ELECTRONIC FRONTIER FOUNDATION SUBMISSION TO THE GOWERS REVIEW OF U.K. INTELLECTUAL PROPERTY LAW

The Electronic Frontier Foundation (EFF) is grateful for the opportunity to submit comments to the Gowers Inquiry on one of the specific issues listed in the Call For Evidence, namely, regulation of legally-enforced Digital Rights Management technologies. EFF submits these comments as a supplement to our participation in the Gowers Inquiry roundtable discussion in San Francisco, California, U.S.A. on March 27, 2006.

EFF is a U.S.-based non-profit legal services and consumer advocacy organization with more than 10,000 individual members worldwide, dedicated to protecting civil liberties, technological innovation and the public interest in the digital environment. Since 1998 EFF has been involved, either as counsel of record or as amicus curiae, in most of the major cases interpreting the anti-circumvention provisions of the U.S. Digital Rights Management law, the Digital Millennium Copyright Act (the DMCA). EFF has also testified before the U.S. Copyright Office for consumer exemptions to these provisions in 2000 and 2003.

Based on EFF's experience, we would like to comment on four sets of unintended consequences of the overbroad DMCA anti-circumvention provisions. After seven years' experience with legally-enforced Digital Rights Management in the United States, it is clear that technological protection measures have not been successful in their intended purpose of stopping digital copyright infringement. At the same time, the overbroad protection provided by the DMCA has caused significant collateral damage to a range of legitimate non-infringing behaviour. On this basis, EFF believes that strong legal protection for technological measures is not warranted and may be counterproductive. However, while we consider that it would be preferable to leave development of rightsholder self-help to the marketplace, we recognize that the Gowers Inquiry may be limited in the scope of its recommendations in relation to legal protection for DRM by the constraints imposed by the EU Information Society Directive (2001/29/EC). Accordingly, we have provided our recommendations on this understanding.

Recommendations for Regulation of Digital Rights Management Technologies

EFF respectfully makes the following recommendations:

Obsolescent DRM technologies:

1. Since obsolescence is likely to be an ongoing concern as copyrighted works are increasingly made available only in technologically protected digital formats, the Gowers Inquiry should consider inclusion of a provision in U.K. law that expiry of the copyright term on a technologically protected work provides a complete defence to the act of circumventing a technological protection measure.

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2. In order to be effective, this will also require lawful availability of certain circumvention tools. U.K. legislation should provide a complete defence for manufacture and supply of circumvention technologies to libraries and archives. Alternatively, this could be done by issuing a standing order under section 296ZE of the U.K. Copyright Designs and Patent Act (CDPA) requiring content producers to provide the relevant DRM keys or decryption information to deposit libraries at the time a work is added to a library or archive collection, or clean copies of the digital work (i.e. without any technological protection measures attached to the work) for the purposes of digital preservation and to enable such institutions, as intermediaries, to make accessible copies available for disabled people, or to otherwise enable readers to avail themselves of the statutory exceptions and limitations to copyright.[1] This should apply to all prescribed libraries and archives under the CDPA and its regulations.

3. To preserve access for lawful noninfringing uses of copyrighted works and to protect access to public domain material located on formats in combination with copyrighted works, a simple and expeditious administrative procedure should be established for information users to petition to import and use necessary circumvention tools for this purpose. This could be done by creating an administrative rule using a procedure similar to that in current section 116A of the Australian Copyright Act of 1968.

4. In order to minimize the chill experienced by users who are not in a position to risk expensive court or administrative proceedings, the Gowers Inquiry should consider remitting monetary or criminal penalties (including awards of attorneys fees) against defendants (i) whose activity was noncommercial and (ii) who acted on a reasonable, good faith belief that their activity was noninfringing and within any exemptions afforded for circumvention. Such a provision would not only go a long way toward eliminating any penumbral chill on otherwise lawful activities, but it might also encourage parties to resolve cases of first impression in the courts and administrative agencies, thereby clarifying the scope of obligations imposed by circumvention restrictions.

