

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

_____)	
In the Matter of:)	
)	
Implementation of Section 304 of the Telecommunications Act of 1996)	CS Docket No. 97-80
)	
Commercial Availability of Navigation Devices)	
)	
Compatibility Between Cable Systems and Consumer Electronics Equipment)	PP Docket No. 00-67
_____)	

FURTHER REPLY COMMENTS OF DIRECTV, INC.

Susan Eid
Vice President, Government Affairs
Robert H. Plummer
Senior Director, Advanced Technology
DIRECTV, INC.
2230 East Imperial Highway
El Segundo, CA 90245
(310) 535-5400

William M. Wiltshire
Michael Nilsson
HARRIS, WILTSHIRE & GRANNIS LLP
1200 Eighteenth St, NW
Washington, DC 20036
(202) 730-1350

Counsel for DIRECTV, Inc.

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SUMMARY

DIRECTV, Inc. (“DIRECTV”) submits these reply comments in response to two issues raised in comments in this proceeding – the “down-resolution” of non-broadcast programming, and the continued status of CableLabs as a *de facto* gatekeeper for the approval of new plug-and-play technologies.

DIRECTV believes that the availability of a wide range of content protection techniques will ultimately best serve the interests of American consumers. With respect to down-resolution, the Commission can only undertake the difficult “balancing of interests” necessary here by keeping in mind the proper baseline. If the Commission prohibits down-resolution, the result certainly will not be (as the consumer electronics and public interest commenters apparently assume) that early DTV adopters receive the highest-value content in its highest-resolution form over analog interfaces. Rather, the result will be that *nobody* receives such content. DIRECTV views this as an indisputably bad outcome – but one that is virtually inevitable without some mechanism to safeguard such content. Conversely, with down-resolution as an option, new and innovative business models become available.

As for CableLabs’ role, by contrast, the issue is not so very difficult. Regardless of its other attributes, CableLabs remains an advocate for the cable industry. As such, it quite plainly should not be given anything resembling a bottleneck role in the development of plug-and-play technology affecting all MVPDs, including cable’s competitors. This is why a host of commenters unaffiliated with the cable industry has urged the Commission to limit or eliminate CableLabs’ role. The Commission should heed those calls.

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¹ Further Comments of DIRECTV, Inc. (filed Feb. 13, 2004) (“DIRECTV Further Comments”); *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, Second Report and Order and Second Further Notice of Proposed Rulemaking, 18 FCC Rcd. 20885 (2003) (“*Plug and Play Order*”).

I. THE COMMISSION SHOULD NOT PROHIBIT DOWN-RESOLUTION OF NON-BROADCAST PROGRAMMING.

Those who oppose down-resolution argue that the Commission should ensure that consumers, and particularly “early DTV adopters,” can use their devices to the greatest extent possible.² DIRECTV wants the same thing. It is, after all, in the business of maximizing the viewing experience for all of its customers. DIRECTV recognizes that many early DTV adopters also were among the first to abandon cable in favor of the clear digital signals offered by DBS. They are some of DIRECTV’s most long-standing and valuable customers.

Despite sharing this common goal, DIRECTV and those who oppose down-resolution have a fundamental divergence on strategy that reflects fundamentally different views of the marketplace. Those who oppose down-resolution in this proceeding base their arguments on a media marketplace that, in DIRECTV’s experience, simply does not exist. In this imaginary marketplace, if MVPDs cannot “downrezz” high-value content (or employ another copy-control method such as selectable output control),³ content providers will simply abandon their long-standing concerns over security and allow their high-value content in high-resolution form to be carried over

² See, e.g., Home Recording Rights Coalition Comments on Further Notice of Proposed Rulemaking at 2-3 (filed Feb. 13, 2004) (“HRRRC Comments”) (arguing that down-resolution of non-broadcast programming would primarily harm early adopters); Comments of the Consumer Electronics Association in Response to Second Further Notice of Proposed Rulemaking at 4 (filed Feb. 13, 2004) (“CEA Comments”) (referring to six million early adopters).

