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Digital Rights Management Systems (DRMs): Recent Developments in Europe

by Francisco Javier Cabrera Blázquez

EDITORIAL

After years of talk, the promise of convergent media is finally fulfilling itself, enabled by new technologies and supported by consumer demand. Video on Demand services will certainly have a special place in this new world, since they permit consumers to access audiovisual content whenever, wherever.

The technical preconditions required for the development of VoD services are already met, now it is up to the content industry to take advantage of this new window of opportunity. But rightsholders won't offer their works on the Internet unless they are protected against unauthorised copying and distribution. To this effect, the content industry places its hopes on technologies commonly known under the name of Digital Rights Management Systems (DRMs). DRMs enable rightsholders to control acces to and use of their content through technological measures and they can be used by VoD providers to offer new and attractive services to consumers. However, the practical application of these technologies may be problematic in some cases.

In 2007, the European Audiovisual Observatory intends to pay special attention to the development of the VoD market. As an appetizer, this article provides an overview on recent developments concerning DRMs in Europe, with the aim of bringing some clarity to the relevant legal issues.

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"Why should I pay for something I can get for free?". This seems to be the question many music and film lovers ask themselves these days. Granted, the "get-it-for-free" culture has spread among Internet users and beyond. And the reason is that getting free "stuff" online is all too easy. Digital technologies allow for perfect and unlimited reproduction of copyrighted material. They also provide for more flexible ways of distributing content. Especially peer to peer networks make possible the free sharing of digital files between a virtually unlimited number of anonymous users. There is a further question people may be asking themselves: "If I am able to do something, why shouldn't I?". However, sharing copyrighted material without authorisation infringes copyright. According to the views of the content industry, this damages the whole creative chain down to the consumers themselves.

In order to protect copyrighted works, the content industry places its hopes on technologies commonly known under the banner of Digital Rights Management Systems (DRMs). However, are DRMs, as the European Film Online Charter[1] would like them to be, "secure, cost effective [and] robust" enough to achieve this objective of protection? It is well known that whenever the content industry introduces a technological protection measure, there always seems to be someone able to crack it. And if this "someone" shares the knowledge with the whole world via the Internet, then obviously the technological protection in question will no longer be effective. As Ed Felten puts it: "The usual argument in favor of bolstering DRM is that DRM retards peer-to-peer copyright infringement. This argument has always been bunk – every worthwhile song, movie, and TV show is available via P2P, and there is no convincing practical or theoretical evidence that DRM can stop P2P infringement. Policymakers have either believed naively that the next generation of DRM would be different, or accepted vague talk about speedbumps and keeping honest people honest".[2] In fact, so far technological protection measures have not stopped p2p piracy, and some experts believe that those measures will never be effective in an online environment.

Rightsholders think differently. To them, the best way of fighting this flourishing "get-it-for-free" culture is to deter DRM circumvention with the help of legislative measures. To this effect, the so-called WIPO Internet Treaties (Copyright Treaty (WCT)[3] and Performances and Phonograms Treaty (WPPT)[4]) were adopted in 1996. Their main aim is to provide adequate legal protection to rightsholders in the new online environment. One of the obligations contained in the treaties concerns the introduction of effective protection for technological measures and rights-management information (Arts. 11-12 WCT and 18-19 WPPT).[5] States party to the treaties are required to implement those obligations in national legislation.

DRMs, however, are not only about copyright protection, they also allow for new ways of providing services to consumers. For example, let us imagine a Video on Demand company with a substantial catalogue of films. Whenever users of the VoD services purchase a film, they receive a digital file on their computer. This file contains the film, information on the rights purchased by the user and a protection system to control the use of the work in question. Depending on the rights that were purchased, the DRM will allow the consumer to watch the film during a period of 24 hours (Download-to-Watch) or to watch it with no time limits (Download-to-Own). Prices are set according to the type of service provided. This way, DRMs allow rightsholders to control their content, enabling them to offer different services at different prices.

However, this increase in control comes at a price for consumers: some features of DRMs, such as copying restrictions or the impossibility to play the file on certain devices, may seem unacceptable to consumers. Consumers may be asking themselves questions such as: do rightsholders have a right to control every use made of their works? Are we not, as consumers, entitled to do whatever we please with the DVDs and CDs we own? In principle, the answer is provided by copyright legislation when it establishes exclusive rights pertaining to authors and other rightsholders and grants some legal exceptions in favour of consumers. Nonetheless, the practical application of DRMs poses a number of important questions regarding the delicate balance between exclusive rights and legal exceptions. Moreover, the application of DRMs may have consequences beyond copyright law. For example, contractual clauses applying to some DRM-based services may impose conditions that infringe consumers' rights. Therefore, some commentators[6] argue that the consumer-related aspects of DRMs are or should be regulated by Consumer Protection Law (e.g. contractual clauses, access to content or privacy issues). In addition, DRMs can be used by service/content providers to bundle services/content to certain devices, and this bundling may preclude competition in relevant markets. If this were the case, it would be an issue for competition law.

