



**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the matter of )  
 )  
Digital Broadcast Copy Protection ) MB Docket No. 02-230  
 )  
 )  
 )

**Reply Comments of the  
Consumer Electronics Association**

In its Comments in response to the Notice of Proposed Rulemaking CEA answered in the context of its **Guiding Principles On Intellectual Property Issues**. CEA replies in the same context to the Comments received in this proceeding. The entire set of principles is reproduced as Appendix I.

- I. *Fair Use remains vital to consumer welfare in the digital age. For example, consumers should retain the right to private, noncommercial home recording of content originating as free terrestrial broadcasts, without requirement for authorization or technical restriction as to home recording.*

CEA emphasized that in the particular case of free, terrestrial broadcasts, the public has a well-established stakeholder interest in fair use. CEA believes it is important to maintain this consumer interest and freedom. Therefore, CEA opposed source encryption of terrestrial DTV broadcasts as an alternative to, or implementation of, the "flag" proposal. CEA warned against any use of the flag to impair fair use or otherwise to require a higher level of user authorization for private, noncommercial activities within the home or the home network.

Free terrestrial broadcasts are the only means of acquiring broadcast or published audiovisual content that is *not* subject to some form of contract or license.<sup>1</sup> Broadcasters received use of valuable spectrum without charge, and therefore have obligations to serve the public interest. One such obligation is to avoid imposing any consumer license for reception. Yet imposing license obligations on recipients is a purpose and rationale for any encryption regime: the core idea behind use of encryption for copy control purposes is to impose obligations on those who decrypt.

---

<sup>1</sup> Cable and satellite programming is subject to user agreements; packaged media are commonly subject to "shrinkwrap" licenses or bailment agreements.

No compelling argument has been offered for making such a radical change in the status of consumers who choose to rely on free terrestrial broadcasting. The IT Coalition argues:

[E]ncryption at the source would make industry negotiated consensus solutions similar to that unanimously agreed to by the consumer electronics, movie, and computer industries in the case of DVDs, easier to achieve. Such an approach would relieve the Commission of making decisions that may best be left to the market and would remove any need for the agency to interpret copyright law, action it lacks authority to undertake.<sup>2</sup>

This view seems naïve at best. DVD is an open market format not subject to regulation; there have been different and competitive means of encoding and protecting DVDs.<sup>3</sup> If broadcast encryption is to be standardized, this would involve a public decision, which the IT Coalition seeks to avoid, over the means.<sup>4</sup> If it is not to be standardized, then there must be a public decision, which the IT Coalition seeks to avoid, over converting different encryption technologies to “Table A” technologies for home network use, unless the encryption chosen by *each* U.S. local broadcaster is to be decrypted by *every* home network device. This would turn an *unlicensed* medium to the world’s *most licensed* medium. Royalty fees alone would likely preclude such an outcome. Moreover, unless some single means of encryption is to be chosen universally for *both* broadcast and home network applications, the need to pick “secure” conversion technologies would still force the Commission to, as put by the IT Coalition, “interpret copyright law.”<sup>5</sup>

---

<sup>2</sup> *Comments of the IT Coalition* (“IT”) at 18-19.

<sup>3</sup> Content and players were also marketed in support of a competitive “Divx” format (not related to the present software for MPEG compression).

<sup>4</sup> A voluntary standard, ATSC A/70, involving security modules, exists for encrypted pay services. It was designed for possible use in parallel with unencrypted free service but has never been implemented. It would require a public process, which the IT Coalition seeks to avoid, to modify it for use as universal source encryption.

<sup>5</sup> Actually, the Commission does have jurisdiction to interpret and apply copyright law; it is the case for restricting the function of reception devices for free, terrestrial broadcasts that is weak. In CS Docket No. 97-80, the Commission ruled that, with respect to MVPD navigation devices governed by Section 629 of the Communications Act, questions of copy protection may fall within the ambit of conditional access, which is very clearly recognized as within the Commission’s core jurisdiction over home devices. *Further Notice of Proposed Rulemaking and Declaratory Ruling*, CS Docket No. 97-80, September 18, 2000, par. 28. In the case of the Broadcast Flag, however, there is no congressional mandate similar to the one addressing MVPD subject matter (conditional access) as applied to MVPD devices (navigation devices). Adding encryption to broadcasts through FCC fiat would further burden, rather than strengthen the jurisdictional issue, while doing little or nothing to avoid any of the difficult policy issues pertaining to the Flag that are cited in the *IT* comments.

