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 AMERICAN ANTITRUST INSTITUTE

Albert A. Foer
President
American Antitrust Institute
2919 Ellicott Street, N.W., Suite 1000
Washington D.C. 20008-1022
(202) 276-6002

Jonathan L. Rubin
Research Fellow
American Antitrust Institute
Law Office of Jonathan L. Rubin
1717 K Street, N.W., Suite 600
Washington, D.C. 20036
(202) 415-0616

Counsel for American Antitrust Institute

February 19, 2003

Table of Contents

Summary

In these reply comments, the American Antitrust Institute ("AAI") urges the Commission to ensure that any digital broadcast copy protection regulations it adopts will promote and protect competition, thereby enhancing consumer welfare.

AAI urges that only upon the demonstrated absence of the efficacy of a voluntary, market-driven approach should a technical mandate be adopted.

In the event a technical mandate in this area is needed, AAI cautions against undue reliance on the *BPDG Final Report* in light of the nature of the BPDG process, which did not include the protections of a formal standard-setting process and did not reach a consensus on many critical issues.

These reply comments also discuss the potential for anticompetitive harm from the adoption of a single set of proprietary technologies as an "approved" copy protection technology in the absence of safeguards designed to avoid the market-distorting effects of the terms of the associated proprietary licenses. Potential anticompetitive harm can also arise from proposed criteria which purport to place approval of technologies in the hands of private parties or groups.

Finally, AAI calls the Commission's attention to the competitive implications of the conflict between copy protection technology and open-source computing platforms and other emerging software technology.

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 AMERICAN ANTITRUST INSTITUTE

1. Introduction and statement of interest.

The American Antitrust Institute ("AAI") hereby submits these reply comments in connection with the Commission's *Notice of Proposed Rulemaking* ("*NPRM*") and certain comments received thereto in the above-captioned proceeding.[1] AAI is an independent research, education, and advocacy organization that supports a leading role for competition, as enforced by our antitrust laws, within the national and international economy. Background on the AAI may be found at www.antitrustinstitute.org, including participation in other matters involving the telecommunications and media industries. We appreciate the opportunity to provide reply comments on the FCC's *NPRM*.

AAI's sole interest in this proceeding is to ensure that any digital broadcast copy protection rules that may be adopted promote competition within the telecommunications and media industries. As a general proposition, AAI is sympathetic to the desire of producers of

[1] *Digital Broadcast Copy Protection*, MB Docket No. 02-230 (rel. August 9, 2002). By *Order* (rel. Jan. 3, 2003) in this proceeding, the Commission extended the deadline for filing reply comments until February 18, 2003.

copyrighted broadcast content to protect such content from piracy and unauthorized redistribution. However, AAI believes that any attempt to regulate broadcast copy protection technology must carefully balance the interests of copyright owners, industry participants, and consumers. Several commentators in this proceeding have alluded to the potential of such regulations to lead to deleterious market effects—including effects on the competitive process, the effect on prices for consumer DTV equipment, and the effect on DTV product and process innovation—while several other commentators give the impression that the potential for anticompetitive effects is not a concern. AAI believes that proposed regulations should be carefully evaluated in light of their potential to distort the functioning of open and competitive markets, and seeks in these comments to point out particular aspects of the regulatory scheme proposed by some parties, and of the issues raised in the *NPRM*, which may have anticompetitive consequences. Accordingly, our comments are limited to what we perceive to be the principal competition policy issues at stake.

In light of the fact that the *NPRM* specifically refers to the *Final Report* of the Broadcast Protection Subgroup ("BPDG") established under the auspices of the Copy Protection Technical Working Group ("CPTWG"),[2] and because many of the issues raised in this proceeding depend on whether and the extent to which the *BPDG Final Report* ought to be the basis for rulemaking in this area, we present first an organizational outline of the

[2]Final Report of the Co-Chairs of the Broadcast Protection Discussion Subgroup to the Copy Protection Technical Working Group (June 3, 2002) ("*BPDG Final Report*"). See *NPRM*, at 1.

5C/MPAA proposal,[3] followed by a list of five aspects of the proposal which we believe implicate antitrust policy issues. The remainder of these comments discuss these issues in greater detail.