This article addresses a number of developments concerning DRMs that have taken place in Europe since the adoption of the Directive 2001/29/EC. Firstly, the relationship between DRMs and exceptions and limitations to copyright will be discussed, paying special attention to the private copying exception. Secondly, the example of the iTunes Music Store will be used to present issues that arise outside the boundaries of copyright law. Thirdly, the EU Initiative on Content Online will be briefly presented. Finally some observations will be made on the topic of control and trust.

1. DRMs and Copyright in the EU

At the European level, DRMs are protected by Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society ("the Directive").[7] This Directive aims at adapting copyright legislation to reflect technological developments and to transpose into EC law the main international obligations resulting from the WCT and the WPPT. The obligations on technological measures and rights-management information have been transposed by Arts. 6-7 of the Directive.

According to Article 6 of the Directive, Member States are obliged to provide "adequate legal protection" against:

- Circumvention of effective technological measures (Art. 6(1))
- Trade in circumvention tools (Art. 6(2))

These two paragraphs pose some interpretation problems. Firstly, the Directive does not define what is "adequate legal protection". It is up to the Member States to decide what level of protection shall be considered "adequate".

The act of circumvention must be carried out "in the knowledge, or with reasonable grounds to know, that he or she is pursuing that objective". This can be tricky: for example, some DVD players running on Linux include DeCSS, a descrambling tool to crack CSS protected DVDs.[8] If the user does not know that there is an illegal circumvention tool included in his/her software programme, then his/her act will not be considered as a circumvention act (the user does not necessarily know that the DVD he/she wants to play is CSS protected either).

The term "technological measures" is to be understood as "any technology, device or component that, in the normal course of its operation, is designed to prevent or restrict acts, in respect of works or other subject-matter, which are not authorised by the rightholder". These measures are deemed effective "where the use of a protected work or other subject-matter is controlled by the rightholders through application of an access control or protection process [...] which achieves the protection objective" (Art. 6(3)). As examples of protection measures, the Directive mentions encryption, scrambling or other transformation of the work or other subject-matter or a copy control mechanism. Some argue that weak protection measures such as the encryption used by the CSS copy protection for DVDs are too easy to crack to be considered "effective". However, the Directive only requires that an access control or protection process be in place, not that this technological measure be completely hacker-proof.

As regards circumvention tools, the Directive imposes on Member States the obligation to provide adequate legal protection against their "manufacture, import, distribution, sale, rental, advertisement for sale or rental, or possession for commercial purposes". Circumvention tools are "devices, products or components", but also the "provision of services", that meet one of the three following conditions:

- they are promoted, advertised or marketed for the purpose of circumvention;
- they have only a limited commercially significant purpose or use other than to circumvent;
- they are primarily designed, produced, adapted or performed for the purpose of enabling or facilitating circumvention.

In principle the Directive only targets commercial activities, but it also allows Member States to prohibit the private possession of circumvention tools.[9]

The Directive also mandates Member States to provide adequate protection of rights-management information (art. 7), that is, "any information provided by rightholders which identifies the work or other subject-matter referred to in this Directive or covered by the sui generis right provided for in Chapter III of Directive 96/9/EC, the author or any other rightholder, or information about the terms and conditions of use of the work or other subject-matter, and any numbers or codes that represent such information". This applies when the information mentioned above is associated with a copy of, or appears in connection with the communication to the public of, a work or other subject-matter referred to in this Directive or covered by the sui generis right provided for in Chapter III of Directive 96/9/EC.

The following actions are forbidden by the Directive:
- the removal or alteration of any electronic rights-management information;
- the distribution, importation for distribution, broadcasting, communication or making available to the public of works or other subject-matter protected under this Directive or under Chapter III of Directive 96/9/EC from which electronic rights-management information has been removed or altered without authority.

The same as in Art. 6 of the Directive, the legal protection offered by Member States is directed against conscious acts: "any person knowingly performing [the acts mentioned above] without authority" [...] "if such person knows, or has reasonable grounds to know, that by so doing he is inducing, enabling, facilitating or concealing an infringement of any copyright or any rights related to copyright as provided by law, or of the sui generis right provided for in Chapter III of Directive 96/9/EC".

1.1. Private Copying and Technical Protection Measures

Article 5 of the Directive contains a long list of exceptions and limitations to exclusive rights.[10] These exceptions and limitations aim at protecting interests other than those of the rightsholders, such as interests of the public in general or persons with special needs. However, what happens when a DRM prevents users from effectively taking advantage of those exceptions and limitations? To solve this dilemma, Art. 6(4) of the Directive makes mandatory that rightsholders make available to users the means of benefiting from such exceptions or limitations. In the event that rightsholders fail to do so, Member States have to take appropriate measures to ensure that rightsholders fulfill this obligation.