³ HRRRC indicates that, as the Copy Protection Technical Working Group’s Analog Reconversion Discussion Group has recently released its final report, there is now available a “true content protection solution” other than down-resolution. HRRRC Comments at 6. Ignoring for the moment HRRRC’s perhaps over-optimistic view of the Discussion Group’s work, even HRRRC cannot dispute that any such solution, which DIRECTV will strongly support, will only work once it is universally required, which may take years to accomplish. Furthermore, such solution must include rules for non-compliant output devices previously deployed.

high definition analog outputs. Thus, these commenters suppose, down-resolution will have the sole effect of “punishing” early adopters.⁴

This idea of “punishment,” though, only makes sense if one assumes that in the absence of down-resolution there would be distribution of the highest value, highest resolution content to everyone, including early adopters. Unfortunately, this naïve view does not reflect how the media marketplace works. In the absence of down-resolution (or some other alternative), content providers will *not* make the highest-value content available to early-adopters in its highest-resolution form. Rather, they will choose not to make such content available to anyone in such form.

DIRECTV has spent the last ten years negotiating with content-providers over these very issues, and knows full well that content providers can and do forego certain arrangements with MVPDs based on security concerns. But this is not just DIRECTV’s view. Both MVPDs and content providers – that is, those actually in the business of negotiating content distribution arrangements – state emphatically that, without down-resolution or another alternative, content providers will withhold the highest value content:

- “For example, [down-resolution] would not rob a consumer of a 1080i display of a newly released hit motion picture, “Movie X.” Rather, a ban on [down-resolution], 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.”⁵
- “As long as the possibility exists for analog component interfaces to output HDTV . . . content without constraint, MVPDs are handicapped in

⁴ CEA Comments at 5

⁵ Comments of the Motion Picture Association of America, Inc., *et al.* at 6 (filed Feb. 13, 2004) (“MPAA Comments”).

negotiating with programmers concerned over unauthorized redistribution of high value programming.”⁶

- “Having made such a strong commitment to the new features and capabilities of digital content production, programming, and distribution, [content providers have] ample incentive to ensure that viewers are able to enjoy those new features and capabilities. . . . [C]ontent providers, however, also must have the ability to respond to the threat to content security posed by the analog hole.”⁷

By contrast, the availability of copy-protection tools such as down-resolution will enable MVPDs to pursue a range of exciting programming options not currently offered to their subscribers, such as earlier windows for movie releases, exclusive content, and other new business models.

The Commission must not be taken in by the false choice offered by some commenters in this proceeding. Prohibiting down-resolution in the expectation that early-adopters will thereby receive high-resolution programming would run contrary to DIRECTV’s experience and the real-world evidence.⁸ Such wishful thinking is no basis for crafting sound policy.

Two other observations seem warranted at this point. *First*, it is not clear that the “harm” experienced by early-adopters (even if measured against the unrealistic baseline of receiving abundant high-resolution programming) is significant, or at least as significant as the consumer electronics industry would have the Commission believe. This is because, as Public Knowledge and Consumers Union acknowledge, down-

⁶ Comments of the National Cable and Telecommunications Association at i (filed Feb. 13, 2004) (“NCTA Comments”).

⁷ Comments of Time Warner Inc. at 8 (filed Feb. 13, 2004) (“Time Warner Comments”).

⁸ Down-resolution is an accepted MVPD industry practice that has been required to address content security concerns in private agreements, such as the Digital Transmission Content Protection (or “5C”) license. *See* DIRECTV Further Comments at 4-5; Time Warner Comments at 10 (“the capability to down-resolve certain high-value content traversing unprotected analog connectors has long been incorporated into the 5C license”).

resolution renders content in DVD quality.⁹ In fact, MPAA observes that the equipment currently on the market cannot fully display 1080i signals in the first place, “and, as a result, a recorded [downrezzed] image will appear *exactly the same* as the original 1080i image on such displays.”¹⁰ Thus, in most cases, those using current-generation equipment would not be able to tell the difference between downrezzed and high-resolution programming even if they were to switch back and forth between the two.¹¹ It is only with respect to *future* devices that down-resolution will have a noticeable effect – and, as the consumer electronics industry has confirmed, such devices will be required to have digital inputs and so will avoid the issue altogether.¹²

