REPORT ON DISCLOSURE ISSUES RELATED TO THE USE OF COPY CONTROL AND DIGITAL RIGHTS MANAGEMENT TECHNOLOGIES
FOREWORD

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# TABLE OF CONTENTS

FOREWORD 2

REPORT ON DISCLOSURE ISSUES RELATED TO THE USE OF COPY CONTROL AND DIGITAL RIGHTS MANAGEMENT TECHNOLOGIES 4

1. Introduction 4
2. Practical applications of digital rights management and copy control technologies 5
   A. Copy-protected CDs 6
   B. Music downloads 8
   C. DVD regional coding 9
3. Issues for consideration 11
4. Conclusion 13
REPORT ON DISCLOSURE ISSUES RELATED TO THE USE OF COPY CONTROL AND DIGITAL RIGHTS MANAGEMENT TECHNOLOGIES

I. Introduction

Prepared by the OECD Committee on Consumer Policy (CCP), this report analyses the disclosure issues raised by the use of digital rights management (DRM) and copy control technologies (CCTs) to protect intellectual property rights. More specifically, it examines the kinds of restrictions that are commonly placed on access or use of protected material (for example, restrictions on making back-ups or private copies) and the disclosures provided to inform consumers about these restrictions.

Policy issues relating to the use of technology to protect intellectual property rights in digital content have been addressed elsewhere in the OECD. In February 2004, the OECD Council issued a Recommendation on Broadband Development which called on member countries to implement “[r]egulatory frameworks that balance the interests of suppliers and users, in areas such as the protection of intellectual property rights, and digital rights management without disadvantaging innovative e-business models” (OECD, 2004). In addition, the Committee for Information, Computer and Communications Policy (ICCP)’s Working Party on the Information Economy (WPIE) is undertaking an in-depth analysis of the digital delivery of content.\(^1\) The WPIE work has identified potential problems relating to the impact of digital rights management technologies on consumer rights and suggested that additional research in this area may be warranted (OECD, 2005a). It has recommended that “developers of DRM, players in the market employing DRM, and users of DRM-protected material should be equally concerned to ensure appropriate usage rights, transparency, privacy, as well as ease and reliability access” (OECD, 2005b).

Outside the OECD, the impact of DRM and CCTs on consumer rights and expectations have been addressed in a number of different inter-governmental fora and consumer organisations. For example, in 2004, the European Commission established a High Level Group on DRM with the aim of examining the perspectives of different stakeholder groups, including consumers, on DRMs. The group issued its final report in July 2004 (EC, 2004). In April 2005, the European Commission held a workshop to explore the possibility of reaching consensus on DRMs including, among other issues, on consumer trust and confidence.\(^2\) The Commission also provides financial support to the INDICARE (Informed Dialogue about Consumer Acceptability of Digital Rights Management Solutions) project.\(^3\) The International Consumer Protection and Enforcement Network (ICPEN) Europe has examined the issue of informing consumers about the use of copy control technology in audio CDs. The Trans Atlantic Consumer Dialogue (TACD) has issued recommendations to the United States and European governments calling for improved consumer protections in this area (TACD, 2005). The European Consumer Law Group has also conducted

\(^1\) To date, WPIE has conducted studies on the delivery of digital broadband content in four sectors including; scientific publishing, music; on-line computer and video games; and mobile content. For more information see www.oecd.org/sti/digitalcontent.

\(^2\) Details of the workshop, including the agenda, are available at: http://europa.eu.int/information_society/eeurope/2005/all_about/digital_rights_man/events/index_en.htm

\(^3\) http://www.indicare.org.
a study and set forth policy conclusions on the impacts on consumers of technological measures for copyright protection (ECLG, 2005).

This report provides a broad overview of the adequacy of disclosures to consumers of technically-imposed restrictions on normal usage of digital content. It examines current practices in the context of the relevant principles of the 1999 OECD Guidelines for Consumer Protection in the Context of Electronic Commerce (E-commerce Guidelines). This report does not focus on other potential consumer concerns relating to the use of these technologies, such as the impact on traditional “fair use” of copyrighted work, interoperability limitations, or security and privacy issues. Moreover this report does not address any potential benefits of CCT and DRM technologies for consumers or a competitive marketplace.