Impact on Innovation and Regulation of Anti-competitive Misuse:

5. The potential for legally-enforced technological measures to stifle competition and technological innovation is a significant issue that should be addressed in

[1] See, for instance, sections 49 and 50 of the Australian Copyright Act of 1968 (Cth), which permits libraries, archives and cultural institutions to reproduce and communicate works to make them available to users for research and study purposes and to other libraries and archives, and Recommendation 25 of the report of the Australian Parliament House of Representatives Standing Committee on Legal and Constitutional Affairs on the Review of Technological Protection Measure Exceptions, op cit, to permit circumvention by libraries, archives and cultural institutions for these purposes.

the review. The Gowers Inquiry should revisit the implementation of Article 6(4) of the Information Society Directive in section 296FE of the CDPA, to require government intervention to control anti-competitive misuse of technological measures. This could be done by requiring the Secretary of State to undertake a factual inquiry upon receipt of a credible allegation of anti-competitive misuse, and to make a speedy determination about whether the technological measure is being used in a way that appears to violate competition policy. Once a credible allegation of anti-competitive use has been made, the burden of proof should shift to the entity using the technological measure to provide evidence to the contrary to the Secretary of State.

6. A provision should be included in sections 296 – 296ZF of the CDPA removing legal protection against circumvention of rightsholders' technological measures where there is a judicial determination that those TPMs are being used in a way that violates U.K. competition policy. The provision should also provide a conditional defence and significantly reduced penalties for circumvention of a TPM where the defendant has acted on a good faith belief that the TPM is being used in an unlawful, anti-competitive fashion. In particular, in order to dispel any chill on legitimate competitors, remedies should be restricted to injunctive relief, demonstrated damages suffered by the plaintiff, or similar relief, rather than prescribed per-piece statutory damages, retroactive royalties, or criminal penalty.

7. To counter the potential for anti-competitive misuse of legally-enforced TPMs, region coding technologies should be excluded from the definition of "technological protection measures" protected under sections 296-296ZF of the CDPA, as recommended in the recent report of the Australian Parliament House of Representatives' Standing Committee on Legal and Constitutional Affairs Committee Affairs on the Review of Technological Protection Measure Exceptions.

Encourage Scientific Research and Publication:

8 To the extent that U.K. TPM law does not already incorporate safeguards for scientific research, the inquiry should consider incorporation of an exception for circumvention acts and the use of circumvention tools for scientific research, and an express exception permitting publication of the results of scientific research.

Review of Impact and Exemption-granting procedure:

9. There should be a regular review of the impact of U.K. TPM law on the ability to make non-infringing uses of copyrighted works, and a procedure to grant exemptions to U.K. TPM law that would operate in addition to the powers granted to the Secretary of State under section 296ZE of the CDPA. Exemptions should cover both the act of circumvention, and the manufacture,

use, and distribution of any tools, technologies or devices necessary to make use of any exempted act of circumvention.

10. The review and exemption-granting procedure should include the following elements:

    (a) The UK Office of Copyright, Designs and Patents, or other relevant government body should actively solicit input from users and undertake independent fact-finding to determine whether lawful uses of copyrighted works are being impaired by TPM technologies. It should also undertake regular survey research to monitor the attitudes and experiences of digital consumers in connection with DRM-restricted media and should present a periodic report of its findings to Parliament.

    (b) Once an exemption proponent comes forward with a concern regarding a lawful use that appears to be impaired by DRM restrictions, the burden of proof should then shift to the copyright owner to (1) describe how the DRM technology functions and how widely it is deployed; and (2) demonstrate by a preponderance of the evidence that continuing legal protection for the DRM in question is necessary to the market viability of the work.

11. The Gowers Inquiry review team should consider the report of the Australian Parliament House of Representatives' Standing Committee on Legal and Constitutional Affairs on the Review of Technological Protection Measure Exceptions and its recommendations concerning procedural rules and burdens of proof for a periodic review of the impact of TPM laws.