Second, some in this proceeding argue that down-resolution is not a very good copy-protection tool in the first place because, by reducing the necessary bandwidth of the signal, it actually renders copying easier.¹³ Were this really the case, DIRECTV suspects that MPAA would be arguing *against* down-resolution, and consumer groups would be arguing *for* it. In any event, no proposal in this proceeding would mandate the

⁹ See Comments of Public Knowledge and Consumers Union at 5 (filed Feb. 13, 2004) (“Public Knowledge Comments”). All of DIRECTV’s HDTV set-top boxes support down-resolution. As DIRECTV explained in its initial comments, however, the first generation of these boxes did so by switching from high definition component analog outputs to standard definition analog outputs. DIRECTV Further Comments at 7. These boxes thus deliver “downrezzed” signals at up to 720x480 interlace – still a signal of good quality. If the Commission permits down-resolution, it should allow down-resolution to standard definition analog outputs, at least in the case of legacy set-top boxes. *Id.*

¹⁰ MPAA Comments at 6 (emphasis added).

¹¹ CEA is thus incorrect when it argues that “the notion that early adopters will not be able to tell the difference between HDTV and ‘downres’d’ programming is anecdotal, false, unsupported in the record, and counter to everyday experience.” CEA Comments at 5. The fact is that most consumers will not be able to tell the difference with displays on current generation consumer devices.

¹² Moreover, even if a signal is downrezzed, device manufacturers will be permitted to enhance the downrezzed image “using video-processing techniques such as line doubling to improve the perceived quality of the image.” NCTA Comments at 4.

¹³ See, e.g., CEA Comments at 4.

use of down-resolution. Down-resolution will be no more than a tool available in the negotiations between content-providers and MVPDs. If indeed down-resolution turns out to enable illicit copying, content providers will not demand it, and distributors will not employ it.¹⁴

II. CABLELABS SHOULD NOT BE PLACED IN A POSITION TO EXERCISE *DE FACTO* CONTROL OVER THE DEVELOPMENT OF NEW OUTPUTS AND ASSOCIATED CONTENT PROTECTION TECHNOLOGIES.

While the arguments over down-resolution require a careful balancing of interests and assessment of market forces, the Commission's decision with respect to CableLabs should be easy. The DFAST license establishes CableLabs as "the sole initial arbiter of outputs and associated content protection technologies to be used in unidirectional digital cable products."¹⁵ This license by its terms empowers CableLabs only to make determinations relevant to UDCP devices that use the POD-Host interface. It thus does not dictate the technology available for use in set-top boxes deployed by any other MVPD.

But this does not mean that the DFAST License is irrelevant to non-cable MVPDs.¹⁶ Cable's competitors may well seek to deploy POD devices of their own, particularly if – given cable operators' continued domination of the MVPD market¹⁷ – the POD-Host arrangement becomes a market standard that is embraced by the consumer

¹⁴ DIRECTV notes that many (if not most) existing high definition set-top boxes simultaneously deliver the video signal over standard definition outputs as well as high definition outputs. This gives consumers the ability to record programming using a VHS or standard definition DVR and also to view programming even if they have not yet purchased a high definition display.

¹⁵ *Plug and Play Order*, 18 FCC Rcd. at 20119.

¹⁶ See The National Cable & Telecommunications Association's Opposition to Petitions for Reconsideration and Notice of Joint Proposal for Improved Testing Rules at 3 (filed Mar. 10, 2004) ("NCTA Opposition").

