

FFII-UK response to

UK All Party Parliamentary Internet Group inquiry into Digital Rights Management (DRM)

About FFII-UK

FFII-UK is the UK volunteer group of the Foundation for a Free Information Infrastructure, a pan European organisation which seeks a positive environment for the development of information goods based on copyright, free competition and open standards. Representing 650 members, 3,000 companies and 90,000 supporters FFII-UK welcomes the opportunity to comment on the UK All Party Parliamentary Internet Group inquiry into Digital Rights Management (DRM).

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Whether DRM distorts traditional tradeoffs in copyright law.

The modern home carries a huge array of devices that allow for the transfer and communication of digital information, a brief list of which serve to illustrate the size and scope of this discussion and the change from the physical to digital age.

- Vinyl record player and Cassette deck
- AM/FM Radio - digital or analogue
- VHS player and recorder
- DVD player and recorder
- Hard disk player and recorder (e.g. TIVO)
- Digital TV box
- Satellite TV receiver
- TV with digital - analogue out
- Home computer/PC with internet and home/ intranet /ethernet / wireless network
- Computer Games box doubling as Media center (PS2, Xbox 360)
- Work/ home/ Laptop computers of differing types Mac / Linux / Windows
- Software and media players including files and formats of differing types
- Portable Media player (e.g. iPod and iPod video)
- Portable PDA (e.g. Blackberry)
- Mobile phone and mp3 player with Bluetooth wireless capability

This list does not cover anywhere near the entirety of devices currently in use but it serves to illustrate what the average consumer makes use of everyday. Let us examine what happens when DRM enters this world:

Xbox 360 to play songs off iPods but not DRM-protected tracks

Microsoft has its own Windows Media-based music player infrastructure, of course, but clearly the company believes there's value in ensuring Apple's player is supported too. Plug one into the console and the machine can display a list of artists, albums, songs and so on, and allow the user to select one to play. But not iTunes-sourced songs, according to Scott Henson, a product unit manager with Microsoft's advanced-technology group, [cited](#) by a CNet report.

"We do not have an official relationship with Apple for the iPod connectivity," said Henson. The report also cites Xbox digital-entertainment executive producer Jeff Henshaw, who claimed Microsoft had approached Apple, but had been sent packing. Anecdotal evidence suggests Apple isn't unwilling to license its FairPlay DRM technology, but it's very picky about how it will consider. Our sources indicate well-established hi-fi brands might be in with a chance.

The Register Tuesday 8 Nov 2005

Source http://www.theregister.co.uk/2005/11/08/xbox_360_ipod/

Thus DRM technologies mean the purchaser of legally downloaded music cannot play or transport their own property between their own devices.

Some further examples of the effects of DRM include:

The Norwegian owner of a US region 1 DVD is arrested for writing and using code that allows it to be played on his home PC which is set to European Region 2. The charge is “trespassing on his own computer”.

Source <http://www.eff.org/effector/HTML/effect16.07.html#V1>

A student arrives on campus to find that the University music download service (Napster), for which he is paying monthly from his accommodation and course fees is incompatible with the most popular media player (iPod) and his computer (Mac or Linux).

Source http://www.theregister.co.uk/2003/11/07/penn_state_students_revolt_against/

Corporation A (Apple) threatens Corporation B (Realplayer) for reverse engineering their proprietary DRM format and threatens legal action on the basis of Intellectual property (copyright and patent), license and anti circumvention infringement.

Source http://www.theregister.co.uk/2004/07/29/apple_vs_real/

A European Government proposes legislation, including legal sanctions, that bans software allowing transmission of DRMless digital material, mandates DRM on all digital radio transmission and a universal wiretapping system to check for copyright material. In effect this legally bans Free / Libre and Open Source Software.

Source <http://eucd.info/index.php?English-readers>

The specifics in each case, which are all real and very recent, are not as important as what the examples tell us. DRM is a standard for *uninteroperability*, serving to hamper both competition and the ability of consumers to enjoy the use of legitimately acquired material

Copyright exists not to offer “moral” protection but to serve a utilitarian function. The creator of an aesthetic work, be it a piece of writing, music or art is offered a monopoly right for a limited period in lieu of the time, effort and investment needed for its creation. DRM offers what is claimed to be a reflection of the tradeoffs inherent in the physical world but this, if it exists at all, is only an illusion. The “rights” (actually technical capabilities) that a content owner grants are not the same as the legal rights of a content consumer and the extent to which DRM replicates fair use in allowing forms of copying is, we will argue, largely coincidental. To be accurate DRM is characterized not by rights but by the **restrictions** it imposes, and more importantly by the manner in which it imposes barriers to consumers who have legally bought goods, and to interoperability and competition.