U.S. Legal Protection Framework for Digital Rights Management – the DMCA

Overview:

In 1998 the United States' Congress enacted the Digital Millennium Copyright Act (the DMCA) to implement the U.S.'s obligations under the 1996 WIPO Copyright Treaty and WIPO Performances and Phonograms Treaty. Over the last seven years, the scope of the DMCA's legal protection for rightsholders' technological measures has proven to be overbroad. The DMCA has been used in a number of ways not intended by the U.S. Congress and that have nothing to do with stopping copyright infringement, but that have caused collateral damage to other important public policies.

In practice, the DMCA provisions have:

- overridden existing statutory exceptions in U.S. copyright law and restricted consumers' legitimate rights of access to information,
- threatened scientific research and publication, and
- stifled technological innovation and competition.

At the same time, technological protection measures (TPMs) have not been successful at stopping or slowing digital copyright infringement. Attached is a copy of EFF's report entitled Unintended *Consequences – Seven Years Under the DMCA,*[2] which describes how the U.S. TPM law has been used since 1998 and provides further information on the cases referenced below.

Statutory Framework:

The DMCA inserted sections 1201-1204 into the U.S. Copyright statute. Although they are similar in many ways to Article 6 of the E.U. Information Society Directive (2001/29/EC) and sections 296 to 296ZF of the U.K. Copyright Designs and Patent Act (CDPA), the DMCA provisions also differ from the U.K. provisions in several key respects.

The DMCA contains three types of ban:

First, a ban on the act of circumventing a technological protection measure that controls access to a copyrighted work (17 USC section 1201(a)(1));

Second, a ban on the manufacture, importation, distribution and trafficking in tools, technologies and devices that can circumvent technological protection measures that control access to copyrighted works (17 USC section 1201(a)(2)); and

Third, a similar ban for tools, technologies and devices that can circumvent technological protection measures that control uses of copyrighted works, such as copying (17 USC section 1201(b)).

Unlike Article 6(4) of the Information Society Directive, the DMCA does not provide a mechanism for accommodating statutory exceptions to copyright law. Instead, it lists seven specific exceptions to the ban on the act of circumvention, and provides exceptions to the creation and distribution of tools for a subset of those seven acts. These include limited exceptions for reverse-engineering for the purpose of creating interoperable computer programs, for computer security testing, encryption research, and government uses. Finally, the DMCA has a triennial rulemaking process by which the Librarian of Congress can grant three year exemptions to the ban on the act of circumvention, upon the recommendation of the U.S. Copyright Register.

U.S. experience:

1. Overbroad TPM laws can override exceptions and limitations in copyright law

DRM technologies can be used to prevent all uses of copyrighted works, including uses that would be permitted under copyright law. The scope of legal protection given to rightholders' DRM or Technological Protection Measures is therefore crucial for

[2] Available at: <www.eff.org/IP/DMCA/?f=unintended_consequences.html>

maintaining the traditional balance embodied in copyright law. Legal Protection of DRM technology should not exceed the scope of copyright law

Unfortunately, a series of early cases interpreted the U.S. DMCA provisions as creating a new exclusive right to control access to copyrighted works, beyond the scope of traditional copyright law.[3] On that view, circumvention of a technological protection measure is banned even if the intended use of a protected work would not be copyright infringement. As a result, the DMCA has overridden existing statutory exceptions in U.S. copyright law for educational and other uses, and effectively eliminated consumers' ability to make unauthorized, but lawful, use of protected digital media that they have purchased. It has also banned the circumvention tools that consumers could otherwise use to make such uses. However, several recent appellate court judgments have confirmed that the DMCA does not provide legal protection for TPMs that are used to protect rights outside of copyright.[4]

Fortunately, U.K. law limits legal protection for rightsholders' TPMs to the scope of copyright. Section 296ZF(3) makes clear that the scope of TPM protection is for acts restricted under copyright law. However, notwithstanding this clear legislative language, obsolescent DRM technology poses a serious threat to the public's legitimate right of access to copyrighted works, and works that are no longer protected under copyright**.**

Libraries, archives and public interest organizations have been concerned for some time that legally-enforced DRM that becomes obsolescent may block the public's statutory right to access copyrighted material that is in the collection of libraries and archives, and public domain material for which copyright protection has expired. We are aware of the submission made by LACA, the Libraries and Archives Copyright Alliance, to the All Party Parliamentary Internet Group (APIG) inquiry into DRM on this point. We also note that in its evidence to APIG, The British Library likewise expressed concerns about these issues.

