

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

In the Matter of

Digital Broadcast Copy Protection

)
)
)
)
)
)

MB Docket No. 02-230

**Public Comments Submitted by
The Information Technology Association of America**

Comment Date: December 6, 2002

TABLE OF CONTENTS

SUMMARY3

I. Statement of Interest4

II. More Work Must be Done Before PBDG Discussions Can be Implemented as Standards.....7

 a. BPDG was not a Standards Body on Which the Commission Can Rely.....8

 b. The Commission Should Establish a Process to Facilitate the Adoption of Voluntary Standards.....8

 c. Important Outstanding Issues Remain Unresolved, Precluding Commission Action on this Record11

 d. The Commission Should Rely on Voluntary Standards Setting Bodies to Do the Work at Hand13

III. The Commission Should Consider Consumer Interests in Any Process Going Forward.....14

IV. CONCLUSIONS.....16

SUMMARY

The Information Technology Association of America (ITAA) appreciates the opportunity to respond to the important questions raised by the Commission's Notice of Proposed Rulemaking in the Matter of Digital Broadcast Copy Protection. ITAA and its members are vigorous advocates of strong copyright protection, while remaining skeptical of the ability of government regulation and government-mandated technology solutions to resolve matters better left to the marketplace and inter-industry standards development processes. The Broadcast Protection Discussion Group (BPDG) accomplished much, but it was not a consensus standards body that developed a record on which the Commission can rely for regulations or objective standards to which technology developers can create compliant products. There are good reasons to proceed on the basis of voluntary, consensus-based standards setting, rather than the output of the BPDG. Too many BPDG issues were left unresolved for a "parallel group" that some would argue has been convened at the Commission. Instead, the Commission should rely on a voluntary standards body to resolve outstanding issues. Particularly important are the rules for "robustness", which should not result in pricing consumer equipment out of the consumer market. There also needs to be a reaffirmation that the goals for consumer use of content announced in the BPDG final report, will in fact be attainable using the copy protection technologies that should be developed to comply with anticipated standards.

Over the years, the copyright law has recognized the need, in the end, to encourage technological innovation while protecting copyrighted material from

infringement. The Commission should tread lightly in this area, and be mindful of the need for this balanced approach.

I. Statement of Interest

The Information Technology Association of America (ITAA) hereby submits comments in response to the Commission's Notice of Proposed Rulemaking seeking comment on whether a regulatory copy protection regime is needed within the limited sphere of digital broadcast television.¹ The ITAA provides global public policy, business networking, and national leadership to promote the continued rapid growth of the IT industry. ITAA consists of over 400 corporate members throughout the U.S., and a global network of 49 countries' IT associations. The association plays the leading role in issues of IT industry concern including information security, taxes and finance policy, digital intellectual property protection, telecommunications competition, workforce and education, immigration, online privacy and consumer protection, government IT procurement, human resources and e-commerce policy. ITAA frequently appears before the FCC as a participant in Commission rule making proceedings related to various aspects of telecommunications policy. ITAA members range from the smallest IT start-ups to industry leaders in the Internet, software, IT services, ASP, systems integration, telecommunications, and enterprise solution fields. For more information and a complete list of members, visit [www . itaa . org](http://www.itaa.org)².

¹ *Digital Broadcast Copy Protection, Notice of Proposed Rule Making*, MB Docket No. 02-230, FCC 02-231 at ¶ 3 (rel. Aug. 9, 2002) ("NPRM").

² Spaces have been added to web site citations to ensure that they are not active links, in conformity with Commission electronic filing requirements.

Last spring, ITAA launched its Interactive Television Council (iTV Council), which was founded by companies leading the development of interactive and enhanced television technologies to promote the development and deployment of these technologies and related services in order to enhance the TV consumer experience. Interactive and enhanced television includes technologies and services such as video on demand, electronic programming guides, customized and localized information (such as news, weather and sports), Internet access, games, digital video recording, and T-commerce (TV-based shopping and banking), as well as viewer-to-viewer applications such as email, chat and game networks.³ The Council's mission statement highlights the promise of interactive television to transform the television viewing experience for consumers around the world. While their technology may be new to many Americans, market research firm IDC expects interactive television services will reach 36 million U.S. households by year-end 2005. The interests of these companies in the questions raised by the Commission's NPRM are substantial and self-evident from their participation in today's television industry as it reshapes itself into the future

ITAA, on behalf of its broad membership, is a vigorous advocate of strong copyright protection for our valuable intellectual property – without which our industry could not survive, much less prosper. At the same time, ITAA member companies are skeptical of the ability of government regulation and government-mandated technology solutions to resolve problems better left to the marketplace, private agreements, inter-

³ Members of the iTV Council are listed on the ITAA web site at www.itaa.org/isec.itvc.cfm

industry standards development, consumer education and enhanced law enforcement to address problems of copyright piracy in the emerging digital environment.