2. An outline of the 5C/MPAA proposal and the antitrust policy issues raised.

The 5C/MPAA proposal consists of three main elements:

a. A functional part, consisting of proposed compliance and robustness rules describing how certain directly regulated devices ought to function, including mandates to use certain "approved" technologies for digital outputs and digital recording;[4]

b. Proposed criteria for use by the FCC to guide approval of one or more copy protection technologies for inclusion on a "Table A of approved technologies";[5] and,

c. A technical part, consisting of specific proprietary content protection

[3]For convenience, we will refer to the joint proposal of Digital Transmission Licensing Administrator, LLC ("DTLA") and the Motion Picture Association of America, *et al.,* ("MPAA"), which was broadly based on the *BPDG Final Report* and described in their respective *Comments* and attachments thereto, as the "5C/MPAA proposal." DTLA is the joint-venture licensing authority founded by Hitachi, Ltd., Intel Corporation, Matsushita Electric Industrial Co., Ltd., Sony Corporation, and Toshiba Corporation (sometimes referred to as the "5C"), which administers the licensing of the 5C Digital Transmission Content Protection ("DTCP") technology, a particular technology that can be used to control the unauthorized redistribution of digital video and audio content.

[4]See *Comments* of the MPAA*, et al.*, Attachment B*,* or *Comments* of DTLA*,* Attachment A.

[5]See *Comments* of the MPAA*, et al.*, Attachment C*,* or *Comments* of DTLA*,* Attachment B.

technologies—including DTCP and its associated technologies[6]—which may satisfy the proposed approval criteria, qualifying them for inclusion on Table A.

The first element of the 5C/MPAA proposal is functional only, and as such does not endorse or recommend a particular technology. The compliance rules dictate the manner in which DTV content should be handled by compliant devices, while the robustness rules dictate design criteria for compliant devices. Among the compliance rules are obligations to limit digital outputs and recordings to those protected using approved technologies. Element (b) of the proposal puts forth criteria for approving technology to use in connection with compliant devices governed under element (a). The final element (c) envisages approval by the Commission of one or more technologies which satisfy criteria (b) in whatever form they are eventually adopted. Taken together, these three elements, were they to emerge as the basis of DTV copy protection regulations, would constitute a technical mandate with which all consumer digital TV demodulators, modulators, digital VCRs, DVD recorders, and distribution systems sold or imported into the United States (*i.e.*, all DTV sink and playback devices) would be required to comply.

The five issues raised by the prospect of the adoption of such a mandate to which AAI wishes to draw the Commission's attention are:

a. The extent to which the Commission should adopt regulations that constitute

[6]"Associated technologies" refers to technologies approved by DTLA which are designed to protect DTCP-protected content. These include: High-bandwidth Digital Content Protection ("HDCP," developed by Intel Corporation, license administered by Digital Content Protection, LLC, for protection of content transmitted from DVI outputs); Content Protection for Removable Media ("CPRM," developed by IBM, Intel, Matsushita and Toshiba [the "4C"], license administered by the 4C Entity, LLC, for protection of content on recordable media); and D-VHS (developed by Victor Company of Japan, Ltd. ["JVC"], license administered by JVC, for protection of content recorded on D-VHS). Technically, the 5C/MPAA proposal does not expressly propose DTCP and its associated technology; it merely proposes criteria which it believes DTCP would immediately satisfy.

a technical mandate rather than either adopting regulations which establish only functional criteria or refraining from regulating in this area altogether;

b. The proper weight to be given the *BPDG Final Report* in light of the nature of the BPDG process and the nature of the *Report* itself;

c. The potential for anticompetitive harm from the initial adoption of a single proprietary technology such as DTCP as an "approved" technology;

d. The potential for anticompetitive harm from criteria that allow approval of additional competing technologies by private parties or groups; and,

e. The competitive implications of the conflict between copy protection technology and open-source computing platforms and other emerging software technology.

3. A technical mandate is appropriate only if it is determined that a market-driven solution is not feasible.

The *NPRM* seeks comment on the extent to which the transition to DTV may be slowed by the reluctance of producers of high value programming to release their product for digital broadcast in the absence of a technical mandate protecting content from unauthorized redistribution. AAI takes no position with respect to the extent to which this may be a significant problem. However, even if it were, the Commission would still have numerous alternatives from which to choose. These alternatives range from complete abstinence from regulatory intervention to instituting the type of technical mandate advocated in the 5C/MPAA proposal.

At least two intermediate solutions are also available. One is the limited requirement that the redistribution descriptor as set forth in Document A65/A, Amendment 3 to the ATSC Standard (*i.e.,* the broadcast flag) serve as the basis for any copyright protection technology,

while leaving it to private negotiations and market forces to determine both the functional and technical specifications of such technology. A second intermediate course would be the adoption of functional criteria only, relegating the choice of a specific technology to the outcome of a competitive market process.