This is not a hypothetical concern in the United States. It was the subject of exemption applications from libraries, the Internet Archive and public interest organizations in the U.S. Copyright Office DMCA exemption rulemakings in both 2000 and 2003. [5] Based on

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[3] For instance, see *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294 (S.D.N.Y., 2000), affirmed under the name *Universal City Studios, Inc. v. Corley et al*., 273 F. 3d 429 (2nd Circ. 2001*); U.S. v. Elcom Ltd.,* 203 F. Supp. 2d 1111 (N.D.Ca., 2002); *Paramount Pictures Corp. v. Tritton Technologies Inc.,* No. CV 03-7316 (S.D.N.Y. filed Sept.17, 2003); *321 Studios v. MGM*, 307 F.Supp.2d 1085 (N.D. Cal. 2004).

[4] *Storage Technology Corporation v. Custom Hardware Engineering*, unreported decision July 2, 2004, 2004 WL 1497688 (D.Mass), vacated on appeal, 421 F.3d 1307 (Fed.Cir. 2005); *The Chamberlain Group, Inc. v. Skylink Technologies, Inc.,* 381 F.3d 1178 (Fed. Cir.2004).

[5] See Recommendation of Copyright Register and Determination of Librarian of Congress, 65 FR 64555 (October 27, 2000), available at: <http://www.copyright.gov/1201/docs/registers-recommendation.pdf> and Determination

the evidence presented, the U.S. Librarian of Congress granted an exemption for 2000-2003 for "Literary works, including computer programs and databases, protected by access control mechanisms that fail to permit access because of malfunction, damage or obsoleteness", and exemptions for 2003-2006 for "Computer programs protected by dongles that prevent access due to malfunction or damage and which are obsolete" and "Computer programs and video games distributed in formats that have become obsolete and which require the original media or hardware as a condition of access".[6] Requests for renewal of the existing exemptions are being considered in the 2006 rulemaking that is currently underway. However, the Librarian declined to grant a circumvention exemption in the 2003 rulemaking for access to public domain movies released on DVD.[7]

Recommendations:

1. Since obsolescence is likely to be a continuing concern as copyrighted works are increasingly made available only in technologically protected digital formats, the Gowers Inquiry should consider inclusion of a provision in U.K. law that expiry of the copyright term on a technologically protected work provides a complete defence to the act of circumventing a technological protection measure.

2. In order to be effective, this will also require lawful availability of certain circumvention tools. U.K. legislation should provide a complete defence for manufacture and supply of circumvention technologies to libraries and archives. Alternatively, this could be done by issuing a standing order under section 296ZE of the U.K. Copyright Designs and Patent Act (CDPA) requiring content producers to provide the relevant DRM keys or decryption information to deposit libraries at the time a work is added to a library or archive collection, or clean copies of the digital work (i.e. without any technological protection measures attached to the work) for the purposes of digital preservation and to enable such institutions, as intermediaries, to make accessible copies available for disabled people, or to otherwise enable readers to avail themselves of the statutory exceptions and limitations to copyright.[8] This should apply to all prescribed libraries and archives under the CDPA and its regulations.

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of Librarian of Congress, 68 FR 62011 (Oct 28, 2003), available at <http://www.copyright.gov/fedreg/2003/68fr2011.html>.

[6] Ibid.

[7] 2003 Librarian of Congress determination, 68 FR 62011, 62015; 2003 Recommendation of Register of Copyrights, op cit, page 99.

