DON’T MESS WITH SUCCESS: GOVERNMENT TECHNOLOGY MANDATES AND THE MARKETPLACE FOR ONLINE CONTENT

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INTRODUCTION

In Las Vegas each January, the International Consumer Electronics Show features a huge display of new innovative computer and consumer electronics devices. These devices range from MP3 players that fit in the palm of your hand to car stereo speakers so large they can only fit in the trunk. This year’s show was the biggest ever – taking up not only the entire Las Vegas Convention Center, but several adjoining buildings as well. But while the show’s sheer size is noteworthy, what made the 2006 “CES” truly unique were the newly forged partnerships between technology companies (consumer electronics and computer companies) and content companies (the movie studios and record companies).

While the tech and content industries tend to be at odds over issues like copyright and technology mandates, there appeared to be a détente in this post-\textit{MGM v. Grokster} era. Content providers and electronics makers showcased a slew of partnerships and innovative devices at the 2006 CES:

1. Microsoft demonstrated new versions of its Media Center software that enables the playback of a consumer’s favorite media, whether on the individual’s home office monitor, living room television, or PDA. The company has also developed a new music service in conjunction with MTV, VH1, and CMT music channels.

2. Innovators like DigitalDeck, NewSoft, SlingMedia, and Sony each have developed competing technologies that allow consumers to remotely watch the television playing in their living rooms on a laptop, mobile phone, or portable gaming console.

* President, Public Knowledge, www.publicknowledge.org. I would like to thank Public Knowledge legal intern and NYU Law School 2L Timothy Schneider for his research and drafting assistance.
3. Yahoo! announced the development of software and services that enable consumers to view, create, and share content between their mobile phones, computers and living rooms, all using the Internet.

4. Google developed a distribution system to allow anyone to provide videos for free or for sale, and allow others to download that content to a computer, Apple iPod, or Sony PlayStation Portable (PSP). Google has already announced content distribution agreements with large content providers like CBS and the NBA. NBC, ABC, CBS and Fox are similarly distributing programming in partnership with Apple’s iTunes.

5. TiVo displayed a soon-to-be-released software update that makes it simple for consumers to watch their favorite television shows on popular players like the iPod and PSP. And the recently released next generation TiVo recorder allows consumers to record over-the-air high-definition television.

6. Together, XM Radio and Pioneer developed an innovative portable satellite radio player that allows consumers to automatically record their favorite songs or shows while they are being broadcast. A consumer’s preferences are stored on the radio, and when connected to a computer, XM’s software helps the consumer to find more information about the artists, purchase music through the new Napster, and discover other songs and shows by similar artists.

The message of the show was clear. The market for delivering content digitally over new technologies is working. Consumers can watch and listen to the content they purchase anytime and anywhere they want. Digital Rights Management (DRM) tools will protect some of that content, and consumers can decide whether that protection is flexible enough for their needs. All of these great developments happened without government intervention.

The public appetite for buying individual TV shows and songs online is growing by leaps and bounds. There are more ways than ever to watch TV and movies and listen to music. Thirty-five million episodes of free over-the-air TV shows were downloaded from iTunes for $1.99 each from October 2005 to July 2006. In February, iTunes announced that it had sold its one-billionth song. ABC/Disney’s recent experiment,

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offering some of its most popular programming for free viewing over the Internet, was a wild success; they plan to expand their offerings in the fall.\footnote{Frank Ahrens, "ABC Encouraged by Internet TV Trial," Wash. Post, June 21, 2006, at D2.} Warner Brothers announced that it would sell TV shows and movies via Bit Torrent, the powerful file sharing software.\footnote{Burt Helm, "BitTorrent Goes Hollywood," Bus. Wk., May 9, 2006, available at http://www.businessweek.com/technology/content/may2006/tc20060508_693082.htm.} The Slingbox, which permits an individual to watch their local TV and cable stations remotely on a computer, is one of the hottest new consumer electronics devices. And sales of high-definition TV sets (HDTV) are skyrocketing.

Yet even as innovators in the content industry promote these alternative distribution technologies, the very same content industry wants Congress to step in and give it protection from the vague threat of massive copyright infringement they believe these new technologies could facilitate. Importantly, the content industry has yet to show any infringement that has resulted from these technologies, nor have they shown that government technology mandates will effectively stop actual copyright pirates, rather than prevent ordinary consumers from engaging in lawful activities.