The wholly private solution is likely to be consistent with sound antitrust policy if content producers' decisions to withhold programming are made independently. An intermediate policy can also be consistent with good competition policy if private parties adhere to the antitrust standards developed with regard to joint ventures and standard setting procedures. A technical mandate, however, should only be adopted if the Commission determines that neither the private, wholly market-driven solution nor the adoption of intermediate guidelines will be likely to lead, for reasons of impracticality or for some other reason, to an acceptable, market determined outcome. AAI agrees with those commentators who believe that in the absence of a credible showing to the contrary, a private, market-driven solution is likely to yield the greatest benefit to consumers and provide the widest scope for welfare-enhancing competition.[7]

---

[7]See, *e.g., Comments* of the IT Coalition (Dec. 6, 2002), "The IT Coalition and the constituencies it represents have consistently advocated intra- and inter-industry efforts relying on open standards, private agreements, market forces, public education, and enforcement of existing copyright law as preferable to government regulation of information technology devices," at 3. See also, *Comments* of Motorola (Dec. 6, 2002), "As always, the Commission must be cautious regarding any activity that may alter the development of market forces, and the presumption should be against regulation unless a compelling showing is made that government action is necessary to ensure a consumer benefit and advance the public interest," at 2, and *Comments* of the Computer and Communications Industry Association (Dec. 6, 2002), "We believe the market can and should determine which technologies are used to protect digital content," at 21.

4. If a technical broadcast copy protection mandate is deemed necessary, the *BPDG Final Report* should not be accorded great weight in light of the nature of the BPDG process.

If the determination is made that a technical mandate is necessary, AAI urges caution about relying too heavily on the opinions expressed in the *BPDG Final Report*. The BPDG was not organized as, and did not claim to function as, a standard-setting body.[8] Instead, the BPDG was a "discussion group" convened by the 5C/MPAA companies to achieve as much consensus about techniques for the protection of broadcast digital content as was possible in a limited time frame. While well accepted standard-setting procedures involve meetings at which minutes are kept, rules for consensus decision-making are adopted, and a "final report" with which all affected parties agree is issued, none of these characterize the BPDG process.[9]

The *BPDG Final Report* is merely a statement by the co-chairs about the extent to which consensus was reached and the issues on which consensus was not reached. Importantly, the BPDG failed to reach consensus on the following issues:

a. The IT industry does not unanimously support the DTLA/MPAA proposal;[10]

b. Some major non-5C consumer electronics ("CE") manufacturers (*e.g.*, Philips, Motorola) do not support the proposal and do not agree that adoption of the

---

[8]"[T]he BPDG is a discussion group. It is not a standards body or public policy decision-making forum." *BPDG Final Report*, ¶2.10.1.

[9]See *Comments* of the Information Technology Association of America ("ITAA") (Dec. 6, 2002), pp. 9-10, discussing the deviations of the BPDG process from the recommendations in *National Standards Strategy for the United States* issued by the American National Standards Institute.

[10]See, *e.g., Comments* of the IT Coalition (Dec. 6, 2002), *Comments* of the Computer and Communications Industry Association ("CCIA") (Dec. 6, 2002), and *Comments* of the ITAA (Dec. 6, 2002). See also *BPDG Final Report*, ¶¶6.8, 6.9, reflecting reservations expressed by the Computer Industry Group ("CIG") to certain elements of the 5C/MPAA proposal.

proposal would give rise to "a balanced and level playing field among all manufacturers" of DTV devices as DTLA claims;[11]

c. Numerous consumer advocacy groups do not support the proposal;[12]

d. No standard technology (*i.e.*, the Table A technologies) could be agreed upon;[13]

e. No consensus was reached on the appropriate criteria for inclusion of technologies on Table A;[14]

f. No consensus was reached on compliance rules;[15] and,

g. No consensus was reached on robustness rules.[16]

Based on its no doubt limited knowledge of all the circumstances, AAI takes no position on whether the steps taken by BPDG thus far pose any actual or potential antitrust concerns. Going forward, however, AAI believes that it is vitally important in connection with any rulemaking based on all or part of the output of the BPDG, that the Commission resist any temptation to regard the product of the BPDG process as having been achieved through a standard-setting process. Failing to do so raises potential antitrust concerns (discussed more fully below) that would not arise had the *BPDG Final Report* been in fact the product of a formal standard-setting procedure.