Twenty years ago, if most ITAA members had been asked about their interest in “the limited sphere of broadcast television”⁴, the vast majority of them would have expressed the view that it was a separate industry of little pressing interest except as another important customer (among many) for IT goods and services. That of course is not the case today. The “limited sphere” described by the Commission is not necessarily as limited as it may at first appear. Most discussions of broadcast content copy protection turn quickly to discussions of “the Internet” as one critically important venue for “unauthorized redistribution” of broadcast DTV content.⁵ All of the members of ITAA have a strong and immediate interest in the current and future health and growth of the Internet. Anything that might affect its unregulated character, openness and flexibility is of immense interest to the broad ITAA membership.

It has almost become a cliché to note that the grand “convergence” of computing, telecommunications and broadcast/television technologies is finally beginning to take shape. Today, with cable television service providers taking a significant share of the market for high speed Internet access through cable modems; with companies like SONICBlue and TiVo using information technology to create “personal video recorder” products for television, (the Replay TV and the TiVo Personal Digital Recorder,

⁴ Id.

⁵ Whether the scope of the discussions of the Broadcast Protection Discussion Group (BPDG) covered just the Internet or other forms of redistribution as well, was one of the many unresolved issues left for another day. See Broadcast Protection Discussion Group, *Report of the Co-Chairs*, at ¶ 5.1 (June 4, 2002) (“*BPDG Report*”)

respectively)⁶ and with computer hardware and software companies introducing personal computers and operating systems optimized to serve as “media centers”⁷, the convergence is becoming a reality. This is the impetus for the creation of the ITAA’s iTV Council and it is a perspective that informs these comments.

ITAA offers the following specific comments in response to questions raised by the Commission’s NPRM.

II. More Work Must Be Done Before BPDG Discussions Can Be Implemented as Standards

The Commission requests comment on the issue whether it should “adopt rules or create some other mechanism to resolve outstanding compliance, robustness and enforcement issues”⁸ that were left unresolved by the high level consensus reached by participants in the BPDG process. The answer is a resounding and unequivocal “yes”: The outstanding issues must be resolved before any implementation of any technological copy protection methods can be contemplated.⁹

⁶ Both companies are founding members of the ITAA’s relatively new iTV Council.

⁷ See, e.g., “HP Defines the Digital Lifestyle with New HP Media Center PC” (Hewlett Packard Company press release, September 3, 2002) w w w. hp. com/ hpinfo/ newsroom/ press/ 03sep02b .htm (last visited December 2, 2002); “Introducing the Media Center PC [with Windows XP Media Center edition]” (Information on the Microsoft corporate web site, www. microsoft. com/ windows/ ehome/ introducing/ introducing. asp, last visited December 2, 2002) Microsoft Corporation is also a member of the iTVC.

⁸ *NPRM* at ¶ 4.

⁹ The Commission conditions this request for comment on several important preliminary matters, including whether the problem identified by content providers is (a) as serious as portrayed, in terms of withholding content from free, over-the-air digital broadcasting and (b) as critical as portrayed to delaying the DTV transition. The Commission’s request must also be conditioned on whether it in fact has jurisdiction to require the implementation of any rules and regulations in this area. While the ITAA has decided not to address those issues at this time, the lack of comment should not be taken as assent with the view that the problem is as portrayed and the jurisdiction of the FCC is adequate. There are many, well known reasons for the pace of the DTV transition, from the cost of reception equipment and the difficulties of over-the-air digital broadcasting, to the status of “must carry” rules as they apply to cable systems and DTV broadcast

a. BPDG was not a Standards Body on Which the Commission Can Rely

The BPDG was, as its name implies, a “discussion group.”¹⁰ In the words of its Final Report, BPDG was “not a standards body or public policy decision-making forum”¹¹ and its purpose “was not to develop complete consensus” but was to “evaluate proposed solutions to the stated problem.”¹² The BPDG was an intense process that involved a large number of participants and a great deal of effort. It went as far as it could go, and by any measure, must be considered to have achieved a great deal.¹³ But it was not intended to, and did not, provide the Commission with all of the raw material needed to implement any regulation on this record, assuming the Commission were to decide such regulation was appropriate and within its jurisdiction. The consensus that the BPDG did not reach on compliance, robustness and enforcement must be reached now, before implementation can be contemplated.

b. The Commission Should Establish A Process to Facilitate the Adoption of Voluntary Standards

What is needed is the “standards body” that BPDG was not. Why? If the Commission determines that a broadcast flag implementation strategy is indeed required, then it must see to it that the discussions of the BPDG are converted, after appropriate

signals, to name just a few. And the Commission’s jurisdiction should not be lightly presumed. The ITAA urges the Commission to consider all of these issues very carefully.