II. Practical applications of digital rights management and copy control technologies

The terms “copy control technology” (CCT) and “digital rights management” (DRM) refer to any of several technical methods used to control or restrict the use of copyrighted digital works. In some cases, technological protection measures can also result in limited access to copyrighted works. In response to concerns about illegal copying and unauthorised distribution of digital works, CCTs and DRM are being increasingly used in everyday consumer products such as audio CDs, DVDs, and e-books. These technologies are used to define what a copyright holder wishes the protected work to be used for and to prevent any additional use by the consumer beyond that specified, the scope, duration, or other aspects of the uses of the work authorised by the copyright holder and to prevent any non-specified unauthorised uses. Both international and national law copyright instruments provide legal protections for technical measures to protect copyrighted material and provide remedies against their circumvention. The terms of use of technologically-protected material are generally governed by licensing (contract) law.

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4 It should be noted that many interoperability problems can result from propriety equipment standards rather than copy protection measures on the copyrighted work.

5 For example, potential computer security vulnerabilities raised by the installation of copy protection software or privacy concerns relating to the authentication of the identity of the user and monitoring capabilities.

6 For example combating widespread piracy and facilitating the creation of new business models for the delivery of copyrighted content – both of which can translate into more consumer choices as providers gain the confidence and ability to offer a variety of usage options at a variety of price points. CCT and DRM could enable consumers to purchase a copy of a digital work to which they will have access for a defined period according to particular preferences and price considerations.

7 While as a general matter CCTs and DRMs do not control access to copyrighted work, in some cases they may have this effect. Regional coding on DVDs is an example of DRMs controlling access to copyrighted works. Regional coding can prevent consumers from playing DVDs which may be legally purchased from other zones under parallel importing laws.


9 The relationship between copyright and licence (contract) law varies among jurisdictions as to whether copyright holders may override, by contract, rights which the users of copyrighted work would otherwise enjoy under copyright law (e.g. “fair use” exceptions). For a clear overview of this area see Berkman, 2006.
DRM is commonly used to control or restrict use in three ways: to encrypt content to keep it unavailable to unauthorised users; to provide a license system for controlling who can use the content and what can be done with it under specific circumstances; and to authenticate the user or device, a required step for accessing the different usage rights awarded by the license (OECD 2005b; Schrock, 2004).

The following sections examine three areas in which CCTs and DRM are currently being employed: copy-protected CDs; online music, and DVD regional coding. The aim is to provide concrete examples of the use of copy control and DRM technologies in consumer products and the information that is provided to consumers concerning the limitations they may impose on usage of the products.

A. Copy-protected CDs

A number of major record labels use CCTs on CDs designed to prevent or limit certain uses such as digitally copying the music onto a computer which can lead to illegal trading or distribution. According to the European Consumer Law Group, the use of copy protection measures on CDs and DVDs has generated criticism from European consumers who complain that the restrictions imposed do not discriminate between legal and illegal behaviour and frustrate normal expectations (ECLG, 2005).

Among major reported problems with early releases of copy-protected CDs was that they could not be played on other devices (such as on car audio systems, older CD players, DVD players, PlayStation machines, and computer CD-Rom drives), and that in some cases caused damage to this equipment (Peters, 2003; Knight, 2002). Recently complaints have largely focused on restrictions on burning private copies of the discs’ contents onto other CDs, the inability to transfer songs onto portable listening devices such as Apple’s popular iPod, and, more seriously, the use of copy protection software that raises computer security concerns (Borland, 2005). In some cases, particularly where they have prevented playback on computers entirely, have prevented private copies, or have raised security concerns, CDs containing CCTs have prompted negative publicity and have been recalled from the marketplace (Garrity, 2005; The Register, 2005; Evers, 2005; Woellert, 2005).

Product warnings and consumer notification

In 2002, the International Federation of the Phonographic Industry (IFPI) developed voluntary guidelines for its member companies and national associations governing the labelling of CDs containing copy control technologies (IFPI, 2002a). The guidelines recommend that record companies include information on the outside of the disc packaging concerning the types of devices on which the disc is intended and not intended to play, and compatibility with computer use including whether such use is dependent on additional hardware or software. The guidelines recommend that information be provided in the appropriate local language of the market where the CD is released, and that where symbols are used their meaning be clear and complemented by appropriate information campaigns.

