BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	)	
	)	MB Docket No. 02-230
Digital Broadcast Content Protection	)	

Comments on Further Notice of Proposed Rulemaking

The Center for Democracy and Technology ("CDT") is pleased to submit these comments in response to the Commission's Further Notice of Proposed Rulemaking (released Nov. 4, 2003) ("FNPRM") in the above-captioned proceeding. We urge the Commission in this next phase to adopt: (i) objective functional criteria for approving content protection technologies for broadcast digital television and (ii) an approval process that is flexible, open, and transparent, so as to prevent massive redistribution of digital TV content but allow the exchange of information via the Internet.

As an Internet organization, CDT's specific concern with the broadcast flag approach stems from the potential impact of flag regulations on expression and innovation online. The broadcast flag regulations represent a specific response to some of the considerable challenges posed for copyright holders by the increasing importance of computers and networks in emerging digital media. However, these technologies also hold tremendous potential to foster expression and civic discourse, and the Commission must be wary of imposing undue burdens on their development and use.

Our concerns along these lines are especially acute given the Commission's decision not to exempt news and public affairs content from control under the broadcast flag regulations.[1] As a result of this decision, the flag will cover a wide variety of content of central democratic and constitutional concern.[2] The flag regulations must be crafted so that they do not overly burden

[1] FCC Report and Order and Further Notice of Proposed Rulemaking, MB Docket No. 02-230, In the Matter of Digital Broadcast Content Protection, released November 4, 2003, ¶ 38 (hereinafter Report and Order).

[2] Already the Internet is used as a forum for political critique and satire based on constitutionally protected excerpting, parody, and transformation of broadcast content. Numerous examples exist. For example, Gov. Howard Dean's concession speech following the Iowa primary in early 2004 was widely redistributed and quickly made the subject of several parody "remixes" online. *See* Bret Begun, "'Yeagh,' the Remix," *Newsweek Web Exclusive*, January 22, 2004, available at <http://video.msnbc.com/id/4021146/>. These remixes were made from excerpted news content, much of which would under the flag approach be marked

the ability of users to create content in this way and in so doing hamper the extraordinary democratic and creative potential created by the Internet and other new digital media.

1. Introduction and Summary

In an era of convergence, the "broadcast flag" approach to protecting digital television broadcasts has public interest implications reaching far beyond TV, affecting the Internet as the medium of digital age communication and innovation. Democratic and First Amendment values demand that a balance be struck between, on the one hand, the need to protect copyright holders from digital piracy and, on the other, the public interest in the free flow of information over digital media including the Internet. In its Report and Order the Commission stated that this was its intent. [3] Now these sentiments must be written into the rules.

CDT's report *Implications of the Broadcast Flag: A Public Interest Primer*[4] explores in detail the policy tensions created by the flag approach. As it explains, the potential for digital TV piracy is real, and the flag is a good faith effort to respond to that threat. At the same time, the flag approach will affect the way that Americans watch, use, and record television programs for years to come, and could have a broader impact on what content can be used – and how – on the Internet. Our report argued that any approach taken by the FCC should provide for transmission of content across the Internet and should authorize technologies that permit the widest lawful use of programs while preventing large-scale redistribution.

In its Report and Order, the Commission described flag regulations that are narrowly tailored to protecting DTV programs from widespread and indiscriminate redistribution. In this next phase, it is incumbent on the Commission to codify this vision in its rules.

As explained in our report, the impact of the flag regulations on consumers will depend a great deal on the details of the process for approving the content protection technologies that manufacturers must include in their devices. The interim process set forth in the FNPRM for

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as protected content. A similar parody video featuring President George W. Bush and British Prime Minister Tony Blair was widely circulated online during the public debate over the war in Iraq. *See* <http://politicalhumor.about.com/library/multimedia/bushblair_endlesslove.mov>, accessed February 12, 2004.

[3] For example, the Commission explicitly states in the Report and Order that it does not intend "to alter or affect any underlying copyright principles, rights or remedies" ¶ 38 (*See also* ¶ 9). The careful balance in copyright law between promoting First Amendment values and protecting content is, of course, the core of these principles. The Commission also makes clear in the Report and Order its desire to ensure that the Internet and computers are not left out or overly burdened by the rule. "We do not wish to foreclose use of the Internet to send digital broadcast content where robust security can adequately protect the content and the redistribution is tailored in nature." ¶ 63. *See also* ¶10, 40

[4] *Implications of the Broadcast Flag: A Public Interest Primer*, first issued in October 2003, revised December 2003 to reflect the FCC's Order, online at <http://www.cdt.org/copyright/broadcastflag.pdf> (hereinafter CDT Report.)

approving such technologies has no objective standards. Therefore the Commission must act quickly and with clarity to develop objective criteria and a transparent process, as recommended in these comments.