¹⁰ *BPDG Report* at ¶ 2.10.1

¹¹ *Id.*

¹² *Id.* At ¶ 2.10.2

¹³ *Id.* at ¶ 4, summarizing the consensus reached.

process, into the output of a consensus-based standards body. Consensus standards, which support the foundations of the American economy, need to be established in this matter. Such standards drive innovation, encourage the proliferation of new technologies and competition, foster interoperability, bolster manufacturing efficiencies and benefit consumers by enhancing price-competitive markets. Such standards reflect a consensus among all affected interests, including content providers and technology developers. The BPDG output is not a consensus standard.

The American National Standards Institute's "National Standards Strategy for the United States"¹⁴ outlines a set of principles for successful standards development that meet "societal and market needs":

In successful standards processes

- Decisions are reached through *consensus* among those affected.
- Participation is *open* to all affected interests.
- *Balance* is maintained among competing interests.
- The process is *transparent* — information on the process and progress is directly available.
- *Due process* assures that all views will be considered and that appeals are possible.
- The process is *flexible*, allowing the use of different methodologies to meet the needs of different technology and product sectors.
- The process is *timely*; purely administrative matters do not slow down the work.
- Standards activities are *coherent*, avoiding overlap or conflict.

¹⁴ <http://www.ansi.org/Public/nss.html> (last visited December 2, 2002)

Successful standards processes yield the right results

- Standards are *relevant*, meeting agreed criteria and satisfying real needs by providing added value.
- Standards are *responsive* to the real world; they use available, current technology and do not unnecessarily invalidate existing products or processes.
- Standards are *performance-based*, specifying essential characteristics rather than detailed designs.¹⁵

Contrast this set of principles with the proposals before the BPDG for criteria to be used to determine whether a particular technology should be “authorized” as a “digital output protection technology or recording method” and listed on the group’s approved technology list, known as “Table A.”¹⁶ Basically, Table A does not describe standards, it identifies the names of technologies “approved” by the content owner community involved in BPDG. That is simply not a set of “standards” to which manufacturers of hardware or software can be held accountable. There was no method for establishing “consensus” as that term is understood in standards-setting, and there was no way to insure a transparent process with the other features so important to proper standards-setting. It is significant that both the Computer Industry Group (CIG), which participated in one of the proposals advanced at the end of the BDPG process, and Philips Corporation, which advanced the other proposal, call for the creation of independent, objective criteria that do not depend on content owner “use or approval.”¹⁷ Their views

¹⁵ Id. at “III – Principles”

¹⁶ See BPDG Report at ¶¶ 6.6, and Tabs F and G.

¹⁷ BPDG Report at ¶¶ 6.8 (CIG proposal for an issue for the BPDG ‘parallel group’); 6.6 (summarizing the Philips proposal at tab G)

should be given great weight by the Commission in this proceeding. The BPDG process did not meet the criteria laid out for a successful standards-making process, whether under the ANSI umbrella or some other auspices.

c. Important Outstanding Issues Remain Unresolved, Precluding Commission Action on this Record

Attacking the problem as a standards-setting process would require consideration and resolution of a number of issues that were left unresolved by the work of the BPDG, not the least of which is known as the “robustness” issue. If the Commission undertakes its own procedure at this point, it should consider carefully how this issue is to be resolved.

In this context “robustness” refers to the ability of a copy protection solution to withstand attack by consumers and others who may be interested in “hacking” the system to disable copy protection features or otherwise work around them. This debate shows up at more than one point in the BPDG report¹⁸, but the burden of the discussion is the same: Should technology developers be required to produce systems designed to withstand the attack of a consumer equipped with widely available tools, or should they be required to produce to designs intended to resist the attack of a determined professional system hacker with access to obscure tools and production testing methods (readers for EPROMs, Erasable Programmable Read Only Memory semiconductors that might

¹⁸ See for example, the discussion whether the requirement that products be made in a manner “clearly designed to effectively frustrate” attacks sets the right tone or incorrectly suggests an overly ambitious requirement for “foolproof design”, BPDG Report at ¶ 5.5; and the discussion whether robustness requirements should be set by the level of tools needed to do the job, or the level of skill of the person engaged in circumvention; id. at ¶ 5.2.

contain security coding information or content in an unprotected format, were cited in the discussion).