The IFPI itself developed its optional logo for record companies to use to indicate that a CD contains technical protection mechanisms (see Figure 1 below). The logo is intended to complement the labelling guidelines and may be accompanied by additional information about the nature and effects of the copy control technology employed (IFPI, 2002b).

As a technical matter, while DVD regional coding is referred to as a DRM or CCT in this paper, it is not a stand-alone technology, but is part of a larger content protection technology called CSS, which has enabled the protected delivery of DVDs to the marketplace.
Despite these self-regulatory efforts by the IFPI, some government authorities and consumer protection associations have expressed concerns that consumers are not being adequately informed about the use and consequences of CCTs in CDs. In June 2005, ICPEN Europe sent a letter to the IFPI Secretariat informing them of ongoing consumer complaints in this area. The letter stated that current implementation of the IFPI guidelines by the two major multinational record companies failed to provide consumers sufficient guidance about the product they buy and how they will be able to use it, amounting to a possible breach of marketing and advertising laws in a number of countries. It recommended that IFPI issue amendments to its guidelines to provide for more specific and detailed disclosures to consumers.\(^\text{11}\) In its response, the IFPI explained different initiatives that record companies have in place to meet consumer concerns.\(^\text{12}\) IFPI gave examples of some independent laboratories running compatibility testing of products with CCTs and others providing consumers with product alternatives, refunds or credit notes. The IFPI concluded that the ICPEN concerns would be borne in mind in the context of the regular review of the IFPI labelling guidelines. In a separate incident, in November 2005, the Attorney General of Texas, United States, filed a class action lawsuit against Sony BMG following the discovery that the company was using Extended Copy Protection (XCP) software in CDs.\(^\text{13}\) XCP is a CCT that uses “cloaking technology” to conceal its existence within computer operating systems and is reported to raise security risks. Among the allegations was that although the CDs in question were marked as “Content Protected,” on the spine of the CD package, there were no disclosures included on the packaging to notify consumers that anything would be installed on their computers. This issue also drew the attention of the independent Italian consumer association, \textit{Altroconsumo}, which sent a public letter to the Milan office of Sony BMG Music Entertainment criticising the lack of information provided to consumers about the use of XCP software and warning of a potential breach of Italian law.\(^\text{14}\)

There have also been private legal cases dealing with inadequate disclosures to consumers relating to the use of CCTs in CDs. For example, in 2001 an American consumer filed a case against the record label Fahrenheit Entertainment, Inc. for failing to disclose that the CD would not play automatically on computer CD drives (Rothkin, 2001). As part of a subsequent out-of-court settlement agreement, the company agreed to list compatibility requirements on the label of the CDs (Harmon, 2002). In 2003 the French consumer association CLCV (\textit{Consommation, Logement et Cadre de Vie}) successfully brought a case on behalf of consumers against the record label EMI Music France. The Court of First Instance found that EMI Music France’s failure to provide sufficient information to consumers concerning technological

\(^\text{11}\) Letter from Christine Wade, ICPEN President, Director of Consumer Regulation Enforcement, Office of Fair Trading, UK, to IFPI Secretariat, 5 July 2005, on file with OECD Secretariat. It is noted that this letter was sent on behalf of the membership of ICPEN Europe, and not the wider ICPEN membership.

\(^\text{12}\) Letter from John Kennedy, IFPI Chairman and CEO to Christine Wade, ICPEN President, Director of Consumer Regulation Enforcement, Office of Fair Trading, UK, 2 September 2005, on file with OECD Secretariat.


restrictions on its CDs amounted to a deceptive and misleading practice in breach of French consumer protection law. Although the company had indicated on the CDs that certain copy protection technologies were in place, it did not specify that this would prevent the CDs from being listened to on car stereos or computers. The court ruled that consumers should be informed of the potential incompatibility issues of copy-protected CDs and playback devices. In 2004, the Versailles Court of Appeals confirmed the above finding, ordering EMI to include a clear notice on the outside packaging of its CDs that they cannot be listened to on all CD players.