It is important to understand that DRM by its nature will always be broken because it treats the consumer as both trusted recipient *and* attacker. Implementing and enforcing DRM will merely push users into using illegal methods in order to protect their fair use rights on their own property, thus absurdly and unnecessarily criminalizing consumers.

The push for the implementation of DRM measures ultimately fails to understand two very key points in relation to technology. Firstly that new technology, be it from the Pianola script player to the VHS recorder, is always both disruptive to incumbent players and upsets income holders in established markets because it forces them to improve their products, innovate and adapt to new markets. Second, capitalism derives much of vitality by virtue of the fact that innovation and entrepreneurship provide for no free rides nor guarantee of profit to incumbents. As we understand it, this quality is laudable among many commentators.

Further still the controversial use of software patents on DRM, an area of particular concern to FFII-UK, demonstrate how DRM cheats consumers by creating closed ICT standards and excluding competitors from bringing products to market.

Phone DRM: the most expensive royalty operation ever

"In January we pointed out that the OMA had initially suggested that this technology might be free of royalties, until the MPEG LA collected together five companies that all felt that their patents were essential for offering the technology. Those companies were ContentGuard, Intertrust, Matsushita, Philips and Sony and none of them were part of the OMA work to create the technology, but they had always warned that there would be a price to pay since they held most of the patents in this area."

The Register 21 April 2005

http://www.theregister.co.uk/2005/04/21/oma_drm_patent_holders_offer_reduced_royalty

While DRM brings a host of problematic issues, DRM systems that are not open and accessible to developers only work to exclude companies seeking to develop compatible products thereby eliminating interoperability and competition by extending the reach of intellectual property.

IPRED2

The proposed EU Intellectual Property Enforcement Directive (IPRED2) has drawn widespread criticism for attempting to implement criminal sanctions for all infringements of an intellectual property right (including software patents) on a commercial scale. Vaguely worded, devoid of any impact assessment, it is of particular relevance in this context because of the manner in which it would enable and aid legal harassment, prevent innovation and hamper competition and interoperability. FFII-UK understands that the current IPRED2 proposal has been withdrawn but in the event of any proposed measures covering general criminalization, be they framed as an EU directive or other measure, we urge that legislators insist on:

- (a) proper analysis of costs and benefits *before* enacting any legislation;
- (b) proper oversight provisions;
- (c) proper examination of the technical achievability of what the Executive wants to mandate.

Whether new types of content sharing license (such as Creative Commons or Copyleft) need legislation changes to be effective.

Creative Commons licenses provide a flexible range of protections and freedoms for authors and artists built upon the “all rights reserved” of traditional copyright to create a voluntary “some rights reserved” copyright, that allows digital content to be created, shared and collaborated on. It is imperative that any implementation of DRM provides support for these alternative licensing models as currently this is not the case.

While these licenses have grown largely without the need for legislative remedy FFII-UK is deeply concerned about the dangers of poorly thought out legislative proposals for DRM. In the case of the French government’s proposals in implementing EU Directive 2001/29/EC (also known as the EU Copyright Directive, or EU CD) that would ban software that allows transmission of digital material without DRM, mandate DRM on all digital radio transmission, create a universal wiretapping service to check for copyright material as well as banning all Free / Libre and Open Source Software, illustrates a scenario where legislators have failed to grasp key issues of the disruptive nature of changes in technology, innovation and culture, and the need for balance and impact assessment. The result, if enacted, can only be considered catastrophic.

How consumers should be protected when DRM systems are discontinued.

What legal protections should DRM systems have from those who wish to circumvent them

To what extent DRM systems should be forced to make exceptions for the partially sighted and for people with disabilities

Circumvention should be permitted and legal if it enables a lawful use of the material controlled by DRM, where DRM has failed, become obsolete or invalid as well as for academic or research purposes. One should ask to what extent DRM should have legal protection to encroach and prevent the free flow of information in a digital society.

Anti-circumvention is a powerful tool for people who want to exclude competitors. If you claim that your car engine firmware is a "copyrighted work," you can sue anyone who makes a tool for interfacing with it. That's not just bad news for mechanics think of the hot-rodders who want to chip their cars to tweak the performance settings.

We have companies now claiming that their printer cartridges contain copyrighted or indeed patented) works. Software that trips an "I am empty" flag when the toner runs out, where companies have sued a competitor who made a remanufactured cartridge that reset the flag. Even garage-door opener companies have gotten in on the act, claiming that their receivers' firmware are copyrighted works. Copyrighted cars, print carts and garage-door openers: what's next, copyrighted light-fixtures?