---

[11]*Comments* of DTLA (Dec. 6, 2002), p. 2. See *Comments* of Philips Electronics North America Corporation (Dec. 6, 2002) and *Comments* of Motorola (Dec. 6, 2002).

[12]See, *e.g.*, *Comments* of the Arizona Comsumers Council, *et al.* (Dec. 5, 2002), *Comments* of the Home Recording Rights Coalition (Dec. 6, 2002), and *Comments* of the Electronic Privacy Information Center (Dec. 6, 2002).

[13]See *BPDG Final Report,* ¶¶6.6.1, 6.6.2.

[14]See *BPDG Final Report,* ¶2.12.4.

[15]See *BPDG Final Report,* ¶¶3.5, 5.3.

[16]See *BPDG Final Report,* ¶¶5.2.

AAI urges caution on this point because some parties have claimed that the *BPDG Final Report* represents a wider consensus than was actually achieved. For instance, DTLA states that the BPDG was successful in

> balanc[ing] content owners' interests with the rights and expectations of consumers to enjoy and copy broadcast content, and the technical needs of consumer electronics and information technology companies that manufacture products that receive DTV content that may be marked with the broadcast flag.[17]

For the reasons given above, this would appear to overstate the extent to which the BPDG's output represents a cross-industry/consumer consensus.

5. In the absence of sufficient safeguards, the approval of one particular content protection technology as the initial approved technology may confer unfair competitive advantages on its proprietors.

The 5C/MPAA proposal suggests that the 5C DTCP technology would satisfy its proposed criteria, and thus qualify as an initial approved technology. DTCP is a proprietary technology under the exclusive control of the 5C licensing authority, DTLA, the use of which is subject to an extensive licensing agreement, including compliance and robustness rules which may be more stringent than the corresponding rules proposed in the *BPDG Final Report*. Several commentators have raised concerns that, in the absence of additional safeguards, *ab initio* approval of DTCP may lead to anticompetitive consequences. In the markets for both copy protection technology and for CE and computer ("IT") DTV devices employing competitive (*e.g.,* subsequently approved) copy protection technologies, the potential for competitive harm arises from the erection of barriers to entry and consumer "lock-in." In the market for CE devices employing DTCP technology, potential competitive harm arises out

[17] *Id.,* at 1.

a first mover advantage enjoyed by the proprietors of the incumbent technology. Both of these anticompetitive effects potentially occur because of the nature of the terms of the DTCP license.[18]

A. Barriers to entry and consumer "lock-in."

The DTLA license requires all downstream devices (*i.e.*, all sink and playback devices to which a DTCP-compliant receiver may be connected) to be DTCP-compliant.[19] Interface technologies that have received provisional approval from DTLA as DTCP-compliant include D-VHS (for digital videotape), CPRM (for removable media), and HDCP (for DVI outputs). Thus, a receiver with an n-VSB or m-QAM modulator, which could pass the DTV signal through in substantially the same form in which it was received over-the-air, would violate the compliance rules under the DTLA license.[20]

The effect of disallowing outputs of modulated DTV signals from a consumer receiver is not merely that such a restriction has the perverse result of affording a greater degree of protection to signals in the home than they enjoy in the form of over-the-air transmissions, but also, more significantly, that it would impose the requirement that all downstream products would have to be DTCP-compliant. Consumers adopting DTCP-compliant receivers, therefore,

---

[18]The July, 2001 version of the DTLA license for DTCP is available at http://www.dtcp.com/data/DTCP_Adopters_Agreement010730.PDF, last visited Feb. 15, 2003.

[19]DTLA Adopter Agreement, Exhibit B, Part I, ¶¶2.2.1, 4.4.4, July, 2001.

[20]See also *BPDG Final Report,* ¶¶2.12.7, 4.6.b, 5.8, and 5.9, discussing n-VSB- and m-QAM-modulated outputs. The 5C/MPAA proposal allows for consumer modulators, provided they meet with certain requirements. See *Comments* of MPAA, *et al.* (Dec. 6, 2002), Attachment B, or *Comments* of DTLA, Attachment A, ¶X.14. However, DTLA expresses some doubt about the legal authority of the Commission to exercise jurisdiction over consumer modulators, see *Comments* of DTLA, p. 15. Moreover, modulator outputs would still not comply with the DTLA Adopter Agreement as currently constructed.