More recently, in January 2006, the Paris Court of First Instance found the retailer Fnac to be in breach of the law for failing to provide buyers of the CD “Testify” by Phil Collins with notice that the CD could neither be played on Macintosh computers nor copied for strictly private use. In the United States, the discovery that Sony BMG was using XCP software on its CDs (see above) has led to a large number of private class action lawsuits being filed. The majority of these lawsuits were consolidated before a single court in New York and a proposed settlement reached in December 2005. Among the allegations against the company were that it failed to disclose, inadequately disclosed and/or concealed material facts about the DRM software contained on its CDs. As part of the proposed settlement order, Sony BMG would agree to enforceable provisions relating to the future use of CCTs on CDs, including a provision requiring Sony to include on the CD case a “written disclosure in plain English that the CD contains content protection software and a brief description of the software.” Class action suits are now also pending against Sony BMG in the Canadian provinces of Quebec, Ontario and British Columbia (Geist, 2006).

B. Music downloads

DRM is often used in online music stores to control usage of digital content. Most digital music files sold online are protected by DRM which can prevent or limit consumers ability to burn back-up copies of the music onto a recordable CD (CD-R), to access the music from other computers, or to transfer the music to portable listening devices. The wide variety of technological protections and proprietary formats for digital files offered from online music stores can lead to compatibility problems with playback devices. This means that consumers who wish to change their music service providers or playback devices may have to repurchase music files in a different format (Barrett, 2003). Due to the complexity of online music store and music player compatibility, consumers may be confused as to what songs they will actually be able to play on which devices.

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17 The Court specified that the notice be in a 2.5mm character.


20 For a fuller description of the varying restrictions on usage rights see OECD 2005b, pp. 54-55.

Furthermore, the practice of altering the terms of consumers’ usage options after purchase (sometimes referred to as “renewable” DRM) has been noted. For example, the Electronic Frontier Foundation reports that consumers who bought music from Apple’s iTunes Music Store until April 2004 were told that their music playlists could be burned on up to 10 CDs whereas after that date Apple reduced this maximum to 7 through a software “update” to iTunes. Likewise, they say, the 4.0.1 “update” to iTunes removed the ability for owners of iTunes music files to access and play that music via the Internet from another computer instead allowing only for “local” sharing between users on the same network (EFF et al., 2005). In January 2006, the Consumer Council of Norway submitted a formal complaint to the Consumer Ombudsman alleging that several practices on the iTunes Music Store, including post-purchase changes in the consumers usage rights, potentially violated the Norwegian Marketing Control Act (Singstad, 2006).

Product warnings and consumer notification

A February 2005 survey of 4,852 European consumers conducted by the European Commission funded INDICARE project revealed that “consumers are not well informed about usage restrictions and DRM applied by online music stores. As a result, they are confused when technical restrictions keep them from burning, sharing or transferring music between devices” (Dufft, 2005). The survey revealed that 79% of the users of digital music stores did not know whether the music they purchased was DRM-protected or not. Of those that knew about usage restrictions, the majority did not know the details of the restrictions.

There have been some industry efforts to address consumer confusion relating to which music formats available from online stores play on which music devices. For example, in 2005 Microsoft launched its labelling campaign and logo “Plays for Sure” (see Figure 3). The stated aim of the campaign is to make it easy for consumers to find which digital media stores and devices work together. The logo can only be displayed by music stores and portable devices that are inter-operable or compatible with Microsoft’s own download service (MSN music), which does not include competitors such as iTunes.

Lack of transparency concerning the use of DRM by online music stores has also been the subject of legal action. In February 2005, the French consumer association, Union Fédérale des Consommateurs – Que Choisir filed a case against Sony and Apple alleging that the use of DRM which prevents songs downloaded from their respective online music stores being played on other companies’ music players is “deceitful” and limits consumers’ ability to independently chose their purchase (Best, 2005). Both cases are expected to be heard shortly.