The IT Coalition also argues that encryption upon broadcast “would eliminate the danger of unprotected demodulation of DTV signals.” But the danger to security posed by any widely or universally adopted system of broadcast encryption seems even greater. The more a single system is used, for both broadcast and network purposes, to lock up a signal that heretofore has been available on a free and unlicensed basis, the more attractive and visceral target such a system would pose for hackers, and the more widespread and irremediable would be the consequences of it being breached.<sup>6</sup> Moreover, the fact that more than 640,000 (and counting) consumers<sup>7</sup> would be left with useless DTV tuners, purchased in reliance on the FCC’s adoption of a DTV transmission standard, would (or at least should) invite a strong moral and legal defense for anyone charged with breaking such encryption in order to restore the functionality of these receivers.

*II. The Supreme Court’s holding in the “Betamax” case has been essential for new and beneficial technology, products, and services to reach consumers. The manufacture, distribution and sale of consumer electronics products and components with substantial non-infringing uses should continue to be legal.*

In its comments, CEA urged public policy adherence to *Betamax* doctrine, in which the Supreme Court interpreted the copyright law as choosing the values of a free market in devices, over concerns that products might be misused.<sup>8</sup> CEA argued that consumer freedom to acquire and use products should not be constrained, even in an ancillary manner, unless there is compelling evidence that absence of a ‘flag’ regime, or the threat of retransmission to the public, has kept DTV content from being broadcast. No such evidence has any been proffered in the comments received by the Commission.

The threat by one commenter, CBS (through its parent, Viacom) to withhold content *unless* the FCC delivers the desired result is not evidence, nor is it based on evidence of present harm.<sup>9</sup> Indeed, in the comments of another broadcaster, ABC, it is admitted that the projected

---

<sup>6</sup> If universal reliance is placed on a single system and a “hack” is easily transmitted to users, it would be an unacceptable imposition on both consumers and commerce to attempt to “revoke” devices or device keys on such a massive basis. *See Comments Of The Computer & Communications Industry Association* at 11 - 12.

<sup>7</sup> CEA Market Research Surveys MS-108 (integrated DTV receivers) and MS-101 (separate DTV receivers), factory to dealer sales through December 31, 2002.

<sup>8</sup> *Sony Corp. v. Universal City Studios*, 464 U.S. 417 (1984).

<sup>9</sup> *Comments of Viacom* at 1.

“tipping point” that could cause it to reassess its DTV broadcasting practices *has not yet been reached*.<sup>10</sup>

ABC’s comments, however, erroneously count CEA among “industry players that have not supported implementation of the broadcast flag.”<sup>11</sup> ABC claims that CEA’s “optimistic” market data and projections for DTV run counter to such “opposition.” CEA’s market projections for the acceptance of DTV and HDTV do not constitute evidence in favor of or against the implementation of a flag.<sup>12</sup> CEA’s position remains simply that there is no evidence of *present* harm or any present basis for the withholding of content. Projections of future consumer adoption of DTV and HDTV display and signal acquisition devices say nothing about the feasibility and prospects for future uploads and downloads of HDTV broadcasts, and whether consumers will ever be appreciable sources for such uploads and downloads.

The ABC/Disney statistics about video “downloads” say nothing about redistribution of HDTV content, or indeed of any content superior in visual quality to that which can be obtained from encoding the present NTSC broadcasts. Other commenters have noted, as a matter of simple physics, the time constraints on such operations, and that it is unlikely, even with improvements in networks, algorithms, and storage devices, for these constraints to be overcome any time soon.<sup>13</sup> Thus, there is no reason to tie a broadcaster’s intentions to broadcast *HDTV* to the amount of “video” redistribution that has been cited. Accordingly, any consideration of a

---

<sup>10</sup> *Comments of the Walt Disney Company and the ABC Television Network* at 3.

<sup>11</sup> ABC/Disney comments at 4. As is reviewed in these Reply Comments, CEA has expressed caution and concern rather than opposition under all possible circumstances.

<sup>12</sup> ABC is correct, however, in its assessment of CEA’s optimism, enthusiasm, and support for the future of program production, transmission, display, and home storage in the HDTV formats. As an association, CEA has committed to supporting the Commission’s efforts to promote and popularize HDTV. Retail prices for HD-capable, large-screen home displays have fallen dramatically in the last year, and they are readily available from all major retailers that stock consumer electronics goods. By contrast, other industries still blame each other as to why major events, shot and produced in compelling HDTV formats, do not receive distribution in an HDTV format in large areas of the country. See, “*Most Cable Viewers Blocked From Access To ABC HDTV Super Bowl Feed*,” National Association of Broadcasters News Release, January 27, 2003; “*Statement Of Dan Brenner, Senior Vice President, Law & Regulatory Policy, National Cable & Telecommunications Association In Response To Statement Of NAB Regarding HD Super Bowl Carriage*,” NCTA News Release, January 27, 2003.