In response to questions raised in the FNPRM, we urge the Commission to enshrine in its regulations a narrow approach to the flag that will support reasonable uses of content, including uses on the Internet and with computers, by -

- adopting objective functional criteria for approving technologies, based on the narrow goal of preventing indiscriminate redistribution to the public online;
- adopting a flexible, predictable, transparent, and publicly accountable process for approving technology based on self-certification and rapid resolution by the Commission of challenges;
- establishing an oversight process to periodically examine the rules' impacts on interoperability of new compliant technology with legacy devices, reasonable consumer expectations, and consumers' ability to access information online;
- refraining from defining the PDNE, at least at present; and
- making clear that the flag is not a precedent for broader regulation of technology.

We look forward to working with the Commission to create protection measures that balance the needs of content producers and consumers and other users, in a manner consistent with the Internet's utility as a medium of diverse expression.

2. Flag Regulations Should be Narrow in Scope and Permit the Greatest Possible Range of Lawful Uses, Including Use on the Internet

The FCC has established three goals for the broadcast flag regulations. These are laid out specifically in the introduction to the Commission's Report and Order, ¶10. They are:

1. To "prevent the indiscriminate redistribution of [flagged] content over the Internet or through similar means."
2. To "facilitate innovative consumer uses and practices, including use of the Internet as a secure means of transmission," and to "promote consumer access to content in new and meaningful ways."
3. To allow "consumers [to] cop[y] broadcast programming and us[e] or redistribut[e] it within the home or similar personal environment as consistent with copyright law," so long as done in a way that does not allow indiscriminate redistribution online.

These goals reflect a narrow vision of the flag regulations as "a 'speed bump' to prevent indiscriminate redistribution of broadcast content."[5] This narrow vision has long been accepted by the flag's supporters as well. For example, MPAA General Counsel Fritz Attaway testified before Congress in Spring 2003:

> The broadcast flag does not prevent copying at all, as I stated earlier. With today's technology, it would prevent [a] student from e-mailing [a] project

[5] Report and Order, ¶ 19.

> [including marked video content] because a secure system does not yet exist for e-mailing. But as soon as that technology is developed, and I believe it will be, then that would be made possible, as well. The only thing that the flag is designed to do is to prevent the mass redistribution of television programs on wide-area networks like the Internet. [6]

CDT strongly endorses this carefully circumscribed description of the flag, and applauds the Commission's express commitment to a narrowly tailored flag rule. We believe the three goals that the Commission articulated and that we enumerate above provide the benchmarks that must guide the Commission in the current proceeding.

In the context of regulations like the broadcast flag, CDT believes that continued innovation and free expression on the Internet is best protected by the development of a robust marketplace in digital rights management (DRM) and content protection technologies. Such a marketplace ensures that consumers have real choices among rights protection options and that developers have strong incentives to find ways to meet consumer demands for reasonable and innovative uses of content while maintaining appropriate protections for copyrighted works. If the Commission's approval process creates unnecessary barriers to entry for content protection technologies, the diversity of content delivery mechanisms available will be diminished, innovative products will be discouraged, and innovation and free expression online will be harmed.

The Commission's decisions about the issues addressed by this Further Notice of Proposed Rulemaking will in large part determine whether the law embodies the focused, permissive vision of the flag or a more sweeping restrictive version. A narrow implementation of the flag requires (a) that the flag rules be *written* narrowly – i.e. the list of criteria for approved technologies is focused and reflects the stated goal of the flag as a "speed bump" against indiscriminate redistribution; and (b) that the flag rules be *applied* narrowly—i.e. no group must be able or allowed to use the flag to block technologies for reasons beyond those specifically enumerated by the Commission.

Thus, the criteria for approving technologies must be clear, narrow in scope, and predictable in application without placing limits on the devices that can be developed based on the technological horizon of today. The process for applying these criteria must be open, transparent, fair, and subject to regular oversight. CDT's specific responses to the questions the Commission has posed in this FNPRM are motivated by a desire to advance these goals.