The Directive has a different approach regarding private copying: it does not impose on Member States the obligation to act in favour of consumers, but rather allows Member States to do so if they consider it necessary. Had rightsholders already enabled reproduction for private use to the extent necessary to benefit from it, Member States lack reason to intervene (Art. 6(4)2).

According to Article 5(2)(b) and Article 5(5) of the Directive, the conditions the private copying exception must fulfill are as follows:

- it must comply with the so-called "three step test": (i) this exception shall only be applied in certain special cases which (ii) do not conflict with a normal exploitation of the work or other subject-matter and (iii) do not unreasonably prejudice the legitimate interests of the rightsholder.

- the copy must be made by a natural person for private use only: commercial purposes (both direct and indirect) are excluded;

- rightsholders must remain free to adopt adequate measures regarding the number of reproductions in accordance with these provisions.

- rightsholders must receive fair compensation which takes account of the application or non-application of technological measures;

These provisions raise many delicate questions. An important one is whether all types of private copying comply with the three-step test. Recitals 38 and 39 of the Directive introduce a distinction between analogue and digital reproductions for private use. The

latter are considered to be more widespread and have a greater economic impact. Member States should therefore take into account technological and economic developments when applying this exception.

In one of the most interesting and controversial disputes of recent times, the French Court of Cassation delivered an important decision[11] on the application of the "three-step test" to the relationship between technological measures and private copying. The case involved an individual, backed by a consumer association, who complained because he had been unable to make a copy of a DVD he bought (David Lynch's "Mulholland Drive") as the technological measures included in the DVD prevented copying. The individual and the association claimed that such technological measures infringed "the user's right to make a private copy" recognised by Arts. L. 122-5 and L. 211-3 of the French Intellectual Property Code. The Court of Appeal in Paris upheld their claim in April 2005. It stated that there was no exception to the private copying exception in French law, and that in the absence of blameable misuse, the making of one copy for private use did not conflict with a normal exploitation of the work in DVD form.[12] The Court of Cassation overturned this judgment, on the basis of Articles L. 122-5 and L. 211-3, which it interpreted in the light of the provisions of the Directive (which at the time had not been transposed into French Law) and Article 9.2 of the Bern Convention. The Court first recalled that these texts included the "three-step test" in question. It then stated that the private copying exception could not stand in the way of the application of technological measures intended to prevent copying which cause prejudice to the normal exploitation of the work. This prejudice should be evaluated on the basis of the economic effect that such a copy could have in the digital environment. The Court of Cassation held that taking into account "the economic importance of the exploitation the DVD release of a film represents in recouping the cost of cinematographic production, the private copying exception should cease to exist because it causes prejudice to the normal exploitation of the work".[13]

Even when the private copying exception complies with the three-step test, rightsholders remain free to adopt adequate measures regarding the number of reproductions. A hot issue is therefore to determine the "right" number of reproductions that consumers are allowed to make. This issue is not solved by the Directive, which in principle leaves this decision to rightsholders. In France the Constitutional Council has decided that in special cases where private copying may conflict with the normal exploitation of the work or other subject-matter and unreasonably prejudice the legitimate interests of rightsholders, the latter are allowed to limit the private copying exception to a single copy or even to not allowing any copying at all.[14]

Another important issue concerns the question of the kind of private copying that should be allowed. It is not clear whether the possibility of simply making a degraded analogue copy is acceptable in the 21st century. And of course, second-generation copies in digital form may also include DRMs, so that no further copies can be made of them. These DRM-protected copies may have compatibility problems with devices other than those originally conceived for playing that type of file (including future devices).[15]

Finally, the relationship between DRMs and the public domain remains open. Both the WIPO Treaties and the Directive afford protection to technological measures designed to prevent or restrict acts executed without the authorisation of the rightsholder as required by copyright law. What happens then when the copyright term expires? And when content providers release public domain content in a DRM-protected format? Such works are not protected by copyright (or they are not protected anymore after the copyright term expires), but as long as consumers have not the means of breaking the digital lock, they are effectively prevented from accessing them.

1.2. DRMs and Copyright Levies

Probably the most problematic issue arising from Article 5(2)b is the relationship between fair compensation for rightsholders and the application of technological measures. As explained *supra*, recitals 38 and 39 of the Directive distinguish between analogue and digital reproductions for private use. Member States should therefore take into account technological and economic developments when transposing this exception into national law, especially as regards the relationship between remuneration schemes and technological protection measures.

Compensation for private copying in the analogue world has so far been achieved in most European countries by imposing levies on blank media (e.g. on audio cassettes). The rationale for these copyright levies is that given the impossibility of controlling every individual act of copying, the only way to compensate rightsholders for those unauthorised copying activities is to tax blank media used for copying purposes.

