



Publisher of Consumer Reports



**Testimony of
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Before the

Senate Commerce, Science and Transportation Committee

Regarding

**Consumer Privacy and Government Technology Mandates in
the Digital Media Marketplace**

September 17, 2003

Chairman McCain, Ranking Member Hollings, and Senator Brownback, I am grateful for the opportunity to represent Consumers Union,¹ the publisher of Consumer Reports magazine, and Public Knowledge² before your distinguished committee today.

Consumers Union is deeply concerned about piracy, and believes that copyright is crucial to the creation of content. Indeed, we wouldn't have a business without the revenues that copyright allows us to generate through the production of our magazine.

We also take seriously that copyright law strikes balances that benefit the public during the term of copyright ownership—that even unlicensed use of copyrighted works, according to fair use and other principles—benefits citizens generally even in some instances where it does not directly benefit³ the copyright owner. That is why, for example, we have such a strong tradition of public libraries in this country.

These carefully crafted balances are threatened when new technologies make it possible for a single individual to share, in effect, thousands of copies of copyrighted works with millions of users. Music is particularly vulnerable in this scenario because the file sizes of digitized music have grown small enough that even Internet users with relatively slow connections to the Internet can still find and download a favorite song in a short period of time.

Statistics from the music industry indicate that record sales have declined over the last two or three years. While some of that decline might be blamed on business decisions by the record companies (given that they have released fewer albums over that time than they did at other times when sales were stronger),⁴ or the war, or the recent economic malaise, our instincts tell us that much of this phenomenon is traceable directly to the free downloading of music files from the Internet, via peer-to-peer software or other mechanisms.

¹ Consumers Union is a nonprofit membership organization chartered in 1936 under the laws of the State of New York to provide consumers with information, education and counsel about goods, services, health, and personal finance; and to initiate and cooperate with individual and group efforts to maintain and enhance the quality of life for consumers. Consumers Union's income is solely derived from the sale of *Consumer Reports*, its other publications and from noncommercial contributions, grants and fees. In addition to reports on Consumers Union's own product testing, *Consumer Reports* and *Consumer Reports Online* (with approximately 5 million paid circulation) regularly carry articles on health, product safety, marketplace economics and legislative, judicial and regulatory actions which affect consumer welfare. Consumers Union's publications carry no advertising and receive no commercial support.

² I am especially grateful for the immense contribution to this testimony of Mike Godwin, Senior Technology Counsel for Public Knowledge. Public Knowledge is a public-interest advocacy organization dedicated to fortifying and defending a vibrant information commons. This Washington, D.C. based group works with wide spectrum of stakeholders-libraries, educators, scientists, artists, musicians, journalists, consumers, software programmers, civic groups and enlightened businesses-to promote the core conviction that some fundamental democratic principles and cultural values-openness, access, and the capacity to create and compete-must be given new embodiment in the digital age.

³ Of course, it may indirectly benefit copyright holders, as for example in the movie "High Fidelity," when John Cusack's character, a record-store owner, plays tapes of music he loves and inspires shoppers to buy new records. The shoppers get a "free performance," but the artist gets new sales.

⁴ See http://www.soundandvisionmag.com/article.asp?section_id=2&article_id=453 and the underlying study cited by the article (see above) by George Ziemann, *MacWizards*.

Couldn't we simply outlaw peer-to-peer software, or at least impose stronger legal restrictions on it? The answer to this is mixed: peer-to-peer activity on the Internet (a network of computers in which any two can share resources, including but not limited to content and other data) is a central part of the Internet design. A better approach, we think, is to look at ways our legal system can adapt itself to reduce the large-scale trading of music online—from one music fan to ten million strangers, for example—while at the same time exploiting new technologies that both deliver more music to more music fans, that pay more artists more money, that encourage the growth and exploitation of the open-architecture Internet, and that strike a fair deal that benefits artists, publishers, and ordinary citizens in general as we enter the first fully digital century.

As consumer advocates, we necessarily favor policies that ensure artists and publishers' getting paid for their creative work. We are willing to work with the record companies and the studios to come up with creative ways solve their piracy problem. What we won't do, and what we believe the Congress shouldn't do either, is attempt to set in stone the business models of the past while moving forward into the digital world. Ordinary citizens and consumers are forced to adapt to the rapid changes brought about by digital technology, and publishers, record companies, and studios will have to change too. Indeed, already many of them are showing signs of positive change, through the immense public success of Apple's iTunes Music Store (and its quickly responding imitators) to the decision by many studios to deliver movie content to theaters digitally—yet safely—because the content is protected by “digital-rights-management” (DRM) technologies.