C. DVD regional coding

DRM, in the form of the Content Scramble System (CSS) encryption code, is used on a majority of DVD discs to scramble their contents and ensure that they can only be played on “authorised” DVD players containing the right decryption keys. DVD disc and playback manufacturers obtain licences to use CSS from the DVD Copy Control Association (DVD-CCA). As part of the licence agreement, content owners agree to honour the worldwide “region codes.” There are six main regions:
Region 1 – North America.
Region 2 – Europe, Japan, South Africa, Middle East (including Egypt), Greenland.
Region 3 – South Korea; Taiwan; Hong Kong, China; the Philippines; parts of Southeast Asia.
Region 4 – Australia, New Zealand, Pacific Islands, Latin America (including Mexico), Caribbean.
Region 5 – Eastern Europe, Russia, India, Africa, North Korea, Mongolia.
Region 6 – China.

The regional coding system was put into place so that movie studios can control when and where DVDs are distributed so as not to interfere with schedules for sequential release of movies, which includes theatrical runs, Pay TV broadcast, video rental release, retail video release, and free-to-air television broadcast. As a result of the system DVDs authorised for one region will only play on players that are also authorised for that region. So, for example, a Region 1 DVD will play only on a Region 1 player. If the consumer attempts to play a Region 1 DVD on a Region 2 the player will display a message that the “DVD is not readable in this zone” or simply reject it.

In practical terms the coding system means that consumers who purchase DVDs while travelling abroad in another “region” will not be able to play the discs on their DVD players when they return home. Conversely, consumers bringing their home DVD collection with them when they travel to another region will not be able to watch those discs on a player purchased in the foreign country.

For those consumers who live in Europe, Australia, and Asia, there is a market for code-free (and multi-region) DVD players, which are modified versions of stock DVD players in which the region coding function has been disabled. For the owners of these players, DVDs can be purchased (and played) from any region. However, as a reaction to the popularity of code-free DVD players, another layer of coding on Region 1 DVDs has been implemented: RCE (Regional Coding Enhancement). RCE prevents selected Region 1 DVDs from playing even on code-free DVD players.

Somewhat less restrictive regional coding specifications are permitted for DVD players on computers. When a computer manufacturer gets a DVD-decoding license from the DVD Copy Control Association, it is allowed to make players that can change regions up to five times. After this limit, the region setting on the DVD player can only be changed again if the computer manufacturer resets the drive. For consumers who travel regularly and purchase DVDs in other regions, this inability to play them on personal laptops can be an unexpected constraint. 22

Product warnings and consumer notification

DVDs are usually labelled to indicate which region they can be played in. Most commonly, this label takes the form of a number (one through six), presented in a circle or superimposed on a globe on the back of the DVD box (see Figure 3).23 The region also appears spelled out in some cases. For example, while

22 The Advanced Access Content Protection System (AACS) for next generation high-definition DVDs developed by a cross-industry consortium of consumer electronics manufacturers, content owners, and technology companies does not contain any provisions requiring regional coding to be included on products by adopters of this content protection system. See www.aacsla.com.

23 On some DVDs you will see Region 0 code, which means that these DVDs are “region free” and can be played on any DVD player.
some companies use the globe logo and number scheme, others state: “This disc has been encoded for Region 1: The United States, US Territories and Canada.”

Figure 3. DVD region label

To those who are familiar with the region system, this labelling appears to be clear. For those who are not aware of the region system, however, a number on a globe is perhaps not enough information to indicate what playback restrictions are included. Explanatory text about the region code system is not usually included on or inside the DVD.

With regard to labelling on DVD players and the regions they are compatible with, an informal review of players available on line showed that information about regions is not evident in product descriptions. Little or no clear information is available on regions for specific players on major provider sites (e.g. Sony, Philips, Panasonic) and online buyers’ guides do not indicate how one might know what region the player is good for.