Copyright levies are now increasingly applied to digital equipment and media. In a digital environment, however, DRMs can (at least in theory) control every individual use of a copyright work and its remuneration. Accordingly, some suggest that copyright levies are not justified anymore in a digital environment. In particular, the combination of DRMs and copyright levies might lead to double payment. Following our VoD example mentioned *supra*, if one consumer downloads his/her favourite film on a VoD service and burns the copy on a DVD-ROM, this purchase might be double-taxed: firstly, through the price of purchase, and secondly, through a copyright levy (if the DVD-ROM is charged with such a levy). Another problem with levies is that blank digital media such as CD-ROMs or DVD-ROMs can be used for purposes other that reproducing copyright works: e.g. people saving their holiday photographs or their professio-nal work on CDs or DVDs would be unduly paying copyright levies.

The European Commission is currently assessing whether copyright levies are being applied to digital equipment and media without due account of their impact on new technologies and equipment.[16] The Commission's main policy objective is to ensure that the fair compensation systems that Member States establish for acts of private copying take account of the application of digital rights management technologies. The provisions of the Directive concerning the private copying exception have been transposed differently by Member States and there are divergent policies amongst Member States on what constitutes fair compensation. The Commission has concluded that Member States lack agreement on the interpretation of Article 5(2)(b) and the extension to digital media and equipment. Levies are unequally applied in terms of the equipment, media and the amounts charged across Member States. The availability and use of DRMs have not had an impact on Member States' policies so far. The Commission has also voiced concerns about the lack of transparency concerning the application, collection and distribution of copyright levies to rightsholders. This problem could hamper the move to a knowledge based economy and the fulfillment of the Lisbon Agenda goals.[17]

The Commission is currently considering three options:

1. To do nothing at all and let the market develop by itself, which was the option chosen by the Commission for the period 2001-2005;

2. To amend the Directive and in particular the provisions dealing with fair compensation for private copying by removing the flexibility accorded to Member States to determine the mode and level of fair compensation;

3. To establish guidance or criteria, by way of a recommendation which would:

   - assist Member States in identifying the availability and use of digital rights management technologies; and
   - provide for transparency in relation to the application, collection and distribution of copyright levies.

According to Commissioner Charlie McCreevy, "The key question is whether existing levies imposed on digital devices should be reduced or phased out and be replaced by direct payment systems".[18] But which kind of remuneration will exist for works that are not protected by DRMs? Or for reproductions made from radio or television programmes? These and other issues will be indeed addressed by the Commission in its proposal on Fair Compensation for Private Copying.[19]

1.3. Exceptions & On-Demand Services: Depending on the Kindness of Strangers?

The rules concerning exceptions and limitations described *supra* do not apply to on-demand services. According to Article 6(4)4, these provisions "shall not apply to works or other subject-matter made available to the public on agreed contractual terms in such a way that members of the public may access them from a place and at a time individually chosen by them". Recital 53 of the Directive justifies this approach by expressing the need to ensure a secure environment for the provision of interactive on-demand services when such services are governed by contractual arrangements. Non-interactive forms of online use (such as the retransmission of television programmes over the Internet) remain subject to the provisions contained in Art. 6(4)1 to 3.

Article 6(4)4 is somewhat contradictory: it does not state that limitations or exceptions are not applicable to on-demand services. Nevertheless it leaves in the hands of rightsholders the (technical and legal) means of preventing the effective benefitting from those limitations or exceptions. Paraphrasing Tennessee Williams, users will "depend on the kindness of strangers"[20] (in this case rightsholders) in order to benefit from exceptions and limitations to copyright provided for by law! This rule may have important consequences for the future of copyright, especially as on-demand services are expected to become the standard content distribution channel in the future.

Just imagine the following situation: an Internet music shop sells DRM-protected songs to the public "on agreed contractual terms" (e.g. via a so-called End User License Agreement[21]). The terms of this agreement define which uses are allowed, therefore substituting the system of exclusive rights as well as the exceptions/limitations established by traditional copyright law. Technological measures control these uses, and according to Arts. 6(1) and 6(4)4 there is no legal possibility of circumventing those technological measures. Some may say that for those who want to benefit from exceptions there is always the possibility of buying a CD containing the same music from a shop. So far so good. Let us now assume that one day the recording industry decides to stop distributing music on CDs to use the Internet as the sole distribution channel. In practice, contractual clauses would override rules on exceptions and limitations and it would therefore be up to rightsholders to graciously offer (or not) the means needed in order to benefit from those exceptions. Marketing considerations may incline rightsholders to kindness, but this remains to be seen...