As always, those who truly understand and embrace the future of technology are quickest to succeed at new models—especially if their competitors, like King Canute knew he could not,⁵ sit in their thrones at the edge of the sea and order the tide not to come in. Do not take this example (a story incidentally drawn from the public domain) to mean that we believe obedience to the law and the balances struck by the law are unimportant—take it instead to mean that we believe our legal responses should be thoughtfully applied in a targeted way that not only does justice in particular cases but also communicates to the general public a sense of fairness, of proper scale, and of balance.

We accept the need for the deterrent effect of properly targeted enforcement efforts. We also stand opposed to measures, whether they are driven by our legislature or by our regulatory agencies, that attempt to slow down, or throttle, or centralize the digital technological innovation that has been—perhaps even more that the creative works of the movie studios and recording artists—a driving force in our economy for the last two decades. We believe there are ways to capture that ever-increasing technological momentum through approaches that ride the tide of technological innovation rather than seeking to slow or halt it.

The open architectures of the Internet and personal computers have revolutionized and benefited American lives already in countless ways. We now have an entire generation

⁵ <http://www.zyra.org.uk/canute.htm>

of children whose reflexive approach to answer a question may be to ask Google about it, then to trace down the answer on the World Wide Web.

Although the same computer and network technology has given us the new problems of copyright protection, it would be a tragedy if the measures we took to protect copyrighted works made the Internet less open, or the personal computer less useable—except when the user pays the appropriate toll.

Consumers want cool, convenient, connected gadgets. New technology has always forced us to continually rethink our laws, to reexamine the balance of copyright—from the printing press to the photocopier, from VCRs and MP3 players to personal video recorders like TiVo and Replay TV—and the United States has always embraced that new technology and that is a large part of the formula for our success. New devices have continually transformed the balance between creators and users, but historically we have erred on the side of allowing technology to flourish even when there was potential leakage, for the sake of capturing the substantial benefits of that new technology.

If content-protection measures are put on the table that do not centralize the process of innovation, that give consumers new functionalities, give them better products at better prices, we would support them. Unfortunately, many of the current proposals—especially the broadcast flag scheme—require a top-to-bottom redesign of the architectures of digital tools and perhaps even the Internet itself. The cable-compatibility “plug-and-play” proceeding at the Federal Communication Commission, depending on its details (which have not yet been published), could have a similar chilling effect on both innovation and access to information and even on the revenues of artists, who are already exploring new ways of showing and selling their creative works online through our dynamically open and evolving Internet.

The broadcast flag and certain aspects of the plug-and-play regulation currently before the Commission present the possibility that a small set of companies will be given a de facto veto on new business models based on political criteria. A much better approach would be to develop, collectively, a set of neutral technological criteria for standards that protect broadcast and cable-carried content – ideally one objective enough to provide predictability to innovators while open-ended enough to inspire ongoing innovation in ways to both protect and present content through digital systems.

Make no mistake about it. Closing the architecture of the Internet or of the personal computer will not merely harm consumers in terms of the value they receive when they buy new systems. Nor will the damage be limited to the computer industry, which has relied on open systems to fuel a generation of astounding innovation in digital products. Perhaps the worst aspect is that certain content-protection approaches, because they focus more on limiting consumer uses of traditionally distributed content than on creating new business models and new kinds of offerings, will ultimately hurt creators and publishers as well, and may even slow the already lagging transition to digital television.

There are other approaches, including more nuanced “digital-rights-management” approaches, that may not only work better than the content-protection standards currently being developed at the FCC, but also may have positive consumer effects.

Imagine, for example, how computer-based DRM could enable a person with disabilities to view a first run movie—on a one-performance-only ticketed basis—through their home theater system, rather than struggling with accessibility issues at a movie theater or simply waiting for the new film to become available on cable or DVD. Or imagine how the Internet could be used to present in-classroom performances of current films with educational value—in ways that both protect the value of the copyrighted work and widen the audience for it.

We believe DRM can be overly restrictive as well, but that the leavening effect of allowing a variety of DRM solutions to compete in the marketplace, rather than a narrow, and possibly obsolete scheme being mandated by Congress or by a regulatory agency, will help ensure that consumer flexibility in access to, as well as use of, new content will remain part of our longstanding copyright-law traditions.

In a minimally regulated free market for copyrighted works, the consumer wins. The example of DRM in spreadsheet software in the 80s is instructive. Initially, LOTUS 1-2-3 was strongly copy-protected and had a high pricepoint (and probably therefore had a higher need for protection because the incentives to circumvent were so great). Eventually a competitor (Borland, headed by Phillip Kahn) came into the market with a product that was sold at a much lower price and unprotected. Because the product had a reasonable price – one that more consumers could afford to pay – the need for over-restrictive DRM was lessened, and software consumers generally find today that such DRM as continues to be used is far more humane than the harsh DRM regimes of the 1980s.