3. <u>The Commission Should Adopt a Small Set of Objective Criteria for Approving Technologies, Based on the Touchstone of "Indiscriminate Redistribution to the Public"</u>

In its Report and Order (and supported by numerous comments), the Commission recognized the need to adopt an "open objective approval process," and specifically sought comments on objective functional criteria to be adopted for the Compliance Requirements set forth for

[6] Testimony of Fritz Attaway before the House Judiciary Subcommittee on Courts, the Internet, and Intellectual Property (March 6, 2003).

approval of Authorized Technologies.[7] We support this approach, and believe that such an approach is most likely to meet the goal of appropriately balancing reasonable content protection with reasonable uses by consumers of broadcast DTV content.[8]

Although many commentators agree that such objective criteria are needed,[9] few agree on exactly what those criteria should be. The problem with objective criteria that are too detailed is that it is difficult to predict appropriate criteria for a rapidly changing set of protection technologies, consumer expectations, and possible uses. On the one hand, detailed criteria specifying consumer uses that should be approved will inevitably fail to take into account uses that are not yet popular or even invented. On the other hand, such criteria could easily miss new piracy threats to content. For example, a flag adopted just three years ago might easily have precluded distribution of television programs over wireless networks within a home—something likely to be desirable soon given the explosive growth of WiFi. By the same token, a flag regulation adopted in 1999 might have failed to anticipate the serious content protection problems raised by peer-to-peer file sharing.

For these reasons, we recommend that the Commission take a relatively narrow approach to requirements for approving technologies, adopting a small number of criteria and revisiting them over time.[10] Indeed, we suggest that the approval of Authorized Technologies hinge on one main functional requirement:

> *Does the technology effectively frustrate an ordinary user from indiscriminate redistribution of protected content to the public over the Internet or through similar means?*

Interpretation of this requirement will of necessity change over time depending on evolving technology capabilities and consumer expectations. To ensure a balanced approach to

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[7] Report and Order, ¶ 43, 62.

[8] The alternative approach rejected by the Commission—the proposed "market acceptance" test, whereby content protection technologies would be approved as Authorized Technologies based on acceptance by a set of designated studios and/or major technology companies—is fraught with perils. CDT Report, p. 12. *See also* Report and Order, ¶ 52.

[9] *See, e.g.,* Comments of the IT Coalition; Comments of Public Knowledge and Consumers Union; Letter from Emery Simon to Marlene H. Dortch re: *Ex parte* Communication in MB Docket No. 02-230 (Oct. 2, 2003).

[10] We note that several IT companies have suggested functional criteria that could be used by the Commission in approving content protection technologies. See, e.g., ITAA Comments at 10; ITIC Comments at 4; ICC Comments at 6; IT Coalition Comments at 20-23; Philips Comments at 22-23; Thomson Comments at 10-13; TiVo Comments at 7-9. We strongly agree with the spirit in which these criteria have been offered, though we urge caution to ensure that criteria do not enshrine particular modes (e.g., encryption) of protection. While we have not offered the same level of detailed technical criteria, we believe if the Commission chose to include them it could do so consistent with the suggestions we make here.

interpreting this requirement, we propose a flexible, open, and transparent approval procedure with public oversight as explained in Section 4 below.

A number of factors should be used by the Commission to interpret this functional requirement. We propose two specific requirements that must be met by any approved technology:

a. Effective content protection - Does the technology effectively prevent an ordinary user from indiscriminately redistributing content to large numbers of people? For example, a peer-to-peer file sharing technology that allows protected content to be redistributed in unprotected form would not meet this requirement. A technology that allowed a user to email a copy of a protected program to any large group of people—with no limitation on the number of people who could receive the program—would not be approved, while a technology that allowed a user to email a clip of such a program to a finite number of family or friends would be approved.

b. Full use and redistribution for unmarked content - Approved technologies should not prevent content that is not marked as protected from being redistributed.[11]

In addition to these two criteria, the Commission should make it clear that it will not *disapprove* technology on certain grounds. That is, the Commission should explicitly indicate some of the uses that will be authorized if implemented consistent with the protection criterion set forth above in (a). For example, the Commission should explicitly indicate that it will approve technologies that:

- Permit recording a program to watch later;
- Allow unlimited physical copying;[12]
- Allow distribution within a home or office environment;
- Allow distribution to a small number of people even across the Internet, so long as it does not permit indiscriminate redistribution to the public;
- Involve software solutions.[13]

These criteria are designed to make the Commission's approval process as lightweight and narrowly focused on the express purpose of the flag regulation as possible. It is hoped that with minimally burdensome and narrowly defined approval criteria, marketplace demands will lead to a diversity of rights protection options for consumers and will ensure that flexible and innovative uses are facilitated. However, CDT believes that procedural safeguards, including a robust oversight mechanism, should be established to ensure that this is the case and that the

[11] This requirement must hold for the distinction between flagged and unflagged content to represent a real choice, as the Commission clearly intends it to. *See, e.g.,* Report and Order, ¶ 37.