[8] See, for instance, sections 49 and 50 of the Australian Copyright Act of 1968 (Cth), which permits libraries, archives and cultural institutions to reproduce and communicate works to make them available to users for research and study purposes and to other libraries and archives, and Recommendation 25 of the report of the Australian Parliament House of Representatives Standing Committee on Legal and Constitutional Affairs on the Review of Technological Protection Measure Exceptions, op cit, to permit circumvention by libraries, archives and cultural institutions for these purposes.

3. To preserve access for lawful noninfringing uses of copyrighted works and to protect the public's ability to access public domain works that are located on a technologically protected format combining copyrighted and public domain works, the Gowers Inquiry should consider establishing a simple and speedy administrative procedure for users to petition to import and use necessary circumvention tools for this purpose. This could be done by creating an administrative rule using a procedure similar to that in current section 116A of the Australian Copyright Act of 1968.

4. In order to minimize the chill experienced by users who are not in a position to risk expensive court or administrative proceedings, the Gowers Inquiry should consider remitting monetary or criminal penalties (including awards of attorneys fees) against defendants (i) whose activity was noncommercial and (ii) who acted on a reasonable, good faith belief that their activity was noninfringing and within any exemptions afforded for circumvention. Such a provision would not only go a long way toward eliminating any penumbral chill on otherwise lawful activities, but it might also encourage parties to resolve cases of first impression in the courts and administrative agencies, thereby clarifying the scope of obligations imposed by circumvention restrictions.

2. Interoperability Issues

U.S. copyright owners have used TPMs backed by the overbroad DMCA provisions to obtain new monopolies over non-copyrightable products and technologies that interoperate with their copyrighted works. This has had anti-competitive impacts for consumers, and stifled technological innovation in several ways.

(a) *Proprietary product lock-in*

The DMCA has been used to lock consumers into purchasing proprietary products at higher prices. For instance, Lexmark, the second largest printer distributor in the US has tried to use the DMCA to block the creation of an aftermarket in recycled printer cartridges that were being sold to consumers at a lower price than Lexmark's own authorized refilled cartridges.[9] A garage door manufacturer, Chamberlain Group, has tried to use the DMCA to ban the sale of its competitor's universal garage remote control opener. [10]

(b) *Geographic Market Segmentation*

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[9] *Lexmark International, Inc. v. Static Control Components, Inc.*, 253 F.Supp.2d 943 (E.D. Ky. 2003), vacated and remanded on other grounds, 387 F.3d 522 (6th Cir. 2004).
[10] *The Chamberlain Group, Inc. v. Skylink Technologies, Inc.*, (N.D. Ill., unreported Civil Action No. 02 C 6376); affirmed on appeal, 381 F.3d 1178 (Fed. Cir. 2004). See also See Timothy B. Lee, "Circumventing Competition: The Perverse Consequences of the Digital Millennium Copyright Act," CATO Policy Analysis No. 564 (Mar. 21, 2006) http://www.cato.org/pub_display.php?pub_id=6025.

The DMCA has been used to support rights that are not part of any national copyright regime. U.S. rightsholders have used region coding technologies backed by the DMCA and similar laws in other countries to geographically segment markets for motion pictures released on DVD, for video games such as the Sony PlayStation, and even for the sale of region-coded printer ink cartridges by Hewlett Packard.[11] In the U.S. Sony has successfully sued distributors of so-called mod chips for Sony Playstations that allow consumers to play video games purchased abroad on U.S. machines. In 2003 U.S. motion picture copyright owners opposed a DMCA exemption request that would have allowed consumers to play DVD movies purchased in other countries and that are not available on DVD in the United States, on US DVD players. In testimony before the US Copyright Office, they claimed that the sale of multi-region DVD players violates the DMCA's technology ban, and that a consumer who plays a lawfully purchased foreign DVD on a multiregion DVD player violates the circumvention act ban.[12]

(c) ***Prevention of creation of new innovative products***

The only digital music store downloads playable on the Apple iPod are from Apple's iTunes store. The iPod is the clear leader in the MP3 player market. The lack of interoperability with other digital download services has helped Apple's iTunes music store to gain a market lead. Apple invoked DMCA liability against competitor Real Networks, when Real created software called Harmony in July 2004 that would have allowed music from Real's own digital download music store to play on Apple iPods. Apple responded by changing the Apple iTunes store's DRM, FairPlay, on at least two successive occasions to prevent it from being compatible with Real's software. At the same time, Apple's "FairPlay" DRM system has proven to be a complete failure at preventing infringement. Apple's own iTunes software enables circumvention of FairPlay DRM by allowing users to "burn, then rip" protected songs to unprotected formats. Consequently, it appears that FairPlay's chief purpose is to hamper interoperability, rather than to protect copyright.