Please note that nothing we say here should be taken to mean that there is no room for DRM in the market—indeed, properly calibrated and flexible DRM schemes may serve as a consumer-engagement tool. In fact, we encourage the providers of DRM technologies to devote some fraction of their energies to making public-domain works more available through their digital-media platforms, with as few restrictions (or even fewer) than those in traditional analog publishing.

Today, the consumer’s experience of DRM is all too often that it blocks something he or she might wish to do, and that he or she might have no problem doing with the work’s analog counterpart. For example, it may be easy and cheap to photocopy a page of a book for an English lesson than it is to extract that same text from the digital version of that same book—even when the work itself is in the public domain.

We believe that if consumers had more positive experiences in purchasing and using DRM-protected works, and knew from experience that the DRM-imposed limitations on their use came from publishers’ choices and not from the technology itself, this rationalizing of the content market in itself would both give a human face to digital

content platforms and serve to persuade many content vendors, still all-too-fearful of the digital world, to loosen the restrictions they impose through DRM on digital works.

The FCC's Broadcast Flag and "Plug and Play" Orders

The broadcast flag dramatically expands the FCC's regulatory authority and would have the agency regulate personal computers⁶ in ways it never has before. What is now a decentralized industry—where the way entrepreneurs now get their products to market is they build them and they sell them—will now come under the purview of the Federal Communications Commission. If Congress wants the FCC to turn itself into the Federal Computer Commission, then the broadcast flag is the quickest way to do it I can imagine.

We have always joined the FCC in wishing for convergence between digital computer-based tools and the consumer-electronics market, but we dare not accept convergence at the price of mandating a single closed-architecture approach for every computer that wants to be an avenue for television and movie content. Already, new innovative offerings from companies like Hewlett-Packard and Gateway, not to mention TiVo, have made clear the potential for open-architecture computers to serve at the heart of our home entertainment systems and protect content as well.⁷

The studios have acknowledged that the broadcast flag is an incomplete solution,⁸ and perhaps not the most robust way to protect content. However, rushing into a scheme that won't actually work to protect content against piracy and then having to go back and redo this again means that consumers may be forced to pay for this technology transition not once, but twice. When we find out that the broadcast flag doesn't work, and then we're told that we're going to need "just this one more thing" again, consumers are going to be faced with another generation of legacy technology, more stuff that they have to throw out. When that happens, they're going to come to Congress for an answer, not to the FCC.

The broadcast flag requires great swathes of the digital environment in the home and in the outside world to be redesigned to monitor for the flag. This cannot be done without great costs, both in allocating design and manufacturing resources and in removing

⁶ MPAA Broadcast Flag comments at p. 14: "An effective comprehensive solution must be mandated by the Commission for pertinent products. (Although the Commission's notice refers to 'consumer electronic devices,' it is essential, and we assume the Commission intended, that computer or 'IT' products be regulated, as well as so-called 'CE' products.)"

⁷ See *Ex Parte Communication* from Microsoft and Hewlett-Packard, *In re Implementation of Section 304 of the Telecommunications Act of 1996; Commercial Availability of Navigation Devices*, CS Docket No. 97-80; *In re Compatibility Between Cable Systems and Consumer Electronics Equipment*, PP Docket No. 00-67, August 8, 2003.

⁸ "The Broadcast Flag is only one part of the solution to the problem of widespread unauthorized redistribution of copyrighted content. Other steps include addressing analog reversion and unauthorized peer-to-peer file trafficking." See Joint Reply Comments of the Motion Picture Association Of America, Inc., et al. at 12.

flexibility and value from digital products offered to consumers. Furthermore, the flag scheme isn't even a complete solution. As they have told us, shortly after passage of the flag, the studios will be at the Commission asking for a fix to their "analog hole" problem.

Congress has been told before by studios that if Congress will just give them this one thing and they'll roll out digital television—just give them hundreds of billions of dollars worth of digital spectrum for free and they'll roll out DTV right away—but broadcasters have never given in return any enforceable commitments, and they still look as far away from giving back their analog spectrum as they did at the beginning of this transition.

At the very least, I do not see how or why Congress should allow the FCC to commit to a vast new regulatory scheme without an enforceable timeline for the DTV transition. And I do not see that enforceable timeline on the table right now.

The FCC's broadcast flag rulemaking would also be ill-advised to proceed without Congressional input as to what kind of reasonable consumer uses any such technology mandate must protect. It is inevitable that any protection scheme will involve some choices regarding what uses will continue into this next generation of technology and what uses will not be allowed. If consumers turn on their expensive new DTVs in three years and discover they cannot do many of the lawful and reasonable things they used to be able to do with older technology, it will be Congress—not the FCC—who will be held to answer.