¹⁷ See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Tenth Annual Report, 19 FCC Rcd. 1606, 1609 (2004) (finding that cable holds a 75% share of the MVPD market).

electronics industry. In such case, non-cable MVPDs would certainly want at least the option of using the DFAST license process – without placing their fates in the hands of their chief competitors.¹⁸

Not surprisingly, those not associated with the cable industry or with the closed negotiations over the DFAST license *overwhelmingly* oppose CableLabs’ role. They argue, for example:

- “[G]ranting this right of first decision to a representative of just one of the affected industries – which can certainly be expected to put its founders’ interest first – ultimately could stifle technological innovation and put at risk the open and flexible architecture of the PC and similar devices.”¹⁹
- “Without ascribing overtly anticompetitive motives to CableLabs, the fact remains that this entity is a wholly owned affiliate of the largest cable operators, and as such, plainly has the incentive and the ability to hinder or prevent entirely the use of DFAST technology by non-cable MVPDs and their manufacturers. It will not promote MVPD competition to allow CableLabs to apply the DFAST license in a discriminatory fashion for cable-only use, when it is plain that incumbent cable operators continue to serve the majority of households in most franchise areas. . . . [A]nother, neutral administrator should be identified by the Commission that is institutionally capable of objective decisionmaking regarding changes to the DFAST license and related determinations.”²⁰
- CableLabs “is not . . . an independent entity. Rather, it is a trade association which exists to further the interest of the cable community. Lacking the requisite independence to make impartial approval determinations which can have substantial competitive effects on multiple industrial sectors, Cable Labs *a fortiori* lacks the qualifications to make approval determinations under [a proposed unified plug-and-play and broadcast flag] regime.”²¹

By contrast, the entities that support CableLabs’ role are almost exclusively those (such as CEA and NCTA) representing parties that were “at the table” for the discussions

¹⁸ Both the *Plug and Play Order* and the DFAST license themselves are silent on the issue of whether non-cable MVPDs can become DFAST licensees.

¹⁹ Comments of Microsoft *et al.* at 6 (filed Feb. 13, 2004) (“IT Comments”).

²⁰ Comments and Opposition of BellSouth Entertainment, LLC at 3 (filed Feb. 25, 2004) (“BellSouth Entertainment Comments”).

²¹ Comments of the American Antitrust Institute at 5 (filed Feb. 13, 2004) (“AAI Comments”).

that ultimately led to the *Plug and Play Order*.²² CEA’s support for CableLabs’ role is, frankly, so tepid that it hardly seems worth counting.²³ NCTA, for its part, spends seven-odd pages arguing that CableLabs is well-respected,²⁴ has well-trained personnel,²⁵ has certified many cable-related devices,²⁶ is fair and objective because its standards are drafted “with input from the relevant manufacturing sectors,”²⁷ is “commit[ted] to the success of retail availability,”²⁸ and will play a “vital role in the effort to protect signal security and prevent harm to the [cable] network.”²⁹

NCTA’s assertions may all be true. But they do not change the fact that CableLabs is a creature of, by, and for the cable industry. CableLabs describes itself as “a nonprofit research and development consortium *that is dedicated to helping its cable operator members integrate new cable telecommunications technologies into their business objectives*.”³⁰ Its website links to the “Only Cable Can” website, which touts the

²² MPAA states, without elaboration, that CableLabs “should be the initial arbiter of the approval process,” presumably by virtue of its status as DFAST Licensor. MPAA Comments at 2. Yet it nowhere explains why such status should allow CableLabs the exclusive role assigned to it.

²³ Although CEA “believes that the ‘Phase I’ result – CableLabs initiative subject to FCC and other authorities’ oversight, scrutiny and review – is appropriate,” it then argues that “[c]ontent providers and distributors are not disinterested parties . . . [and] should not be afforded the sole power to make determinations about technologies, interfaces, or products.” CEA Comments at 13, 15.

²⁴ NCTA Comments at 9.

²⁵ *Id.*

²⁶ *Id.* at 9-10.

²⁷ *Id.*

²⁸ *Id.* at 10.

²⁹ *Id.* at 11.