The DMCA provisions have also been used to stifle technological innovation by impairing the ability of technology developers to reverse engineer computer code to develop new products. Legitimate reverse engineering is permitted under U.S. copyright law as fair use. The DMCA has an exception for reverse-engineering, in recognition of its

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[11] Sony Computer Entertainment America Inc. v. Gamemasters, 87 F.Supp.2d 976 (N.D. Cal. 1999); Stevens v Kabushiki Kaisha Sony Computer Entertainment, [2005] High Court of Australia (Oct. 6, 2005); David Pringle & Steve Stecklow, "Electronics With Borders: Some Work Only in the U.S.," WALL ST. J., Jan. 17, 2005, at B1; Reuters, "HP Sued Over Printer Cartridge Expiration," MSNBC, Feb. 22, 2005, available at <http://www.msnbc.msn.com/id/7012754/>.

[12] Testimony of representatives of MPAA (S. Metalitz) and AOL/ Time Warner (D. Marks) Library of Congress, Copyright Office, Public Hearings on Exemption to Prohibition on Circumvention of Copyright Protection for Access Control Technologies, Docket No. RM 2002-4, May 15, 2003, Panel 3 (p. 263 ff) that multiregion DVD players violate section 1201, linked from: <www.copyright.gov/1201/2003/hearings/schedule.html>.

important role in encouraging competition and innovation in the software market. The exception, however, has proven inadequate in practice. U.S. copyright owners have used TPMs backed by the DMCA to try to block legitimate reverse engineering.[13] This has threatened the development of free and open source software.

Recommendations:

5. The potential for legally-enforced TPMs to be used to stifle competition and technological innovation is a significant issue that should be addressed in the review of the U.K.'s copyright law. To avoid some of the detrimental consequences experienced in the United States, the Gowers Inquiry should revisit the implementation of Article 6(4) of the Information Society Directive in U.K. law in section 296FE to require government intervention to control anti-competitive misuse of TPMs. Upon receipt of a credible allegation of anti-competitive use, the Secretary of State should be required to undertake a factual inquiry and make a speedy determination about whether the TPM is being used in a way that appears to violate national competition policies. Once a credible allegation of anti-competitive use has been made, the burden of proof should shift to the entity using the TPM to provide evidence to the Secretary of State to the contrary.

6. A provision should be included in sections 296 – 296ZF of the CDPA removing legal protection against circumvention of rightsholders' technological measures where there is a judicial determination that those TPMs are being used in a way that violates U.K. competition policies. The provision should also provide a conditional defence and significantly reduced penalties for circumvention of a TPM where the defendant has acted on a good faith belief that the TPM is being used in an unlawful, anti-competitive fashion. In particular, in order to dispel any chill on legitimate competitors, remedies should be restricted to injunctive relief, demonstrated damages suffered by the plaintiff, or similar relief, rather than prescribed per-piece statutory damages, retroactive royalties, or criminal penalty.

7. To counter the potential for anti-competitive misuse of legally-enforced TPMs, region coding technologies should be excluded from the definition of "effective technological measures" in section 296ZF, as recommended in the recent report of the Australian Parliament House of Representatives' Standing Committee on Legal and Constitutional Affairs Committee Affairs' Review of Technological Protection Measure Exceptions.[14]

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[13] See, for instance, Vivendi Universal's Blizzard Games' lawsuit against the developers of the open source bnetd project. *Davidson & Assoc. v. Jung*, 422 F.3d 630 (8th Cir. 2005).