[12] The FCC states that it intends for the flag rule to "in no way limi[t] or preven[t] consumers from making copies of digital broadcast content." Report and Order, ¶ 9. *See also* ¶ 38.

[13] The Commission made clear its support for software based protection approaches in the Report and Order. *See, e.g.* ¶ 10, 40, 55.

flag does not, in practice, have unintended chilling effects. We describe these procedural mechanisms in the next section.

4. The Commission Should Adopt a Process for Approving Technologies That Promotes New Ways of Using Content and Is Responsive to Consumer Needs

In its FNPRM, the Commission has sought comments on "whether standards and procedures should be adopted for the approval of new content protection and recording technologies to be used with device outputs on Demodulator Products."[14] The answer to this question is clearly "yes." The Commission also asked "whether content owners are the appropriate entities to make initial approval determinations [for content protection technologies], or whether another entity should have decision-making authority."[15] On this point, we believe that no one industry segment should be able to make initial approval determinations; rather, we believe the best procedure would be based on self-certification followed by a challenge period.

Given CDT's concerns about the flag system's effects on the free flow of information—as well as its ongoing efficacy in protecting marked content—we are particularly focused on the process by which new protection technologies will be approved. The Commission needs to ensure that new technologies are not unnecessarily blocked from reaching the marketplace, and that the list of approved technologies is subject to frequent, public review. The creation of functional criteria as described in Section 3 above may not be sufficient to ensure a balance between copy protection and reasonable uses. Therefore, the process for approving content protection technologies must be open enough, transparent enough, and narrowly crafted enough to allow technologies that permit reasonable uses to be introduced, consistent with the content protection goals of the flag.

We recommend that the Commission (1) adopt a lightweight self-certification process that supports the introduction of new technologies and new ways of distributing content, and (2) create an oversight function to ensure the flag system remains flexible, open, and responsive to consumer needs.

Procedures: We strongly believe that the Commission should not put itself in the position of "approving" a priori particular content protection technologies for marketplace use. Rather, the Commission should allow self-certification and only evaluate technologies if challenged. We list below the key elements of the procedures we recommend:

- *Self-certification:* We applaud the Commission's adoption of an interim process that is based on self-certification.[16] We encourage the Commission to codify a clear self-certification approach: Proposed technologies should be allowed to go on the market unless there is a substantial, empirical, verified showing by qualified technical experts that the proposed technology (i) does not in fact inhibit indiscriminate redistribution of

[14] Report and Order, ¶ 61.

[15] Report and Order, ¶ 64.

[16] Report and Order, ¶ 52.

content to the public online or (ii) is not sufficiently robust so as to frustrate tampering by an average consumer.

- *Challenge:* Notice of self-certification filings should allow a reasonable opportunity for interested parties—particularly content owners—to evaluate and register a challenge with the Commission. If no challenge is filed, the technology should be presumptively authorized. If objections are raised, they should be evaluated and the Commission should rule on them within a reasonably short period of time, to be specified by the Commission in its rules.
- *Opportunity for public notice and comment:* The Commission should ensure that both the interim process and any future, permanent process permit interested parties (both from the private sector and from consumer groups) to comment on challenges. Notice should also be given when technologies are challenged, to enable public comment.
- *Broad initial list of Authorized Technologies:* The Commission should seek to avoid the "lock-in" effect or first-mover advantage that may be created in favor of whatever technologies first self-certify.
- *Ongoing growth of approved technologies*: We encourage the Commission to ensure that the list of certified content protection technologies grows quickly, so that consumer and manufacturer choices of DRM platforms and packages will be meaningful. The "certification window" established by the Commission should never close.

Oversight Board and Review: In an environment of rapidly changing technology, products, and consumer expectations, it is possible that over time the flag regulations may fail to meet their stated goals—for example, by failing to provide baseline content protection, or by failing to permit reasonable uses of content by consumers. We believe that periodic reviews and a robust oversight function that involves outside experts are needed to evaluate the flag regulations over time. Our key recommendations along these lines are:

- *Independent Oversight Board:* The Commission should establish an oversight advisory board made up of individuals from broadly diverse industry and public backgrounds, including representatives of consumers and public interest groups, content producers, manufacturers, and technology companies.
- *Periodic Review:* No less frequently than once per year, this oversight board should report on the status of the flag system's implementation. It should be within the board's mandate to recommend that the flag system be substantially changed, or even discontinued. The board should also have the task of considering whether criteria for content protection technology certification should be changed or removed. The board should consider whether new reasonable uses of digital media are being adequately considered and facilitated. The board should also consider whether the approval process is adequately encouraging the introduction of devices that are interoperable with legacy equipment and with other equipment existing at the time such compliant devices are offered.