2. Beyond Copyright: the Case of Apple's iTunes Music Store

2.1. Interoperability

In 2003, Steve Jobs, Apple's CEO, explained during an interview his views on the future of digital content distribution. At the time he was distrustful of technological protection measures: "When we first went to talk to these record companies -- you know, it was a while ago. It took us 18 months. And at first we said: None of this technology that you're talking about's gonna work. We have Ph.D.'s here, that know the stuff cold, and we don't believe it's possible to protect digital content. [...] it only takes one stolen copy to be on the Internet. And the way we expressed it to them is: Pick one lock -- open every door. It only takes one person to pick a lock. Worst case: Somebody just takes the analog outputs of their CD player and rerecords it -- puts it on the Internet. You'll never stop that. So what you have to do is compete with it".[22]

Apple's strategy to compete with piracy was to create the iTunes Music Store,[23] probably the most successful music platform on the Internet. It was opened on 28 April 2003, and since then it has sold more than 1 billion songs worldwide (over 200 million in Europe). However, even if Steve Jobs does not trust technological protections, the iTunes Music Store uses a DRM technology called FairPlay, which is built into the QuickTime multimedia technology and used by the iPod (a very popular portable multimedia player[24]), iTunes software, and the iTunes Music Store. Files sold on the iTunes Music Store are encoded with FairPlay, and this DRM decides on the usage that can be made of the files.

This seems rather paradoxical: if (as Steve Jobs himself argued) DRMs are ineffective in preventing piracy, why did Apple include them in files sold on its music store? Of course, the recording industry is determined not to put their content online without technological protection. And even if technological protection will never be 100 per cent sure, it can be argued that this protection may be enough at least for "keeping honest people honest". But there may be further reasons. According to Felten, DRM-advocates have shifted to new arguments: firstly, they argue that DRM enables price discrimination (different prices for different services), which may be a good thing for both business and consumers. Secondly, they think that "DRM helps platform developers lock in their customers, as Apple has done with its iPod/iTunes products, and that lock-in increases the incentive to develop platforms".[25] Indeed, the couple iPod/iTunes is key to Apple's business in the market of music downloads. Apple's business strategy seems to be based on selling iPods rather than on iTunes sales.[26] Thanks to FairPlay, the only portable player that can play music files purchased on iTunes is the iPod. Consumers wanting to play songs bought on iTunes on a portable player have no other option than using an iPod. Moreover, DRM-protected songs bought on other platforms cannot be played on an iPod.

Of course, what is locked for consumers is also locked for competitors. The iTunes/iPod couple's success has spurred a host of critics, including legal and legislative action. Some competitors argue that FairPlay's lack of interoperability could have a negative impact on the market of music downloads and hamper competition. The European Commission considers that DRM interoperability is a prerequisite for the effective distribution and access to protected content in the Internal Market and that consensus among stakeholders is necessary to achive this objective.[27]

But how much interoperability is really needed in a new market? Is it true, as one critic voice puts it, that DRMs circumvent competition?[28] In such a case, is legislative intervention needed? or is it true, as some analysts think, that for this new market to develop a market player's dominant position is not bad after all?[29]

The French Competition Council recently had an opportunity to make a pronouncement on all those questions in a complaint filed by VirginMega against Apple.[30] The complaint's aim was to force Apple to license Fairplay to VirginMega for use in its online music store. The DRM used by VirginMega, Microsoft's WMA, was incompatible with the iPod, which only accepts Apple's FairPlay. Therefore, consumers purchasing music files on the VirginMega music store could not play them on iPods. VirginMega consider that in France Apple had a dominant position in the market of portable music players as well as in the market of music downloads. It also put forward that having access to FairPlay licences was necessary to operate an online music store, and that this DRM was an essential facility. The refusal to licence FairPlay would therefore be an abuse of Apple's dominant position in the market of portable music players. This refusal would also lead to a lack of DRM interoperability that would harm consumers' interests.

Apple based its refusal to licence FairPlay to third parties on fears of weakening iTunes' security. Besides, Apple's contractual relationship with the majors imposed on the former to keep total control on how third parties would use FairPlay. This would be a difficult and expensive task, and Apple preferred to use its financial and human resources instead on introducing iTunes on new markets and in fighting against piracy.

The French Competition Council found that the only possible reason to find for VirginMega would be to agree with the notion that FairPlay is an essential facility. The Council based its decision on previous French and European case-law. For example, in the recent case of IMS v. NDC,[31] the Court of Justice of the European Communities considered that in exceptional circumstances a dominant undertaking is obliged to license its intellectual property right. The case concerned an undertaking which held a dominant position and owned an intellectual property right in a brick structure[32] indispensable to the presentation of regional sales data on pharmaceutical products in a Member State and refused to grant a licence to use that structure to another undertaking which also wished to provide such data in the same Member State. The Court concluded that, in order to consider such a situation as an abuse of a dominant position within the meaning of Article 82 EC, the following conditions must be fulfilled:

- the undertaking which requested the licence intends to offer, on the market for the supply of the data in question, new products or services not offered by the owner of the intellectual property right and for which there is a potential consumer demand;
- the refusal is not justified by objective considerations;
- the refusal is such as to reserve to the owner of the intellectual property right the market for the supply of data on sales of pharmaceutical products in the Member State concerned by eliminating all competition on that market.