would be locked-in to devices that are DTCP compliant, since a downstream product that employs any subsequently approved competing copy protection technology that is non-DTCP compliant would be incompatible. All potential downstream entry points for devices that employ competing copy protection technologies, therefore, would be foreclosed. This would extend the influence and control by the proprietary licensor of DTCP beyond the initial receiving device and make something of a mockery of the proposal that an initial technology can be approved while at the same time leaving the door open for the later introduction of competing approaches.[21]

One way of avoiding such a locking-in of all consumers to a single technology would be to approve a number of competing copy protection technologies at the initial stage. However, doing so without also imposing interoperability requirements risks forcing consumers to choose among a set of mutually incompatible technologies. A solution that requires approved technologies to allow the use of any other approved technology as well as a modulated DTV output would greatly lessen compatibility problems.[22]

---

[21]See *Comments* of Philips Electronics North America Corporation (Dec. 6, 2002), pp. 20-28. Philips states, "There is no justification for allowing private parties to impose different and more restrictive rules on downstream sink and playback devices than are imposed on devices that receive DTV content over-the-air in the first instance," at. 20.

[22]The principal technical objection to the consumer modulator according to the *BPDG Final Report* was its potential use in some devices to defeat copy protection schemes found on non-broadcast content, such as DVDs. AIA does not possess the technical expertise to render an opinion as to whether this objection can be easily overcome. However, in light of the immense complexity of the technical scheme the Commission is being asked to consider on the one hand, and the substantial harm to consumer welfare that appears to be at stake on the other, a technical solution that allows consumers to "mix and match" DTV devices employing competing copy protection technologies would seem to be the only way to avoid consumer lock-in and barriers to competitive entry and, therefore, well worth the effort.

B. The incumbent-licensor's first-mover advantage.

The second aspect of the appointment of any proprietary technology which raises anticompetitive concern arises out of the ability of the licensor to amend the license terms. This would apply in the DTCP context to either the DTLA license or the license for any associated technology. Admittedly, the terms of the DTLA Adopters Agreement appear to prevent DTLA from making amendments which "make any material changes to the Specification."[23] However, the licensor would be the final arbiter of which changes are "material," and no such limitation applies to the licensor's compliance and robustness rules.

To illustrate the type of first-mover advantage available to an incumbent-licensor, consider the recent amendment to the compliance rules in the July, 2001 Adopter Agreement pertaining to the handling of "copy once" marked content.[24] The amended specification permits personal video recorders (PVR's, which store video programming on a hard drive for viewing later) to copy "copy once" marked content which would continue to bear the "copy once" encoding for a period of 90 minutes of recording, permitting such "copy once" content to be copied again to removable media. This amendment resolved the argument over storage for a limited time on a PVR, which some CE companies had argued were not "copies." On October 15, 2002, Matsushita, a 5C company, released a new product, the Panasonic Model DMR-HS2 PVR.[25] This product is a combination PVR-DVD recorder, a unit capable of both storing content on its hard drive as well as recording such content on removable media. The license amendment had the effect of bringing this product into compliance with the DTLA license with

---

[23]DTLA Adopter Agreement,¶3.3.1,July, 2001.

[24]DTLA Adopter Agreement, Exhibit B, Part I, ¶¶2.2.1.4, July, 2001.

[25]See *The New York Times*, September 5, 2002, Section G, p.1.

respect to "copy once" content, provided the DVD is recorded within 90 minutes of the initial recording. As a DTLA founder company, it is not inconceivable that Matsushita had advance warning of the impending amendment, potentially imparting to them a first-mover advantage with respect to a product of this type. While there is no reason to believe that Matsushita took any unfair advantage of its position as a DTLA founder, this case illustrates the potential for an incumbent-licensor to take advantage of a self-regulating latitude to amend the terms of its license.[26]

Mitigation of this type of competitive harm would help insure that private parties engaged in product and process innovation face a level playing field. At the same time, advances in copy protection technology itself should be promoted irrespective of the source from which it arises. One approach to mitigation of these problems is to establish an independent licensing authority.[27] Another approach would follow the precedent set in the case of the Serial Copy Management System ("SCMS") developed by Philips for audio CDs. After dedication of the SCMS technology to the public, the responsibility for certification and administration was delegated to the Secretary of Commerce.[28]

---

[26]See *Comments* of Motorola (Dec. 6, 2002), pp. 9-11.

[27]*Id.,* at 11. Motorola recommends such an independent body so that "one entity or group will not be able to dominate the management of the system or its technology."

[28]See 17 U.S.C. §1002.

6. Any criteria adopted for the approval of additional, competing content protection technologies should be non-discriminatory, based on objective standards, and administered by an independent decision-maker.