The content industry is asking Congress to impose three technology mandates: the broadcast flag, radio content protection and an end to the “analog hole.” Each mandate 1) injects government into technological design; 2) places limits on lawful consumer activities; and 3) increases consumer costs. Once consumers start to purchase devices that are compliant with these technology mandates, the costs will be enormous. For example:

1. A consumer would not be able to record over-the-air local news on her broadcast-flag compliant digital video recorder in her living room and play it back on a non-compliant player in her bedroom (broadcast flag).
2. A member of Congress could not email a clip of his appearance on the national news to his home office (video broadcast flag).
3. A consumer would not be able to record analog home movies using a digital camcorder and transfer them to a computer in order to make a DVD (analog hole).
4. A student would be prohibited from recording excerpts from a DVD for a college Powerpoint presentation (analog hole).
5. A consumer would be unable to record individual songs off digital broadcast and satellite radio (audio broadcast flag).
6. A university could not use digital TV video clips for distance...
In light of recent marketplace developments, calls for these technology mandates raise several important questions. Is it good policy to turn the Federal Communications Commission into the Federal Computer Commission or the Federal Copyright Commission? Is it good policy to impose limits on a new technology like HD Radio (that unlike digital television, consumers need not adopt) that may well kill it? Is it good policy to impose a technological mandate (like the broadcast flag and closing the analog hole) that would result in consumers having to replace most of the new devices that they just purchased?

There are better alternatives for protecting digital content than heavy-handed “tech mandates.” Those alternatives are a multi-pronged approach of consumer education, enforcement of copyright laws, new business models for content distribution and the use of technological tools developed in the marketplace, not mandated by government. The *MGM v. Grokster* decision and the passage of the Family Entertainment and Copyright Act are just two of several new tools that the content industry has at its disposal to protect its content.

I. TECHNOLOGY MANDATES HARM INNOVATION AND ARE COSTLY AND INCONVENIENT FOR CONSUMERS

I served as counsel to the nine public interest and library groups that successfully challenged the Federal Communications Commission’s (FCC) video broadcast flag rules in the United States Court of Appeals for the District of Columbia Circuit. The broadcast flag is a series of bits embedded in a digital TV signal that, if activated, prohibits all online distribution of part or all of that signal. Public Knowledge financed and coordinated the case, *American Library Association v. FCC*, 406 F.3d 689 (D.C. Cir. 2005). The court ruled that the FCC lacked the authority under the Communications Act to require technology manufacturers to build their devices to read and obey the broadcast flag.

The impact of the D.C. Circuit’s decision vacating the broadcast flag rules goes far beyond the ability of citizens to make non-infringing uses of copyrighted material they receive on free over-the-air broadcast television. Equally as important, the court’s ruling limited the power of a government agency that, in the court’s own words, has never exercised such “sweeping” power over the design of a broad range of consumer electronics and computer devices. In doing so they affirmed the hands-off approach that has fostered a robust marketplace for electronic devices and has made this country a leader in their development and manufacture.

For this reason, any attempt to portray legislative reinstatement of
the broadcast flag rules as “narrow” should be viewed with great skepticism. The rules put the FCC in the position of deciding the ultimate fate of every single device that can demodulate a digital television signal, or that can connect to such a device (so called “downstream devices”). The broadcast flag rules require the FCC to undertake a “certification process” to pre-approve television sets, computer software, digital video recorders, cellphones, game consoles, iPods and any other device that can receive a digital television signal.5 This certification process places the FCC in the position of dictating the marketplace for all kinds of electronics.

The agency has neither the resources nor the expertise to engage in this kind of determination. This type of government oversight of technology design will slow the rollout of new technologies and seriously compromise US companies’ competitiveness in the electronics marketplace.

Some argue that the initial FCC certification process worked because all thirteen technologies submitted to the agency were approved. This is a very superficial view of that process. First, several manufacturers removed legal and consumer-friendly features of their devices before submitting them to the FCC, largely at the behest of the movie studios. Second, the changing nature of the FCC and its commissioners is likely to make for widely varying results. Given the fervor of then-Commissioner Martin’s dissent to the Commission’s approval of TiVo-To-Go, it is unlikely that such technology would be certified today under Chairman Martin’s FCC.6