³⁰ www.cablelabs.com (emphasis added). CableLabs also states that, “to be a member of CableLabs, your company must be a cable television system operator (as defined by the Cable Act) – CableLabs’ charter admits cable operators worldwide. A cable operator as defined by the Cable Act, is a person or persons who provide video programming using closed transmission paths and uses public-rights-of-way. This definition *does not include open video systems, MMDS . . . or DBS . . .*” www.cablelabs.com/join (emphasis added).

alleged superiority of cable over other MVPD systems.³¹ Surely it is not unreasonable to fear that such an organization might favor its cable operator members over their MVPD competitors. And surely it is not unreasonable for cable's competitors to hesitate before disclosing information related to new products to such an organization, and thereby placing sensitive commercial information in the hands of their MVPD rivals. Indeed, NCTA practically acknowledges these problems in its (rather startling) statement that CableLabs' "sole-arbiter" role is justified in part because "[cable o]perators want and need a retail presence to compete against DBS providers that have flooded retail outlets with their own proprietary equipment."³²

The only other two serious arguments mustered by NCTA to justify CableLabs' role provide cold comfort to cable's competitors. *First*, NCTA points out that there is "de novo review at the FCC if any party is dissatisfied with an approval or a disapproval of a new output or security technique."³³ Yet the fact that the FCC might eventually remedy discriminatory treatment does not mean that such discrimination would be costless. Even temporary delay in the approval of devices to be used by cable's competitors would result in real harm in a market where speed of deployment is a strategic imperative.

Second, NCTA argues that, under the DFAST License Compliance Rules, *the content providers themselves* can also approve new outputs or security techniques.³⁴ This

³¹ www.cablelabs.com (linking to www.onlycablecan.com/home.html).

³² NCTA Comments at 10.

³³ *Id.* at 14-15.

³⁴ *Id.* at 15.

is true.³⁵ But again, obtaining approval from multiple studios is a cumbersome and unrealistic option for MVPDs in a highly competitive market – especially when compared to the streamlined process available through CableLabs. If a non-cable MVPD were to seek approval outside CableLabs for a new kind of digital output to be used with the POD-Host interface, it would have to approach and negotiate with each of the major movie studios separately – a comparatively costly and time consuming process. It is one thing for that MVPD to forgo the benefits of a standardized approval process because it chooses to deploy proprietary technology. But it is quite another thing for that MVPD to forgo these benefits solely because its competitors control the process.

Fortunately, this problem is easily solved. All the Commission need do is to designate *multiple entities* to approve outputs and content protection technologies under the DFAST license. Such entities could include the National Institute for Standards and Technology (“NIST”), the Institute of Electrical and Electronics Engineers, Inc. (“IEEE”), or even CEA. As DIRECTV indicated in its Further Comments, such organizations should approve new technologies not pursuant to any rigid (and soon-obsolete) set of standards elaborated by the Commission, but rather based on a more nuanced consideration of the technology in question and the security problems that exist when approval is requested.³⁶ Only such a regime would remove the potential for

³⁵ The Compliance Rules provide: “In the event that CableLabs is advised that four (4) member studios of the Motion Picture Association approve a digital output or content protection technology that provides effective protection to Controlled Content against unauthorized interception, retransmission or copying, such output or content technology shall be deemed approved by CableLabs . . . and upon receipt of notice by CableLabs of such approval by the four studios, CableLabs shall amend these Compliance Rules to include such output and/or content protection technology.” DFAST License Agreement, Exhibit B (Compliance Rules) ¶ 2.4.4, available at *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, Further Notice of Proposed Rulemaking, 18 FCC Rcd. 518, 593 (2003).

³⁶ DIRECTV Further Comments at 12.

exploitation of a bottleneck and provide manufacturers with sufficient flexibility to address the security problems of tomorrow.

CONCLUSION

For the foregoing reasons, the Commission should (1) permit (but not mandate) down-resolution of non-broadcast programming, and (2) designate one or more entities in addition to CableLabs that can act as initial arbiters of outputs and associated content-protection technologies for the DFAST license.

Respectfully submitted,

/s/

William M. Wiltshire
Michael Nilsson
HARRIS, WILTSHIRE & GRANNIS LLP
1200 Eighteenth St, NW
Washington, DC 20036
(202) 730-1350

Counsel for DIRECTV, Inc.

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