<sup>13</sup> See the chart of download times, assuming a steady (T 1) 1 Mb/s, *Comments Of The Computer & Communications Industry Association* (“CCIA”) at 10, and the consumer hard drive storage requirements for a single HDTV program, as discussed in *Comments of Electronic Frontier Foundation*, (“EFF”) at 4-5. While improvements in compression could make these processes several times faster, this is more than outweighed by the generosity of assuming dedicated and uninterrupted T 1 download speed for consumers, who are much more likely to have cable or DSL modems. As EFF notes, speeds available to consumers are likely to decrease or, at best, remain the same as more consumers share local facilities. Moreover, speeds for *uploads* via cable and DSL modem services -- the tactic that the Flag is designed to frustrate -- are about a third of the download speeds.

flag imposition should be based on calculations of very long range *future* harm, and should be approached very cautiously in light of the potential to impinge on consumer freedoms.

*III. Consumer electronics manufacturers respect and support the intellectual property rights of content owners. However, to the extent manufacturers must constrain product design and performance in favor of such rights, any legally mandated restrictions should be narrowly tailored and construed to protect the right in question, should not unduly hinder technological innovation, and should foster the availability of content to consumers.*

The arguments made by commenters in favor of FCC jurisdiction are stronger with respect to programming and services than they are with respect to design mandates on home networked devices. The Motion Picture Association and its numerous co-commenters (“MPAA”) refer repeatedly to the Commission’s strong and judicially recognized jurisdictional claim over cable television services, and conditional access to them. Based on these precedents, they argue for recognition of a similar regulatory interest in broadcast receivers and downstream products. However, because broadcast reception is governed neither by license nor contract, application to broadcast receivers and downstream devices does not follow.<sup>14</sup> The provisions cited by MPAA are initiatives by the Congress enacted for particular purposes, none having to do with protection of broadcast programming from access, copying, or distribution.

*IV. Legal restrictions against “circumvention” of technical measures should not be interpreted as affirmative design mandates. For example, the Digital Millennium Copyright Act should not be construed so as to mandate design conformance of a consumer electronics product with any particular technical measure other than the defined exception specified in section 1201(k) of the Act.*

In its comments, CEA warned: “Technical mandates should not be lightly imposed or implied. Some, for example, have taken the position that *any* means of copy control or ‘extended’ copy control status (*i.e.*, interface function or viewing resolution) should be regarded as an ‘effective’ technological measure under the DMCA, and a duty of design conformance should then be implied in all products, so as to *make* the measure effective. ***Were this the state of the law, CEA would flatly oppose any implementation of a broadcast flag, voluntary or***

---

<sup>14</sup> See discussion at 29 - 31, *Comments of Philips Electronics North America Corporation.*

*otherwise.*<sup>15</sup> Therefore, CEA argued that any mandate over the design of consumer products that is based on copyright considerations must be accompanied by "encoding rules" that preserve reasonable and customary consumer practices; and that in the case of the "broadcast flag," encoding rules are necessary to prevent application of the "flag" to news and educational programming.<sup>16</sup> These positions are supported by examples given by several other commenters: the EFF re news and scholarship,<sup>17</sup> CCIA re the "no mandate" provision of the DMCA,<sup>18</sup> and the IT Coalition re Encoding Rules.<sup>19</sup>

V. *The right of "first sale" disposition of content protected by intellectual property can and should be clarified to extend to content that has been digitally distributed.*

CEA observed that a controversial issue in "BPDG" deliberations has been the scope of redistribution against which the "flag" should be protective, and argued that there should not be any constraint on retransmission within a circle of friends and family, and this "circle" may appropriately extend both within and outside of the home. Many commenters joined CEA in taking this position. *See, e.g., Comments Of Public Knowledge And Consumers Union*, Appendix at 3-4. Thousands of other commenters expressed similar concerns.

VI. *Legislated protections for "databases" as intellectual property should not be enacted or construed to confer proprietary control over program scheduling information on which consumer electronics devices and their users rely.*

CEA did not note any comments aimed at using flag data so as to exert proprietary control over public information.