The constraints imposed on device manufacturers have repercussions for consumers beyond the availability of certain convenient features. To preserve the integrity of the copy protection measures, flag compliant devices will not interoperate with non-compliant devices, rendering millions of pre-Flag consumer devices obsolete. The FCC’s certification process exacerbates this problem: none of the thirteen different technologies approved by the FCC in its interim certification process work with one another other. This means that a consumer who buys one Philips brand flag-compliant device must buy all Philips brand flag-compliant devices. Not only will this raise consumer transition costs, it raises serious questions about vendor lock-in and its impact on competi-

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5. Transcript of Oral Argument at 31, Am. Library Ass’n v. FCC, 406 F.3d 689 (D.C. Cir. 2005) (D.C. Circuit Court Judge Harry Edwards noted this reach at oral argument when he said, “You’re beyond transmission. . .I mean you’re out there in the whole world regulating. . .I mean, I suppose it will be washing machines next.”).

Proposals to mandate content protection for digital broadcast and satellite radio would similarly place the FCC in the position of mandating the design of new technologies. For example, H.R. 4861, the Audio Broadcast Flag Licensing Act of 2006, gives the FCC the authority to adopt broadcast flag-like regulations governing all “digital audio receiving devices.” In the case of so-called High-Definition (or HD) Radio, this could destroy this new technology at birth. Digital broadcast radio benefits consumers through improved sound quality (particularly for AM radio) and gives radio broadcasters the capacity to provide additional program streams and metadata. Unlike digital television, however, consumers need not purchase digital broadcast receivers to continue receiving free over-the-air broadcast radio. Certainly, if digital radio receivers have less functionality than current analog radio receivers, consumers will reject them and the market for HD radio will die.

In the case of digital satellite radio, mandated radio content protection has the potential to cripple this increasingly popular, but still nascent, technology. XM Radio now has nearly seven million subscribers, and Sirius Radio recently passed the four million subscriber mark. Consumers are buying all types of receivers for those services, based in part on the new flexibility and features the equipment offers, such as the ability to store, disaggregate and play back individual songs. The type of content protection the recording industry seeks would likely slow this incredible growth.

7. For a detailed discussion of these issues, see Mike Godwin, Consumer Impact of the Broadcast-Flag Scheme, http://www.p Providemail.org/content/presentations/bflagppt.ppt.
II. THE CONTENT INDUSTRY HAS NOT JUSTIFIED THE NEED FOR TECHNOLOGY MANDATES

Hollywood’s core justification for imposition of the broadcast flag scheme can be paraphrased thusly: if the threat of indiscriminate redistribution of “high value” high-definition television content is not reduced, broadcasters will not make that content available, thus slowing this country’s transition to digital TV.13

One of the most vocal proponents of this argument was Viacom, which told the FCC in 2002 that “if the broadcast flag is not implemented and enforced by next summer, CBS will cease providing any programming in high-definition for the 2003-2004 television season. And without the security afforded by a broadcast flag, Paramount will have less enthusiasm to make digital content available.”14

Viacom never did carry out its threat to withhold HD programming, and the argument that the broadcast flag is necessary to encourage the broadcast of high value content and the orderly transition to digital TV transmission has been repudiated in the marketplace.15 First, broadcasters are making “high value” content available for HDTV or, “in HD”—50%16 of TV shows, including 66%17 of prime time programming, is broadcast in high-definition. A number of “high value” sports programming broadcasts, including Monday Night Football, the Super Bowl, the NBA Finals, the NCAA Final Four college basketball championship, Major League Baseball’s All-Star Game and World Series games, all NBC NASCAR races, the U.S. Open golf tournament, and the Olympics, are broadcast in HD along with many other select sporting events throughout the year.18 Second, the country’s transition to digital TV is accelerating, not slowing down, as sales of digital TV sets continue to

15. D.C. Circuit Judge Edwards also rejected this argument. See Transcript of Oral Argument at 32, Am. Library Ass’n, 406 F.3d at 689 (Judge Edwards: “This in no way—what you do here or not in no way impairs the ability to . . . stay on the digital deadline . . . In no way.”).
17. For the week of Jan. 19 to Jan. 25, ABC will broadcast 13 of 32 prime-time shows in HD. During the same week, CBS will broadcast 31 of 34 prime-time shows in HD; NBC will broadcast 32 of 50 prime-time shows in HD during the same period. For all 3 networks combined, 76 of 116 (66%) prime-time shows will be broadcast in HD for one week in January 2006.
increase. According to the Consumer Electronics Association, sales of
digital TV sets grew 60% to $17 billion dollars.19 According to Forrester
Research, 16 million American homes have digital television sets. That
number is expected to rise to 50 million by 2010, or one in two house-
holds.20 Indeed, the case could be made that rather than accelerate the
DTV transition, the broadcast flag could slow the transition when con-
sumers discover that expensive new television sets have less functional-
ity than their current sets.