As regards anti-copying devices on DVDs, the Paris Court of Appeals ruled in 2005 that consumers must be clearly informed about specific restrictions to their use, stating that these restrictions were essential characteristics of the goods.\textsuperscript{24} It further ruled that consumers may not understand from the sole reference “P.C.” labelled on the DVD that copying is prohibited. On appeal to the \textit{Cour de Cassation} on a separate point of law, this decision was vacated in February 2006 and remanded to the Court of Appeals for rehearing.\textsuperscript{25}

III. Issues for consideration

The above brief examinations of some of the ways in which copy control and DRM technologies are currently being applied suggest that, in some instances, consumers may not understand, or may be provided with insufficient, unclear, misleading, or confusing information concerning usage restrictions. Examples of these restrictions may include:

1. \textbf{Play limitations}, such as copy-protected CDs not playing in some playback devices.
2. \textbf{Copy limitations}, such as limitations or prohibitions on music being digitally copied and burned onto recordable CDs).
3. \textbf{Interoperability limitations}, such as music purchased in one file format not playing on all portable music devices.
4. \textbf{Geographic limitations}, such as regional coding on DVDs; and
5. \textbf{Post-purchase changes in usage rights}, such as restrictions on making private back-up copies of downloaded music or on accessing this music from different computers.


The need to provide consumers with adequate and accurate information about commercial transactions is a core element of consumer protection law and policy in OECD countries. With regards to transactions occurring on line, which today account for an increasing proportion of sales of entertainment goods such as music and movies, Section III(b) of the 1999 OECD E-commerce Guidelines is instructive. This section provides:

“Businesses engaged in electronic commerce with consumers should provide accurate and easily accessible information describing the goods or services offered; sufficient to enable consumers to make an informed decision about whether to enter into the transaction and in a manner that makes it possible for consumers to maintain an adequate record of such information.”

While the 1999 Guidelines only apply to e-commerce transactions, the principles they set forth are based on established consumer laws and policies governing misleading and unfair commercial conduct applying both on line and off line. Provisions to ensure transparency regarding the terms and services of consumer transactions are also found at the European Union level in the Distance Contract Directive and Electronic Commerce Directive. Similar protections are enshrined in the domestic marketing and advertising laws of most OECD countries.

A number of consumer protection groups and academics have called for improvements in disclosures to consumers. In 2005, the Trans Atlantic Consumer Dialogue issued a resolution recommending that “[a]ll equipment containing DRMs must be clearly labelled showing what uses are allowed and what equipment it will or will not work on.” (TACD, 2005) Similarly, a 2005 policy report published by the European Consumer Law Group similarly stressed “the need to enhance the transparency of TPMs [technological protection measures] and DRMs so as to ensure that consumers are in a position to choose the services that offer, in their opinion, the fairest terms and conditions.” (ECLG, 2005) More recently, in a submission to the UK Parliamentary “All Party Internet Group,” the UK National Consumer Council (NCC) concluded that “the way DRM technology is being deployed is causing a number of serious problems for consumers...[including] inadequate information to make informed purchase choices.” (NCC, 2006).

Ensuring that consumers are adequately informed upfront of any technological restrictions on usage of copyrighted material they purchase takes on added significance considering the legal prohibitions against circumventing these technologies. Anti-circumvention provisions, which make it illegal to “unlock” any technological measures used to protect copyrights, are included in the WIPO Copyright Treaty of 1996, the European Copyright Directive of 2001, and a number of national laws implementing these instruments. Because consumers may be subject to potential civil (and in some cases criminal) liability for attempting to bypass or deactivate technological restrictions on their products, it is important for them to be informed prior to purchase that these restrictions are in place.


IV. Conclusion

Adequate disclosure to consumers of the terms and conditions of products and services purchased is a key element of consumer protection law and policy. This report recognises that industry has taken steps to address consumer concerns about lack of disclosures about CCT and DRM technology on particular products. Indeed, market forces can provide a strong incentive for industry to develop initiatives to satisfy these concerns. The report also recognises that governments have a role to play in encouraging private sector action and ensuring that current practices are aligned with the existing legal and policy consumer protection instruments. Governments should take action to prevent failures to disclose information concerning CCT and DRM technology (i) that deceive consumers, or (ii) that are otherwise likely to cause substantial injury that consumers cannot reasonably avoid and that is not offset by benefits to consumers or competition.

The CCP supports further efforts by the private sector and governments to raise consumer awareness about the use of copy control and DRM technologies and to educate consumers about what they should be looking for before purchasing particular products. This report is intended to assist towards this end.
BIBLIOGRAPHY