Several important principles are at play here. The first is consumer cost: the more “hardened” the equipment is to withstand professional attack, the more it will cost to produce for the mass markets of consumer electronics in the converging digital age. There clearly is a point where the cost of compliant equipment becomes an impediment to consumer acceptance and the market is constricted, or even hobbled. The interests of content owners in protection against infringement have to be balanced against this marketplace reality. Consumer education about piracy and introduction of new digital content services offering value-added services in competition with so-called “free” sources of content, will pay a bigger return than “overly robust” consumer equipment. Second, this emphasizes the fact that there is no “100% solution” to this problem. While consumer piracy can and should be limited, the goal of eliminating it is simply not realistic. Third, it is worth pointing out that if the target is the determined professional hacker-pirate, a better method of attacking this target is enhanced law enforcement, not hardened consumer gear, especially given the availability of “professional equipment” made for the industry (studios, TV broadcasters, satellite and cable operators and possibly others) and exempt from the broadcast flag recognition and control requirements, which will be available in carefully controlled quantities under any solution proposed here.¹⁹ The possibility of acquiring such equipment on a “black market”, however illegal and repugnant it may be, cannot be discounted. If professional hackers have any chance to

¹⁹ BPDG Report at ¶ 4.12.

find professional equipment, what is the point of making consumer equipment sufficiently “robust” to withstand professional attack?

d. The Commission Should Rely on Voluntary Standards Setting Bodies to Do the Work at Hand

Finally, who should constitute this “standards body”?²⁰ It could of course be the Commission, and many of the Commission’s questions in its NPRM imply the Commission in such a role.²¹ At the same time, however, the Commission recognizes that it could “create some other mechanism” to resolve the outstanding issues²², and this would seem the preferable course. As the American National Standards Institute has pointed out, “Congress has directed federal agencies to rely on voluntary consensus standards where compatible with their mission.”²³ A private, voluntary standards body has not failed – the BPDG was not such a body, and within its limited mandate it should not be deemed a failure. The standards process has not yet been given a chance to work. That step should be taken before any other. Such a process may eliminate, or at least minimize, the need for regulation currently under consideration by the Commission.

²⁰ See NPRM at 7, requesting comment on the makeup and identity of an “entity” to determine eligibility for technological solutions. Rather than “eligibility”, the entity should determine the objective criteria to which device manufacturers have to produce in order to meet the standard for protection technologies; a standard which does not as yet exist in final form.

²¹ NPRM at ¶ 4.

²² Id.

²³ National Standards Strategy for the United States, *supra* note 14, at “I – Introduction”, and citing the National Technology Transfer and Advancement Act of 1995, Pub. Law. 104-113, as “promoting increased use of voluntary standards for regulation.”

III. The Commission should consider consumer interests in any process going forward

Much has been written elsewhere about the relationship between “fair use”, a defense to a claim of copyright infringement under federal law²⁴, and the uses of copyrighted content by consumers, both in digital and in other formats. The Commission may wish to limit its consideration of such issues, given that copyright law and policy are generally outside its scope of work, but it need not, indeed it should not, avoid the subject altogether. Take the trail blazed by the BPDG and follow it to its conclusion.

While some participants took the view that “fair use” considerations were simply outside the scope of the BPDG’s work²⁵, a consensus appeared to have been reached on two requirements of any final product that may emerge from the process started by the BPDG discussions:

- 4.7 The requirements to protect digital recordings should not interfere with the ability of consumers to make secure copies of DTV content marked with the Broadcast Flag, either on personal video recorders (*e.g.*, a hard-disk based device such as TiVo or ReplayTV) or on removable media (*e.g.*, on D-VHS tapes or DVD recordable discs). Similarly, the requirements to protect digital outputs should not interfere with the ability of consumers to send DTV content across secure [home and personal digital networks], such as a home digital network connecting digital set top boxes, digital recorders, digital servers and digital display devices.²⁶

First, these requirements should be affirmed by any action the Commission takes, especially in light of concerns of some members of the BPDG process that while the

²⁴ 17 U.S.C. §107.

²⁵ See BPDG Report at ¶ 4.7, footnote 12.