The recording industry has similarly failed to demonstrate that radio
content protection is necessary. The industry does not cite a single in-
stance of a digital broadcast or satellite radio transmission being copied
illegally or retransmitted over the Internet. Indeed, RIAA chief Mitch
Bainwol’s recent testimony and comments on the subject make clear that
the real rationale for seeking radio content protection is not copyright in-
fringement, but the recording industry’s displeasure over the licensing
fees it receives from broadcast and satellite radio broadcasters.21

III. BROADCAST FLAG AND AUDIO FLAG SCHEMES WILL TRANSFORM
THE FEDERAL COMMUNICATIONS COMMISSION INTO THE FEDERAL
COPYRIGHT COMMISSION

Despite the FCC’s protestations to the contrary, the broadcast flag
scheme and any radio copy protection scheme will necessarily involve
the agency in shaping copyright law and the rights of content owners and
consumers thereunder. Making copyright law and policy is not the
FCC’s job—it is Congress’ job.22

While it is true that the video broadcast flag scheme does not com-
pletely bar a consumer from recording her favorite TV show, it does pre-
vent consumers from engaging in other lawful activities under copyright
law. For example, as the D.C. Circuit noted in Am. Library Ass’n. v.
FCC, the broadcast flag would limit the ability of libraries and other
educators to use broadcast clips for distance learning via the Internet that

19. See Press Release, Consumer Electronics Association, 2006 is the Year of DTV,
Forecasts CEA: New CEA Figures Show 2005 DTV Revenues Grew 60 Percent (July 29,

20. See, Alan Breznick, Consumer Confusion Hampers Cables HDTV Sales Drive,

21. See Content Protection in the Digital Age: The Broadcast Flag, High-Definition Ra-
dio, and the Analog Hole: Before the Subcomm. on Courts, the Internet, and Intellectual
Property of the H. Comm. on the Judiciary, 109th Cong. 58 (2005) (statement of Mitch Bain-
wol, Chairman and CEO, Recording Industry of America); Mitch Bainwol, Out: P2P Para-

22. See Brief of Petitioner at 43-50, Am. Library Ass’n, 406 F.3d at 689 (D.C. Cir. 2005)
(No. 04-1037), 2004 WL 3080422.
is permitted pursuant to the TEACH Act.\footnote{23}

This and other examples highlight that while proponents of the flag may justify flagging as prohibiting only “indiscriminate” redistribution of content over the Internet, flag-compliant technologies actually prohibit any and all distribution, no matter how limited or legal. For example, if a member of Congress wants to email a snippet of her appearance on the national TV news to his home office, the broadcast flag scheme would prohibit her from doing so. Video bloggers would similarly be unable to post broadcast TV clips on their blogs for commentary and analysis. Media watchdog groups like the Parents Television Council, which rates television programs according to how child friendly they are, would be prevented from posting clips from those programs for parents to see.\footnote{24}

The Congressional Research Service Report entitled Copy Protection of Digital Television: The Broadcast Flag (May 11, 2005) details the ways in which the broadcast flag limits lawful uses of copyrighted content. CRS concluded that:

While the broadcast flag is intended to ‘prevent the indiscriminate re-distribution of [digital broadcast] content over the Internet or through similar means,’ the goal of the flag was not to impede a consumer’s ability to copy or use content lawfully in the home, nor was the policy intended to ‘foreclose use of the Internet to send digital broadcast content where it can be adequately protected from indiscriminate re-distribution.’ However, current technological limitations have the potential to hinder some activities which might normally be considered “fair use” under existing copyright law. For example, a consumer who wished to record a program to watch at a later time, or at a different location (time-shifting, and space-shifting, respectively), might be prevented when otherwise approved technologies do not allow for such activities, or do not integrate well with one another, or with older, ‘legacy’ devices. In addition, future fair or reasonable uses may be precluded by these limitations. For example, a student would be unable to email herself a copy of a project with digital video content because no current secure system exists for email transmission.\footnote{25}

Proposals for digital radio content protection with an “audio flag”\footnote{26} simi-
larly, and perhaps even more directly, place the FCC in the position of determining consumers’ rights under copyright law. For example, the House bill gives the FCC the authority to:

[C]ontrol the unauthorized copying and redistribution of digital audio content by or over digital reception devices, related equipment, and digital networks, including regulations governing permissible copying and redistribution of such audio content.27

Under this proposal, the FCC is placed in charge both of 1) determining the extent to which unauthorized copying (which is legal in some circumstances) of digital broadcast and satellite radio content is permitted; and 2) determining what kind of copying and redistribution of audio content is permissible.