We have seen no technology that demonstrates it is possible to protect fair use and other reasonable consumer uses, while at the same time protecting content from piracy. Before the Commission begins to demand that such a wide range of consumer electronics have the flag in it, they should insist upon a demonstration of the actual technology and show us how it will work.

We support measures to protect content that generally work well, such as encryption or "scrambling" content at the source. That is the approach taken by the DVD market, and even the efforts of a few computer hackers who succeeded in defeating these protection measures had no effect on the DVD market, which continues to grow rapidly. Once again, we favor protection schemes that allow variety and flexibility for consumers – DVDs' content protection does not yet do this, but, unlike the broadcast flag, for example, DVDs make up for this lack in flexibility in other ways, typically by offering additional features. CU believes the market in sales of digital entertainment will continue to evolve, given the right competitive environment, and avoiding a one-size-fits-all government-imposed solution.

The FCC's cable "Plug and Play" agreement (also known as the cable "encoding rules"), which ostensibly sought to "ease the digital transition for consumers" by mandating that digital televisions be compatible with the content protection systems that cable operators are using and will use. But in the process of supposedly facilitating the digital transition,

the FCC excluded computers—a device present in approximately 70 million consumers’ homes that is capable today of displaying a digital signal.

The Plug and Play order ensures that cable televisions will have content protection built into them, and ensures that the outputs on digital televisions will not be able to hook up with computers or any devices that are not “secure.” “Plug and Play” used to mean just that: consumers could buy a device, plug it in, and it worked. Now “Plug and Play” means something quite different. It means, rather counter-intuitively, that consumers’ “Plug and Play” TV sets won’t work until they get a special card from their cable operators. And in an especially ironic twist, consumers won’t be notified that their “Plug and Play” sets won’t Plug and Play (because they’ll need the security card from their operator) until after they purchase those TV sets. This is a guaranteed recipe to provoke consumer anger.

Depending on the details of the final order, Plug and Play sets the digital TV transition back by not contemplating computers as “unidirectional content receivers” whose generally open architecture, modifiable by the owner, hasn’t prevented companies like TiVo from figuring out how to protect content. Furthermore, there are approximately 70 million devices on the market that could receive a digital signal today: personal computers (with a tuner add-on). But the FCC has specifically excluded computers from this agreement. It is ironic that the FCC has trumpeted the coming convergence of the functionalities of computing and television, yet when presented with an opportunity to do something concrete about that convergence, failed to contemplate computers within the scope of the order.

Conclusion

Article 1 Section 8 of the United States Constitution tells us that the goal of copyright is “*To promote the Progress of Science and useful Arts;*” The reason that the Framers put Copyright law into the Constitution was not to protect a small class of citizens who happen to be writers or artists. It was to benefit everybody by encouraging writers and artists to create more. That very same clause says that we have to reward inventors because we know that the health of the nation is built on technological openness and new frontiers.

The greatest industrial innovation we’ve seen in the last half century has been cybernetics, the use of tools that process information. Not a year goes by that computing technology does not revolutionize another sector of industry, science, and the arts. We have to find a way to harmonize the creativity of the content producers and the creativity of the engineers and scientists and computer programming that doesn’t involve a prohibition of thinking new thoughts and building new devices, but rather embraces an exploration of all the new things that haven’t been created yet.

The incredible changes that we’ve seen in the world are about the fact that literary and artistic creators and engineers and scientific creators have been unfettered and they’ve

found new tools for content. Sometimes these things do shake things up, but we're good enough and clever enough to deal with that.

There are all sorts of ways to protect content that don't involve creating content prisons. We could have digital tools that are interoperable, open, and mutable—and protect content at the same time. Why not set our sights instead on how best to put tools in the hands of inventive men and women, set our sights on how to keep computers open, included in the long-awaited world of convergence, and protect content all at the same time?

The beauty of the computer is that it can be a TV or a typewriter or a recipe book, but recipe books and TVs and typewriters can't be computers. We should not force computer manufacturers to choose either to continue being open, general purpose devices or to become closed platform media appliances.

Why turn the clock back on computers merely to return to the world of the 1980s? Why aren't we looking forward to a 21st century where individuals get to use the content they pay for more flexibly on more platforms in ways that even better fit their lifestyles and schedules? The best way to allow that is to permit the convergence of communications and computing technologies with mainstream media devices. But the FCC's decisions on the broadcast flag and cable Plug and Play could potentially set us back two decades.

Without computers there would be no TiVo, without the World Wide Web there would be no online programming guides, no radio broadcast over the Internet. There are so many things that computers have enabled—we must aim as high as we can see, aim to have devices not just with features, but with potentials.