DRM talk given to Microsoft by Cory Doctorow of the Electronic Freedom Frontier

Source: <http://www.craphound.com/msftdrm.txt>

The threat of DRM to Free / Libre and Open Source Software derives from the fact that DRM is based on principles of secrecy i.e. a user is not allowed because of anti circumvention or other provisions to know information that would allow or create interoperability with their own electronic devices and legally acquired media, fundamentally in opposition to the principles of FLOSS development. Thus DRM criminalizes consumers and limits the creation and the provision of innovative, and interoperable, technology.

Implementing technology that fundamentally approaches its disabled users as if they were "attackers" will lead to users moving to systems that will define them as pirates in making use of and protecting their fair use rights while slowing the development and acceptance of genuinely beneficial and adequate technology based on open and accessible standards. There have been notable incidences where DRM has threatened the accessibility to information of persons who are blind or print

disabled. FFII-UK would recommend that any consideration of DRM of this area highlight the fact that no DRM barrier should prevent them from accessing information to which they would currently reasonably expect.

Whether DRM systems can have unintended consequences on functionality

We think this is demonstrated in the examples mentioned previously in relation to tradeoff inherent in copyright, however Sony Corporations example of hidden DRM is notable.

“Many people, I think, don’t know what a root-kit is. So why should they care about it?”

Thomas Hesse President of Sony BMG global business division

Source www.theregister.co.uk/2005/11/09/sony_drm_who_cares/

“This means, that for systems infected by the Sony DRM root-kit technology, the dropped file is entirely invisible to the user. It will not be found in any process and file listing. Only root-kit scanners, such as the free utility RootkitRevealer, can unmask the culprit,”

Ivan Macalintal, a senior threat analyst at security firm Trend Micro

Source http://www.theregister.co.uk/2005/11/10/sony_drm_trojan/

In hiding DRM systems *at root level* on the computers of those who had *legally bought one* of the 5.7 million ‘infected’ CDs, Sony have displayed nothing less than flagrant disregard for end users’ legal and moral rights, proving that DRM will damage both producers and consumers in the market-place.

Of particular note is the legal position and liability of security experts, tasked with protecting your property, and in particular: (a) informing you that hidden DRM software may have been installed and enabled on your computer; (b) creating software that patches security risks and holes in these files; (c) creating software that removes hidden and unauthorized software and code. Pressure from industry may be force enough to prevent concerned parties from acting or informing you or other customers but the threat of legal action under *an EU copyright directive, US style DMCA, IPRED2* or similar legislation is no doubt even worse.

The role of the UK Parliament in influencing the global agenda for this type of technical issue

Freedom of information and access to knowledge and information are the benchmarks of an inclusive, healthy and growing society where all stakeholders from public and private spheres can contribute. Erecting restrictions and creating enclosure in the form of DRM serves only to barricade ourselves from the oncoming digital age. FFII-UK opposes DRM where it imposes costs, restricts access to the market, creates uninteroperability, hampers disabled users, prevents consumers attempting to make use of their legally acquired digital media.

A capable Legislature must be able and competent to scrutinize the Executive, together with an effective Fourth Estate and Civil Society, which in turn work to create balanced and well reasoned laws. FFII-UK recommends that the UK Parliament:

- Insist on a proper analysis of costs and benefits *before* enacting any legislation.
- Insist on proper oversight provisions.
- Insist on a proper examination of the technical achievability of what the Executive wants to mandate.
- Exercise caution and due attention on any "concessions" it is offered.

To do otherwise risks nothing less than failing in its institutional role.

In closing FFII-UK would like to make particular reference to 'Access to Knowledge', also known as the A2K treaty, which has emerged in response to the call from developing nations for a development agenda for the World Intellectual Property Organisation. Dealing with the relationship between copyright law, consumer interests and DRM, as well as other fields, it is one of the most important current platforms for maintaining global balance in the emerging digital age and worthy of support. Further Information is available at <http://www.cptech.org/a2k/>

Further Reading:

The Right To Read by Richard Stallman <http://www.gnu.org/philosophy/right-to-read.html>

Microsoft DRM Research talk by Cory Doctorow <http://www.craphound.com/msftdrm.txt>

How the music biz can live forever, get even richer, and be loved

by Andrew Orlovski http://www.theregister.co.uk/2004/09/23/orlovski_interactive_keynote/

Some Safety and Reliability Questions about DRM

by Victor Yodaiken <http://www.groklaw.net/article.php?story=20060111184253232>