---

<sup>15</sup> Such an interpretation would turn an "anticircumvention" provision into a universal compliance mandate for all signaling or marking technologies, even if adopted voluntarily, and even where compliance would frustrate lawful consumer expectations, be prohibitively costly, or require non-compliance with some other measure. The DMCA's "no mandate" provision, section 1201(c)(3), was added, *inter alia*, to avoid such a result. *See* floor statement of Senator Ashcroft, 7Congressional Record, October 8, 1998, S11888, floor statements of Reps. Klug, Tauzin and Boucher on final passage, October 12, 1998, H 10621, October 13, 1998, E2144, October 14, 1998, E2166.

<sup>16</sup> In this respect CEA supports the formulation in the House Energy & Commerce Committee staff draft released prior to the September 25 hearing of the Subcommittee on Telecommunications & The Internet.

<sup>17</sup> EFF Comments at 15.

<sup>18</sup> CCIA Comments at 18.

<sup>19</sup> IT Comments at 31.

VII. *Home recording and piracy should not be confused. Home recording practices have nothing to do with commercial retransmission of signals, or unauthorized commercial reproduction of content.*

CEA warned against all-too-prevalent confusion of the reasonable and customary practices of consumers, and “piracy.” It commented that any mandate arising from this proceeding should proceed from the premise that home network devices are legitimate, and that their functions relied upon for normal consumer activity should not be impaired.

CEA welcomes the recognition of consumer rights and practices as expressed in the NBC comments:

In the analog regime, the consumer, within specific and broadly accepted legal parameters, can copy audio and video content without any real technological barrier. If the digital regime unduly burdens the consumer’s long-established and legal use of content, consumers may be more likely not to embrace digital television, a result that would run counter to a fundamental reason why NBC supports the broadcast flag.<sup>20</sup>

CEA also believes that consumers will embrace not just digital television, but *HDTV*, when they have a reasonable prospect of receiving it at home. To accomplish this will require efforts of all the industries that play a role in the production, distribution, display, and home networking of content. With appropriate guidance from the Congress and the Commission, each industry can do its part without depriving consumers of the freedom and sovereignty they have come reasonably to expect.

### **Conclusion**

Given the concern over the possible ancillary effect of mandates, the lack of evidence of present or near term harm that could reasonably affect the broadcast carriage of HDTV programming, and strong doubts as to whether the Commission, without further congressional guidance, has jurisdiction to impose mandates on broadcast receivers and home-networked devices, CEA believes that the Commission should proceed with work on Broadcast Flag issues, but should receiver further congressional guidance before imposing any mandate on consumer products.

---

<sup>20</sup> *Comments Of National Broadcasting Company, Inc.* at 4.

Respectfully submitted,

*/s/ Michael Petricone*

Michael Petricone  
Vice President, Technology Policy  
703 907-7544

Consumer Electronics Association  
2500 Wilson Blvd.  
Arlington, VA 22201  
February 18, 2003

## **CEA GUIDING PRINCIPLES ON INTELLECTUAL PROPERTY ISSUES**

1. Fair Use remains vital to consumer welfare in the digital age. For example, consumers should retain the right to private, noncommercial home recording of content originating as free terrestrial broadcasts, without requirement for authorization or technical restriction as to home recording.
2. The Supreme Court's holding in the "Betamax" case has been essential for new and beneficial technology, products, and services to reach consumers. The manufacture, distribution and sale of consumer electronics products and components with substantial non-infringing uses should continue to be legal.
3. Consumer electronics manufacturers respect and support the intellectual property rights of content owners. However, to the extent manufacturers must constrain product design and performance in favor of such rights, any legally mandated restrictions should be narrowly tailored and construed to protect the right in question, should not unduly hinder technological innovation, and should foster the availability of content to consumers.
4. Legal restrictions against "circumvention" of technical measures should not be interpreted as affirmative design mandates. For example, the Digital Millennium Copyright Act should not be construed so as to mandate design conformance of a consumer electronics product with any particular technical measure other than the defined exception specified in section 1201(k) of the Act.
5. The right of "first sale" disposition of content protected by intellectual property can and should be clarified to extend to content that has been digitally distributed.
6. Legislated protections for "databases" as intellectual property should not be enacted or construed to confer proprietary control over program scheduling information on which consumer electronics devices and their users rely.
7. Home recording and piracy should not be confused. Home recording practices have nothing to do with commercial retransmission of signals, or unauthorized commercial reproduction of content.