Innovation is an important antitrust value, and among the most important of the consumer welfare-enhancing benefits of competitive markets. One of the key issues on which consensus was not reached in the *BPDG Final Report* was the nature of the criteria to be employed in determining which copy protection technologies should be approved, *i.e.*, the so-called "Table A criteria."[29] Because adoption of the proposed 5C/MPAA Table A criteria[30] confers on one industry (the content providers) substantial influence over the rights and obligations of another industry (the device manufacturers), AAI believes these criteria are inconsistent with sound antitrust policy.

AAI believes that private parties or groups should not be granted extraordinary influence over the approval process applicable to specific technologies. Despite DTLA's characterization of 5C/MPAA proposed Table A criteria as reflecting "significant marketplace acceptance of a technology,"[31] AAI respectfully suggests that the consensus of a handful of studios and a group of CE suppliers cannot be said to represent "the marketplace." The relevant market must be defined to include the consumer end-users, from whom demand for the products originates.

If indeed specific technologies must be chosen as "approved," and a truly market-driven solution is not feasible, AAI urges the Commission to require all proponents of copy protection

---

[29] *BPDG Final Report*, ¶6.6.

[30] *Comments* of the MPAA, *et al.*, Attachment C (Dec. 6, 2002), or *Comments* of DTLA, Attachment B (Dec. 6, 2002).

[31] *Comments* of DTLA (Dec. 6, 2002), p. 10, referring to proposed criteria (a), (b), and (d).

technology to confront an identical approval process, administered by an independent authority with no stake in the outcome, and governed by an open and transparent procedure which would not favor one technology over another based on the identity or the market power of the party or parties supporting it.

7. The Commission should carefully consider the impact of the proposed robustness rules on open-source software platforms, on emerging software technologies, and on the United States' competitive position in relation to software development overseas.

Finally, AAI urges the Commission to consider the effect of the 5C/MPAA proposed robustness rules on the competitive environment in the software industry, and on the United States' competitive position in relation to software development in parts of the world which may choose not to mandate the type of DTV content technology currently being considered.

Specifically, AAI believes that the proposed robustness rules will have the effect of excluding from the DTV market any IT equipment which operates on an open-source platform, despite the claims made to the contrary by 5C/MPAA.[32] While the open-source movement is attempting to rise to a seemingly impossible challenge—the development of open-source technology which is not user-modifiable—IT equipment running on closed-source platforms will capture the DTV-computer consumer market. Insofar as open-source platforms represent the only source of real competition to Microsoft's Windows(c) operating system, the proposed robustness rules may operate to further entrench the latter's monopoly.

---

[32]"[T]he Broadcast Flag Solution will not, in itself, interfere in any way with continued innovation in the development of open source software. While building a secure open source protection technology will not doubt be a challenge, ... [w]e welcome the efforts of open source programmers to meet this challenge and develop secure digital output protection technologies and recording methods for submission for inclusion on Table A," *Comments* of MPAA, *et al.,* Attachment A, p. 6.

An additional consideration with respect to the software industry, raised by several commentators, involves the emerging technique of software demodulation. The prospect of the development of such software raises the unpleasant specter that the Commission will be faced in the near future with having to either impose additional regulations of questionable legality on yet another sector of the economy, or see the hardware-based protection scheme now being considered irrevocably compromised.

A related concern is the effect on research in this area, which may be stifled or limited by the perception that such activities represent attempts to circumvent DTV copy protection schemes. No such inhibiting influence would affect jurisdictions not subject to the proposed regulations, with the result being that the competitive position of the United States could be compromised with respect to this technology.

8. Conclusion

AAI appreciates both the desire of content providers to minimize the likelihood that copyrighted digital broadcast content is not illicitly redistributed and the difficulties in achieving a voluntary consensus with respect to the adoption of technological solution(s) to accommodate this goal. However, we strongly recommend that any regulation in this area be crafted with care to avoid anticompetitive market effects, and when the difficult choices have to be made, urge the Commission to err on the side of an open, competitive marketplace.

Respectfully submitted,

AMERICAN ANTITRUST INSTITUTE

Albert A. Foer,
President

Jonathan L. Rubin,
Research Fellow

By: Jonathan Rubin

Jonathan L. Rubin
Counsel for American Antitrust Institute
Law Office of Jonathan L. Rubin
1717 K Street, N.W., Suite. 600
Washington, D.C. 20036
(202) 415-0616
D.C. Bar No. 353391

January 19, 2003