Not only does this language give the FCC power to set copyright law, it also directly conflicts with copyright law, specifically the Audio Home Recording Act. That Act, passed in 1992, was the product of a compromise between the recording industry and the consumer electronics industry that enabled the sale of digital audio recording devices in the United States without fear of litigation. While granting the recording industry royalty payments on blank digital media and recording devices and restrictions on serial copying, Congress explicitly gave consumers the right to record digital radio transmissions for noncommercial use.28 A digital radio content protection mandate would undercut this compromise and sharply curtail consumers’ home taping rights.

IV. A TECHNOLOGY MANDATE TO CLOSE THE ANALOG HOLE IS PREMATURE, UNNECESSARY AND WOULD CAUSE GREAT CONSUMER CONFUSION, COST AND INCONVENIENCE

In 2005, a bill was introduced in the House of Representatives that would mandate that all digital devices with analog outputs or inputs read and obey two specific technologies – an encryption technology called CGMS-A and a watermarking technology called VEIL.29 The content industry claims that both of these technologies are necessary to ensure that authorized copying and redistribution of transmitted content through the use of a broadcast flag or similar technology.” Audio Broadcast Flag Licensing Act of 2006, H.R. 4861, 109th Cong. (2006).

27. Id.


analog content cannot be captured and digitized for possible indiscriminate distribution over the Internet.

Preliminarily, I would note that while the CGMS-A + VEIL technology was discussed at the Analog Hole Reconversion Discussion Group, a standards group with both industry and public interest participation, it was quickly dismissed as not worthy of further consideration. Thus, this technology has not been fully vetted by industry and public interest groups. If Congress feels it must do something about the analog hole, it should refer the technology back to industry and public interest groups so CGMS-A+VEIL can be thoroughly analyzed for its impact on consumers and the cost to technology companies. In the complete absence of any such review, the one-sided imposition of such a detailed technology mandate would be unprecedented.

More importantly, the proposed analog hole fix suffers from a number of important substantive flaws.

First, the analog hole technology mandate would be even more intrusive than the broadcast flag, affecting a much broader range of devices. While the broadcast flag would put the FCC in charge of design control just for technologies that demodulate a broadcast signal, the proposed fix would mandate design for every device with an analog connection, including printers, cellphones, camcorders, etc. Like the broadcast flag, it sets in stone a copy protection technology for technologies that are constantly changing.

Second, the analog hole mandate would impose a detailed set of encoding rules that would restrict certain lawful uses of content. The House bill includes tiered levels of restriction based on the type of programming (e.g., pay-per-view, video on demand) that limit lawful uses in a manner that ignores the four fair use factors of 17 U.S.C. §107. This upsets the balance established in copyright law between the needs of copyright holders and the rights of the public by placing far too much control over lawful uses in the hands of the content producers.

Third, and perhaps most disturbingly, the mandate would eliminate the DMCA’s “safety valve.” The presence of the analog hole is a common justification for greater limitations on fair use imposed by the anticircumvention provisions of Digital Millennium Copyright Act. Individuals who, for example, want to exercise their fair use rights by extracting a snippet of a DVD were directed to hold a video camera up to a video screen or connect a recording device to the analog outputs on a TV set. An analog hole mandate would eliminate this safety valve.

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30. Rulemaking Hearing: Exemptions from Prohibitions on Circumvention of Technological Measures that Control Access to Copyrighted Works, Copyright Office § 1201, 71-72 (May 15, 2003) (statement of Steve Metalitz, representing Content Industry Joint Commenters) (“... I think the best example I can give is the demonstration that Mr. Attaway [MPAA
VI. THE PROPER BALANCE BETWEEN CONTENT PROTECTION AND CONSUMER RIGHTS SHOULD BE SET BY COPYRIGHT LAW AND MARKETPLACE INITIATIVES

I am often asked the following question: if Public Knowledge opposes the broadcast flag, radio content protection and closing the analog hole, what are better alternatives to protect digital television and radio content from infringing uses? The best approach to protecting rights holders’ interests is a multi-pronged approach: better education of the public, using the legal tools that the content industry already has at its disposal, and deploying the technological tools that are being developed and tested in the marketplace every day. In the past year alone, the content industry has used and won several important new tools to protect content.

