broadcast DTV tuner will have to rely on component analog interfaces until they replace their home theater receivers with one that supports DVI/HDCP or HDMI switching.

Second, although device manufacturers have the best of intentions, many digital video interfaces included on new devices are not entirely compatible with one and other.⁷ Where the encrypted DVI/HDCP interfaces fail to interoperate properly, the consumer is forced to fall back on analog interfaces if she wants to view high-definition programming. Where compatibility is the goal, there is no question that the tried-and-tested component analog interfaces are superior to the newly-deployed digital DVI/HDCP interfaces.

In summary, there is every reason to expect that upwards of six million Americans will continue to rely on high-definition analog interfaces for many years to come. These consumers either already pay for, or eagerly anticipate, high-definition non-broadcast programming like HBO, ESPN, and Showtime from their MVPD. It would be fundamentally unfair to force them to accept an inferior version of the high-definition programming for which they have paid, simply because their equipment is hooked up to component analog outputs as a result of necessity, compatibility or convenience.

B. There Is No Legitimate Justification For Down-Resolution.

The main proponents of down-resolution in this proceeding have been the major motion picture studios, represented by the Motion Picture Association of America (MPAA).⁸

⁶ See Jerry Del Colliano, *Are All Receivers and AV Preamps Now Obsolete?*, AUDIOREVOLUTION.COM (Feb. 20, 2004) (pointing out that receivers with DVI switching capabilities are not expected until the end of 2004) (available at <<http://www.audiorevolution.com/news/0204/20.receiver.html>>)

⁷ See CEA Comments, *supra*, at n.6 (“[T]hough now widely deployed, digital interfaces are not yet fully tested for interoperability; a series of ‘plugfests’ is ongoing and likely will extend for several years.”).

⁸ See Comments of the Motion Picture Association of America, Inc., Metro-Goldwyn Mayer Studios, Inc., Paramount Pictures Corp., Sony Pictures Entertainment Inc., Twentieth Century Fox Film Corp., Universal City Studios

The main argument advanced by the MPAA is little more than a veiled threat aimed at consumers—if down-resolution on analog interfaces is not permitted, the movie studios will withhold high-value content. Put more simply, it is “down-resolution or else.” In the words of the MPAA Comments, “a ban on image constraint capability, if adopted, would rob the consumer of the ability to watch Movie X at all in an early-window time frame, because that consumer’s cable or satellite device would not be secure enough to receive it.”⁹ Of course, in this circumstance, it is not the lack of “image constraint capability” that deprives the consumer of the movie, but rather the movie industry’s concerted refusal to deal in an effort to force more restrictive digital interfaces on consumers.

The MPAA comments make no bones about the motivation behind down-resolution: it is intended to make analog interfaces artificially unattractive to consumers, pressuring them to adopt digital interfaces encumbered by content protection technologies that the MPAA prefers. The hostility towards high-definition analog interfaces is palpable: “The perpetual availability of content over unprotected high-definition analog outputs is not an option.”¹⁰ This is a chilling threat for the many consumers who have already invested thousands of dollars in HDTV-capable devices, with every expectation that the devices would continue to be useful for many years to come.

Why the hostility towards high-definition over component analog outputs? The MPAA invokes its “analog hole” mantra, claiming that content output over analog outputs is more susceptible to unauthorized Internet redistribution. While the MPAA has made it clear in other contexts that it desires a regulatory solution for the “analog hole,” that is not the purpose of the proceedings in the instant dockets. In fact, to the extent that down-resolution is used to address the MPAA’s concerns, it does so at the *expense* of the primary goal of these proceedings—facilitating compatibility between MVPD systems and consumer electronics devices.

Even if “analog hole” concerns were appropriately within the scope of these proceedings, the MPAA’s premises are logically flawed for several reasons.

First, no commenting party has submitted any evidence demonstrating that any high-definition video captured from component analog outputs has *ever* been redistributed over the Internet, much less that such activity poses a substantial threat to the business of MVPDs or rights holders. This is particularly striking in

LLP, and the Walt Disney Company, FCC CS Docket No. 97-80/PP Docket No. 00-67 (filed Feb. 13, 2004) (“MPAA Comments”) at 5-7.

⁹ *See id.* at 6.

¹⁰ *See id.* at 5.

light of the fact that high-definition programming has been available from MVPDs over analog interfaces for some time.

Second, down-resolution actually *facilitates* the unauthorized redistribution of programming by reducing the file size of the captured video programming.¹¹ As a result, down-resolution effectively “pre-compresses” video for those intent on the unauthorized Internet redistribution of non-broadcast content.

In short, no commenting party has offered a credible justification that would support the imposition of down-resolution on non-broadcast MVPD programming.

C. Conclusion.

The Commission should stay true to the primary goal of this proceeding—to maximize compatibility between MVPD systems and consumer electronics devices in an effort to encourage a competitive market in HDTV devices.

It is apparent that, today and for many years to come, high-definition component analog interfaces offer consumers the greatest degree of compatibility (for many early adopters, the *only* hope of compatibility) between their cable and satellite set-top boxes, CableCard devices, HDTV-capable displays, and home theater receivers. The Commission should prohibit the use of down-resolution for non-broadcast MVPD programming on these analog interfaces, just as it has for broadcast programming.

/s/

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¹¹ This point is made in both the CEA Comments, *supra*, at 4, and the Comments of Public Knowledge and Consumers Union, *supra*, at 5.