²⁶ Id at ¶ 4.7. Original Footnotes omitted. Language in brackets in original.

goals were set, the commitment to them was ambiguous.²⁷ Second, to the extent that they are at present less than clear, they should be clarified.²⁸

Another unresolved issue left by the BPDG process is the question of product obsolescence. A consensus could not be reached on several fronts, particularly the questions of when new rules should go into effect for content protection, and what should be done about a generation of DVD players and recording devices now on the market.

Any new rules and production requirements for manufacturers should not go into effect until standards have been set, multiple technologies are available to meet the standards, and manufacturers have sufficient time to incorporate new technologies into their products. This is not procrastination, but simply the orderly transition to a new technology. To move too fast would be to move before the benefits of a voluntary standards setting process would be realized. Innovation, instead of being encouraged, would be stifled.

As for concerns over the backward compatibility of new DVD recording and playback devices with the 30 million or so existing DVD players now in home use²⁹, those concerns should be fully aired in the course of any voluntary standards process, or if necessary, at the Commission itself.

²⁷ See BPDG Report at ¶ 2.12.1, comments of the Consumer Electronics Co-Chair.

²⁸ The language contained in brackets in the indented quotation of paragraph 4.7, supra, was placed in “indentations” to convey the need for that language to be considered by a subsequent group working on additional definitions and other issues. See BPDG Report at ¶ 4.7, note 11; and ¶ 5.1.

²⁹ See BPDG Report at ¶ 2.12.5 (comments of the Consumer Electronics Co Chair); and 5.3.

IV. Conclusions

Copyright law has well served the United States economy and the information technology industry in the second half of the 20th Century. The IT industry has emerged as a transforming force in the economy, one of the largest economic sectors and an enabling technology that has changed the nature of our economy, almost beyond measure. Every industrial sector has been affected. IT remains a potential source of tremendous growth in the economy. New industrial sectors have grown up around IT; as well as new methods of learning, new forms of entertainment, new ways to deliver government services. And the copyright law has been there, to provide the legal protection necessary to nurture this growth and innovation and protect the valuable intellectual property involved from infringement and piracy. Information Technology is without a doubt one of the most important “copyright industries.”³⁰

One critical feature of copyright law has stood out as important to these developments: The law, while providing critical protection, has evolved to show itself open and flexible to innovative technologies, and to do so, it has had to adopt a balanced approach, taking into account the concerns and interests both of copyright proprietors and the consumers of copyrighted information. True, as has been pointed out elsewhere, almost every innovative information technology of the 20th Century, from piano rolls to broadcast radio to photocopiers and video cassette recorders, has been resisted by copyright owners more comfortable with the status quo. But the point is that the law has ended up as a champion of innovation, not an impediment to it, while continuing to offer

³⁰ Indeed when export trade and jobs statistics and similar indices of importance for the “copyright industries” are compiled and released, those indices usually include information technology.

protection to owners of copyrighted works.. The same is true for software, which the law had the flexibility to protect as “written work”, and which the courts have studied carefully (and sometimes exhaustively) over the years to strike the right balance between the copyright interests in the “expression” of software and those seeking to parse out functional elements in the code.

This balanced approach does not come about by happenstance, and it is never perfect or settled. It is worth keeping in mind, however, that this is simply a different formulation of the fundamental goal of copyright law enshrined in the Constitution: “To promote the progress of science and useful arts”³¹. The struggle in a rapidly changing technological environment is always to maintain a balanced law that supports innovation while protecting intellectual property rights.

The Commission finds itself in the midst of this discussion, and has a responsibility to act in ways that are narrowly circumscribed to take into account the full range of the public interest. In the present case it seems clear enough that the

³¹ U.S. Const. Art. 1, Sec. 8, Cl. 8. The entire clause reads “The Congress shall have power . . . To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”

Commission would run a great risk of upsetting both the balance of the law and its support of innovative technologies if it were to mandate “a regulatory copy protection regime . . . within the limited sphere of digital broadcast television” at this time, on the basis of the discussions held by the Broadcast Protection Discussion Group, no matter how much proponents of government mandates try to supplement those discussions on this record. The matter is not ripe for Commission intervention beyond, at best, support for a private standards setting body charged with taking the next steps.

Respectfully submitted,

INFORMATION TECHNOLOGY
ASSOCIATION OF AMERICA

By /Signed/_____

—

Joseph Tasker, Jr.
General Counsel
1401 Wilson Boulevard, Suite 1100
Arlington, Virginia 22209-2318
(703) 284-5331

December 6, 2002