According to the French Competition Council, a facility may be essential if it has no real or potential substitute. Additionally a risk of precluding competition must exist and there must be a causality link between the dominant position and the abuse of that dominant position. The Council decided that these conditions were not met for the following reasons:

- The main use of legally downloaded music (in 2004) was listening, stocking and managing music files on a computer, as well as creating compilations on CDs. Use on portable players was considered to be insignificant .
- Files downloaded from VirginMega can be turned into MP3 or AAC files (DRM-free formats) via a computer and then be downloaded to an iPod. This is an adequate and legal workaround to the interoperability problem.
- There are many portable players on the market that are compatible with Microsoft's WMA. Files sold on the VirginMega music store are compatible with these players.
- ITunes' success on the market of music downloads can be explained by a number of reasons unrelated to FairPlay (notably pricing and consumer-friendliness).
- The Competition Council could not find enough reasons for thinking that competition would be hampered, given the intense competition and the number of new entrants in the market of music downloads.

The interoperability issue became so widely discussed[33] that the French legislator decided to look into this matter when amending existing copyright legislation. On 30 June 2006, the Act on copyright and neighbouring rights in the information society (better known as the "Loi DADVSI") was adopted.[34] This act aims at transposing (rather belatedly) the Directive 2001/29/EC into national legislation. The adoption of the French DADVSI Act was a rather complicated political exercise. Both chambers introduced extensive changes to the bill originally tabled by the Government, which had been severely criticised by the opposition and even by some MPs supporting the current French government. One of the most controversial issues was the introduction of an interoperability exception, which was considered by many as directed against Apple's iTunes Music Store: the new Act introduced sanctions for the circumvention of technological protection measures, but these sanctions would not be applicable to acts which aim at achieving interoperability. However, the French Constitutional Council decided that this exception was contrary to the French Constitution. According to the Council's decision,[35] the notion of "interoperability" constitutes an exception to a criminal law provision which aims at protecting technological measures. Therefore, this notion has to be defined in clear terms, otherwise this would be contrary to the principle of legality and proportionality of criminal offences and penalties. The Council concluded that the notion of interoperability was not defined adequately and therefore the exception would be unconstitutional. The act also introduced a "regulatory authority for technological measures" entrusted a.o. with "ensuring that the technological measures do not, by their mutual incompatibility or their inability to interoperate, result in further limitations on the use of a work in addition to those decided on by the rightsholder". Matters could be referred to this independent administrative authority, which comprises six members (magistrates and qualified individuals), by "any software editor, technical system manufacturer or service operator" to obtain the guarantee and the information necessary for interoperability that may have been refused through a conciliation procedure and, as appropriate, sanctions.

The European Commission does not seem to be too concerned about iTunes' lack of interoperability. According to Charlie McCreevy, "if consumers want a seamless system that marries the music they buy and the player they listen to – why shouldn't they have it, especially if it doesn't distort the market or prevent others from entering? If people don't like one product or approach, they will vote with their wallets and go elsewhere".[36]

2. 2. Contractual Clauses

DRMs allow rightsholders to impose on consumers contractual terms on a "take-it-or-leave-it" basis, leaving consumers with

little or no bargaining power at all. This raises a. o. questions of transparency and fairness. As much as technological innovation should not be achieved at the expense of rightsholders, the fight against piracy and the search for economic growth cannot exclude consumer rights. In this line of thinking, a British report[37] recommended a.o. that the UK Office of Fair Trading (OFT) bring forward appropriate labelling regulations so that it will become crystal clear to consumers what they will and will not be able to do with the digital content they purchase.

The contractual clauses used by the iTunes Music Store have been criticised in different European countries. In Norway, the Consumer Ombudsman recently declared that iTunes' standard customer contract violates Norwegian law.[38] According to a letter sent to Apple by the Consumer Ombudsman, some of the contractual terms applying to the online music service are in breach of section 9a of the Norwegian Marketing Control Act.[39] This provision concerns unfair contract terms and conditions. The terms in question concern (i) the contractual locking of purchased music to the iPod, (ii) the requirement that consumers accept English contract law as governing law, (iii) the disclaiming of all liability for damage that the iTunes software might cause and (iv) the provisions enabling iTunes to alter usage rights to already purchased files. Furthermore, the Consumer Ombudsman considers other terms that are likely to be unlawful, like iTunes' negligence to respect the statutory consumer right to cancel a purchase made by distance-selling within a certain time-limit. The Consumer Ombudsman examined whether iTunes' practice of geographical price discrimination might be unlawful. In Europe, the iTunes Music Store works at a national level, i.e. users from a given EU Member State can only purchase music at their national iTunes Music Store. This allows iTunes to charge different prices in different EU Member States. Also, the Ombudsman is not quite certain whether technological protection measures as such can be considered as unreasonable terms under section 9a of the Marketing Control Act, whose wording targets unreasonable contractual terms. Apple submitted its response in August and is in talks with consumer agencies in Norway, Sweden and Denmark, hence the case is still pending.[40]