The Supreme Court’s decision in MGM v. Grokster gave content owners a powerful tool against infringement by holding that manufacturers and distributors of technologies that are used to infringe could be found liable for infringement if they actively encourage illegal activity. As a result, a number of commercial peer-to-peer (P2P) distributors have gone out of business, moved out of the U.S., or sold their assets to copyright holders.

In addition to targeting manufacturers who actively encourage illegal infringement, both the RIAA and the MPAA continue to sue individuals who are engaged in massive infringement over P2P networks. By their own admission, these lawsuits have had both a deterrent and educative effect. The RIAA now characterizes the P2P problem as “contained.” Meanwhile, new agreements between Internet service providers and content companies strike a balance between consumer privacy and concerns surrounding the distribution of copyrighted works over the Internet. Last year, Verizon and Disney entered into an agreement by which Verizon will warn alleged copyright infringers using its networks, but will not give up their personal information to Disney. Verizon officials have told

Executive Vice President for Government Relations and Washington General Counsel] gave for you [Marybeth Peters, Registrar of Copyrights] earlier this month in Washington in which he demonstrated that he used a digital camcorder viewing the screen on which a DVD was playing to make a excerpt from a DVD film and have a digital copy that could then be used for all the fair use purposes. . . .” ), available at http://www.copyright.gov/1201/2003/hearings/transcript-may15.pdf; Rulemaking Hearing: Exemptions from Prohibitions on Circumvention of Technological Measures that Control Access to Copyrighted Works, Copyright Office § 1201, 71-72 (May 15, 2003) (statement of Dean Marks, Senior Counsel Intellectual Property, Time Warner, Inc.) (“I agree with everything Steve has just said about fair use copying or taking clips . . . with digital camcorders and analog camcorders being widely available . . .”), available at http://www.copyright.gov/1201/2003/hearings/transcript-may15.pdf.

me that they intend to enter into similar agreements with other content providers.

The passage of the Family Entertainment and Copyright Act in 2005 addressed some of the most damaging forms of copyright infringement, the distribution of copies of films prior to, or very shortly after a film’s release. The FECA gave copyright holders a new cause of action to help limit leaks of pre-release works and made explicit the illegality of bringing a camcorder into a movie theatre. It also provided for the appointment of an intellectual property “czar” to better enforce copyright laws.

These tools are in addition to the strict penalties of current copyright law, including the DMCA. To the extent that the content industries are looking for a “speed bump” to keep “honest people honest,” I would contend that many such speed bumps already exist, while more are being developed every day without government technology mandates.

Finally, by far the most effective means of preventing massive copyright infringement involves the content industry doing what it took the music industry far too long to do—satisfy market demand by allowing consumers to enjoy fair and flexible access to content at reasonable prices (inevitably produced in a free market). Content companies are increasingly adopting copy protection and other digital rights management tools in the marketplace, without any government intervention. iTunes’ Fairplay DRM is perhaps the most well known, but other services that use DRM include MSN music and video, Napster, Yahoo Music, Walmart, Movielink, CinemaNow and MovieBeam. Consumers—not the government—decide which restrictions best meet their needs.

DVDs are the best example of the market working. There, a government mandate—the Digital Video Recording Act—was rejected and an industry-agreed upon, yet fairly weak, “keep honest people honest” protection system was adopted. Despite the fact that enterprising programmers defeated the protection system long ago, the DVD market has grown at an astounding rate—from zero in 1997 to $25,000,000,000 in sales and rentals last year. Today, as described above, other new digital music and video distribution models, developed with content industry support and industry-agreed upon content protection, are emerging in the market. These efforts make government intervention in the free market unnecessary.

CONCLUSION

The 2006 Consumer Electronics Show demonstrated that the content and technology industries are moving forward, together, to provide the digital content and the digital machinery that consumers are buying and enjoying. Technology mandates like the broadcast flag and radio content protection are a step backward from this progress, limiting both innovation and consumer choice while increasing costs to innovators and consumers. Based on recent marketplace developments, government action here would do far more harm than good.