[14] *Review of Technological Protection Measure Exceptions*, issued by House Standing Committee on Legal and Constitutional Affairs of the House of Representatives, Australian Parliament on March 1,2006, see particularly Recommendation 4, available at: <http://www.aph.gov.au/house/committee/laca/protection/report/fullreport.pdf>.

3. Preserving a safe environment for scientific research and publication

U.S. copyright owners have used the DMCA to block publication of research that discusses security vulnerabilities in protection technologies. There are concerns within the U.S. that this has weakened computer security, which depends on research and testing.

In 2001, a music industry group threatened DMCA liability against a Princeton professor and his research team when they tried to publish a research paper describing weaknesses in the music industry's proposed digital watermark technology. The industry group considered that the information in the paper was a "circumvention tool" and publishing it was banned under the DMCA. The research team withdrew their paper after the music industry also sent threat letters to their employers and the conference organizers. After Professor Felten and his team filed a lawsuit to clarify their right to research and publish, the music industry body withdrew its threat. While the research team was eventually able to publish a vetted version of its paper after several months of litigation, significant harm was done. One of the team lost his position and a second decided to discontinue computer security research as a result of the litigation.

Professor Felten's case has had an ongoing chilling effect on scientific research and publication. Researchers in the U.S. and overseas have refused to publish the results of security vulnerability research or have removed previously published research from the Internet for fear of DMCA liability. Within the U.S. there is growing concern about the impact of the DMCA on computer security research. In 2002, former White House Cyber Security adviser Richard Clarke admitted that the DMCA had had a chilling effect on security research and called for DMCA reform.

The importance of ensuring a safe environment for scientific research into encryption and computer security has been highlighted by the recent Sony rootkit CD copy-protection episode. As noted in the submissions to the APIG DRM inquiry, consumers became aware during 2005 that Sony BMG had sold audio CDs with two types of copy protection software that installed itself onto purchasers' computers as hidden files, and exposed those computers to security threats. Computer science researchers who discovered the security flaws delayed releasing their results and raising the alarm for fear of potential DMCA liability.[15]

Finally we note that the Digital Media Consumers' Rights Act of 2005, Bill No. H.R. 1201, currently pending before the U.S. Congress, put forward by Representatives Rick

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[15] J. Alex Halderman & Edward W. Felten, "Lessons from the Sony CD DRM Episode", available at: <http://itpolicy.princeton.edu/pub/sonydrm-ext.pdf>. See also testimony of Prof. Edward W. Felten, Library of Congress, Copyright Office, Public Hearings on Exemption to Prohibition on Circumvention of Copyright Protection for Access Control Technologies, Docket No. RM 2005-11A (Mar. 31, 2006) (describing ways in which DMCA hindered research into Sony-BMG CD copy-protection software), available at: <http://www.copyright.gov/1201/2006/hearings/transcript-mar31.pdf>

Boucher and John Doolittle, would permit circumvention for non-infringing uses, including scientific research.

Recommendation:

8. To the extent that U.K. TPM law does not already incorporate safeguards for scientific research, EFF recommends incorporation of an exception for circumvention acts and the use of circumvention tools for scientific research, and an express exception permitting publication of the results of scientific research.

4. U.S. DMCA Exemption Rulemaking

As noted above, U.S. law permits the Librarian of Congress, upon recommendation by the U.S. Copyright Office, to grant three-yearly exemptions from the DMCA's ban on the act of circumvention. That process is governed by section 1201(a)(1)(C) of Title 17 of the U.S. Code.