We believe that the presence of neutral and technically competent oversight in the overall flag structure will go a long way towards assuaging consumer concerns about the future of reasonable uses of digital media. We stand ready to assist the Commission in developing this oversight function.

5. Defining a "Personal Digital Network Environment" Appears Premature and Beyond the Commission's Jurisdiction

The FNPRM asks whether defining a "Personal Digital Network Environment" (PDNE) would be beneficial. The concept of the PDNE is facially attractive. Defining an environment within which consumers could make essentially unfettered uses of content might beneficially expand the ways consumers could use programs, particularly on digital networks. A definition of a PDNE might make clear that consumers can redistribute programs freely within a home, or watch recorded programs at work or while traveling.

However, CDT is concerned that a definition of a PDNE could serve not only as a floor, but also as a ceiling on reasonable consumer uses of content. There is a risk that the PDNE would become synonymous with all reasonable uses of content by consumers—even if there are valuable and lawful uses outside the PDNE.

CDT believes that defining a PDNE is premature. The technology of digital video use is changing very rapidly. Innovations like TiVo, WiFi, and the Media Center PC, among others, make it clear that how consumers will expect to access and use television is in a state of great flux. In the near future consumers may reasonably want to send programming within a home, to an office, to follow someone when she goes to work or school or the library, and to other family members outside of the home. Attempting to define a PDNE now risks precluding reasonable uses of broadcast television content that we cannot today define.

Most importantly, we believe defining a PDNE is unnecessary at this time. To the extent technologies allow use only within a PDNE, they would by definition not permit indiscriminate redistribution to the public—and thus by definition should be approved technologies. In light of this fact, the extensive, complex, and likely inaccurate rule-making involved in defining the PDNE today would create costs that would provide very little benefit.

If the Commission does decide that it should define a PDNE at this time, we would strongly encourage further fact-finding. Complex questions will be raised, including (to name just a few): How far outside of a home should the PDNE extend (such as, for example, to cars, offices, second homes, family members' homes)? How far outside the immediate family or residents should a PDNE extend?

However these questions are resolved, the PDNE should not leave out the Internet.

Any definition of the PDNE will need frequent reevaluation in light of changing technology and marketplace expectations. We would urge annual reviews of any definitions set, at least for the foreseeable future. We also note that an inquiry into PDNEs would clearly implicate copyright and other policy issues, and would raise serious jurisdictional questions for the Commission.

6. Conclusion: A Narrow Flag Should Not be Viewed as a Precedent for Broader FCC Regulation

We have laid out a set of recommendations about how to best implement the flag in a way that prevents the kind of massive redistribution that copyright holders justifiably fear while also preserving for consumers the reasonable uses that they have come to expect in the age of digital convergence and the Internet. A flag rule that does not permit reasonable use of the Internet would run counter to the convergence trends that offer such vast potential for reasonable consumer use. Such a rule would likely fail both in the marketplace and in the court of public opinion.

The Commission must address another key issue: The Commission must make it clear that the flag cannot be viewed as a precedent for broader regulation of technology. The specific rationale and processes put in place to deal with the special case of broadcast content protection are not sufficient to justify broad re-architecting of all digital technology.[17]

In an era of convergence, the Commission must adopt a form of copy protection that will preserve the open, decentralized version of the Internet that consumers have come to expect. We urge the Commission to adopt rules that protect broadcast digital television as an avenue for the delivery of high-value content in the age of the Internet and that allow consumers to take advantage of the tremendous new opportunities for information access, civic discourse, and economic opportunity represented by the Internet.

Respectfully submitted,

Jerry Berman, President
Alan Davidson, Associate Director
Susan Crawford, Policy Fellow
Paula Bruening, Staff Counsel

Center for Democracy and Technology
1634 I St., NW
Washington, DC 20006
202-637-9800
http://www.cdt.org

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[17] For example, CDT is concerned with the potentially sweeping ramifications of the Commission's apparent intention to consider mandated protection measures for analog outputs (Report and Order, ¶ 26) .To be effective, such a measure would require broad regulation of devices containing analog-to-digital converters, including personal computers and many consumer electronics devices.