Concerning iTunes' practice of geographical price discrimination, the European Commission is currently analysing a complaint submitted by the British consumer association "Which?" to the UK Office of Fair Trading.[41] "Which?" complained that UK users were unable to benefit from cheaper prices charged in other European countries. The OFT referred the case to the European Commission, because the latter is better placed to consider this matter, in light of the fact that iTunes operates in more than three EU Member States. OFT also stated that the Commission is in a better position to address the questions raised by "Which?" in the context of single market issues relating to the licensing of copyright for online services.[42] The Report mentioned *supra* also recommended that the Department of Trade and Industry investigate different single-market issues including geographical price discrimination inside the EU, with a view to addressing the issue at the European level.

Regarding this case, the European Commission seems to take again a wait-and-see attitude. According to Philip Lowe, Director General of Competition, the European Commission does not regard this issue as an instance of major concern until seeing further market developments, especially since Apple obtained its strong market position in open competition with many similar players.[43] Concerning this question, the German government has announced that it will promote a charter on digital rights during its next presidency of the European Union (January-June 2007). This charter will deal with consumer rights' issues. Germany has also announced a digital rights conference to be held in March 2007.[44]

3. Next Steps

After years of talk, it seems that the promise of convergent media is finally fulfilling itself, enabled by new technologies and supported by consumer demand. In Commissioner Reding's opinion: "Broadband communications and the convergence of networks, services and devices are right now paving the way for a new phase of growth and innovation".[45] The European Commission intends to encourage the development of business models and to promote the cross-border delivery of online content services, creating the preconditions for a true European single market for online content delivery. In order to gather information on this topic, the European Commission recently launched a public consultation on Content Online in the Single Market.[46] It included sending a question-naire to stakeholders which reflects some of the challenges to EU policies from the point of view of the DG Information Society and Media as well as concerns/ideas previously expressed by groups of stakeholders. As regards DRMs, the Commission is interested in knowing more about DRM robustness, transparency and user-friendliness, as well as the interoperability between devices. Input to this consultation will help shape a Commission Communication on Content Online. This Communication (together with the future Commission's proposal on Fair Compensation for Private Copying) will hopefully shed some light on the questions raised above.

4. Is Control Better than Trust?

Lenin is quoted to have penned the aphorism: Trust is good, control is better. It sounds pretty much like the idea behind DRMs. You may trust your customers, but it seems much better to be able to actually control what they can do with your content. Mistrust is indeed a very human reaction and, given the current levels of copyright infringement, a quite understandable one. However, too much control over what consumers can do with the content they purchase (especially if this control infringes consumers' rights) may lead them to choose less constraining options or turn to illegal ways of obtaining content.

Aware of the risks of an excessively "Leninist" stance, the content industry has the difficult task of finding a balanced approach that takes into account consumers' interests and rights without sacrificing copyright protection. Normally business models are based on consumers' acceptance, but it is probably too soon to tell which models will be successful in this new market. If most online stores currently use DRMs, there are others like eMusic.com that prefer to sell music in the unprotected MP3 format.[47] Also more and more self-producing bands are cutting the middleman out and selling their songs directly on the Internet without DRMs.[48] Besides, a new generation of business based on free content is appearing. Take the example of SpiralFrog.com, a new online music store which will offer advertising-supported legal downloads of audio and video content licensed from the catalogues of the world's major and independent record labels. For its part, the popular video exchange website YouTube.com is currently seeking rights to thousands of music videos, and it states that any business model it decides to adopt will offer the videos free of charge.[49] Some even go as far as to predict that the future lies in advertising-supported rather than in DRM-protected content.[50]

Whatever the future will look like, an act of balance (not necessarily based on trust but rather on convenience for both parties) will be required in order to provide content for the public and remuneration for those involved in the creative chain. This act of balance could be summarised with the following quote from Shakespeare: *Love all, trust a few, do wrong to none.*[51]