The tri-ennial rulemaking was included to address concerns raised in the legislative debates leading up to enactment of the DMCA by congressional representatives, academics and public interest groups, that copy-protection mechanisms and other DRM technologies would interfere with fair use and other noninfringing uses of music, movies, television, books and other copyrighted materials. The exemption rulemaking was intended to be a "fail-safe" mechanism, to ensure that DRM technologies would not block the public from making lawful uses of copyrighted works. EFF participated in the rulemakings in 2000 and 2003. In our view, the rulemaking has failed to meet its intended purpose for several reasons, which are set out in more detail in a report we produced in December 2005 that was included in the written materials provided on March 27, 2006.[16]

EFF is aware of recommendations made in the APIG DRM inquiry for the U.K. government to establish a regular review of the impact of TPMs and U.K. TPM law on non-infringing uses of copyrighted works, similar to the U.S. process. While EFF supports a periodic review of the impact of U.K. TPM law, we wish to draw your attention to several deficiencies in the U.S. proceeding and recommend that any process adopted in the U.K. avoid these limitations.

(1) *No Tools Exemption*

The chief limitation of the U.S. process is that it can only grant exemptions for the act of circumvention, and not for manufacture and distribution of the tools, technologies and devices that would be needed to make use of any exemption granted. As a result,

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[16] *DMCA Triennial Rulemaking: Failing The Digital Consumer*, EFF Report, December 2005, copy attached, and available at: <http://www.eff.org/IP/DMCA/copyrightoffice/DMCA_rulemaking_broken.pdf>

exemptions granted can only be exercised by the very small number of persons who have the technical know-how to fashion their own software or hardware circumvention tools. In practice, this means that the rulemaking provides no help to the average consumer.

The ability of consumers to circumvent DRM restrictions depends almost entirely on the ready availability of tools in the marketplace, as demonstrated in DMCA cases involving DVD copying, garage door openers, and laser printer toner refills. In contrast, average consumers denied access to circumvention tools are not able to make use of the 6 exemptions that have been granted by the Librarian in prior DMCA rulemakings.

(2) ***Procedural Burdens and Limitations***

Apart from the limited scope of exemptions able to be granted under the statutory process, it is difficult for consumers to participate meaningfully without legal representation because of stringent procedural rules that were adopted by the U.S. Copyright Office in the 2000 rulemaking. These are set out in detail in EFF's December 2005 report and include requirements as to the framing of a valid exemption request, the burden of proof, and the nature and quantity of evidence required. To date, 6 narrow exemptions have been granted, for 5 limited classes of works, but despite significant consumer participation, no consumer exemptions have been granted.

Recommendations:

9. There should be a regular review of the impact of U.K. TPM law on the ability to make non-infringing uses of copyrighted works, and a procedure to grant exemptions to U.K. TPM law that would operate in addition to the powers granted to the Secretary of State under section 296ZE of the CDPA. Exemptions should cover both the act of circumvention, and the manufacture, use, and distribution of any tools, technologies or devices necessary to make use of any exempted act of circumvention.

10. The review and exemption-granting procedure should include the following elements:

    (a) The UK Office of Copyright, Designs and Patents, or other relevant government body should actively solicit input from users and undertake independent fact-finding to determine whether lawful uses of copyrighted works are being impaired by DRM technologies. It should also undertake regular survey research to monitor the attitudes and experiences of digital consumers in connection with DRM-restricted media and should present a periodic report of its findings to Parliament.

    (b) Once an exemption proponent comes forward with a concern regarding a lawful use that appears to be impaired by DRM restrictions, the burden of proof should then shift to the copyright owner to (1) describe how the DRM technology functions and how widely it is deployed; and (2) demonstrate by a preponderance of the evidence that continuing legal

protection for the DRM in question is necessary to the market viability of the work.

11. The Gowers Inquiry review team should consider the report of the Australian Parliament House of Representatives' Standing Committee on Legal and Constitutional Affairs on the Review of Technological Protection Measure Exceptions and its recommendations concerning procedural rules and burdens of proof for a periodic review of the impact of TPM laws. [17]

Thank you for your consideration.

Gwen Hinze
International Affairs Director
Electronic Frontier Foundation

[17] *Review of Technological Protection Measure Exceptions*, issued by House Standing Committee on Legal and Constitutional Affairs of the House of Representatives, Australian Parliament on March 1,2006, see particularly chapter 3, paragraphs 3.41-3.98, available at:
<http://www.aph.gov.au/house/committee/laca/protection/report/fullreport.pdf>