1) See European Charter for the Development and the Take-up of Film Online, 23 May 2006, available at: http://ec.europa.eu/comm/avpolicy/docs/other_actions/film_online_en.pdf
2) See Ed Felten, DRM Wars: *The Next Generation*, available at: http://www.freedom-to-tinker.com/?p=1051
3) WIPO Copyright Treaty, adopted in Geneva on 20 December 1996, available at: http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html
4) WIPO Performances and Phonograms Treaty, adopted in Geneva on 20 December 1996, available at: http://www.wipo.int/treaties/en/ip/wppt/trtdocs_wo034.html
5) For a description of the rules contained in both treaties see Jeffrey P. Cunard, Keith Hill, Chris Barlas, *Current Developments in the Field of Digital Rights Management*, pp. 11 *et seq.*. Standing Committee on Copyright and Related Rights, Tenth Session, Geneva, 3-5 November 2003. Available at: http://www.wipo.int/documents/en/meetings/2003/sccr/pdf/sccr_10_2.pdf
6) See e.g. Natali Helberger, *Digital Rights Management from a Consumer's Perspective*, IRIS plus 2005-8, available at: http://www.obs.coe.int/oea_publ/iris/iris_plus/iplus8_2005.pdf.en
7) Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society. Official Journal L 167, 22/06/2001 P. 0010 – 0019. Available at: http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32001L0029:EN:HTML
8) In order to avoid liability, most Linux-based DVD players do not include DeCSS so that the user has to find and install him/herself DeCSS. For more information on CSS see: http://www.dvdcca.org/faq.html
9) See Directive, Recital 49.
10) The only exception that Member States are obliged to introduce in national legislation is one related to temporary acts of reproduction which are transient or incidental and an integral and essential part of a technological process (cache copies). Otherwise, each Member State may select out of this extensive catalogue which exceptions and limitations wants to introduce in national legislation.
11) Cour de cassation (1 re ch. civ.), 28 février 2006, Studio Canal, Universal Pictures video France et SEV c/ S. Perquin et Ufc que Choisir. Available at : http://www.foruminternet.org/telechargement/documents/cass20060228.pdf
12) Cour d'appel de Paris (4 e ch. B), 22 avril 2005 - S. Perquin et Association Que Choisir c/ Universal Pictures vidéo France, SA Films Alain Sarde et autres. Available at : http://www.foruminternet.org/documents/jurisprudence/lire.phtml?id=902
13) See Amélie Blocman, [FR] *Court of Cassation Pronounces on Private Copying versus Technical Protective Devices*, IRIS 2006-4: 12. Available at: http://merlin.obs.coe.int/iris/2006/4/article20.en.html
14) Decision of the French Constitutional Council no. 2006-540 DC of 27 July 2006, available at: http://www.conseil-constitutionnel.fr/decision/2006/2006540/index.htm
15) See infra.
16) See http://europa.eu.int/comm/internal_market/copyright/levy_reform/index_en.htm
17) See speech of Charlie McCreevy - Address to the EABC/BSA Conference on Digital Rights' Management, High level Industry Seminar/Global Industry Roundtable on Levies & DRMs, Brussel, 12 October 2005, available at: http://ec.europa.eu/commission_barroso/mccreevy/docs/speeches/2005-10-12/euam_en.pdf
18) See Bulletin Quotidien Europe No. 9218, 24 June 2006.
19) This communication was expected for Autumn 2006 but has been postponed *sine die*.
20) See Tennessee Williams' play *A Streetcar Named Desire*.
21) This is a license that the end user must accept before having access to the product. It is the standard licensing procedure for end users in the software industry (also called "click-wrap licenses").
22) See Jeff Gooddell, Steve Jobs: *The Rolling Stone Interview*, Rolling Stone, 3 December 2003. Available at: http://www.rollingstone.com/news/story/5939600/steve_jobs_the_rolling_stone_interview
23) See http://www.apple.com/itunes/
24) See http://www.apple.com/ipod/
25) See Ed Felten, op. cit.
26) See e.g. Ina Fried, *Will iTunes make Apple shine?*, available at: http://news.com.com/2100-1041_3-5092559.html
27) See Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee, the Management of Copyright and Related Rights in the Internal Market, available at: http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=52004DC0261&model=guichett
28) See Timothy B. Lee, *Circumventing Competition - The Perverse Consequences of the Digital Millennium Copyright Act*, available at: http://www.cato.org/pub_display.php?pub_id=6025
29) See e.g. Mark Mulligan, *Scratching Beneath the Surface of Another Apple Milestone*, available at: http://weblogs.jupiterresearch.com/analysts/mulligan/archives/016790.html
30) *Conseil de la concurrence, décision n° 04-D-54 du 9 novembre 2004 relative à des pratiques mises en œuvre par la société Apple Computer, Inc. dans les secteurs du téléchargement de musique sur Internet et des baladeurs numériques* (Decision of the Competition Council no. 04-D-54 of 9 November 2004). Available at : http://www.conseil-concurrence.fr/pdf/avis/04d54.pdf
31) Judgment of the Court of Justice of the European Communities (Fifth Chamber), Case C-418/01, 29 April 2004, available at: http://curia.europa.eu/jurisp/cgi-bin/gettext.pl?where=&lang=en&num=79959570C19010418&doc=T&ouvert=T&seance=ARRET
32) IMS provided data on regional sales of pharmaceutical products in Germany to pharmaceutical laboratories formatted according to a brick structure consisting of 1,860 bricks, or a derived structure consisting of 2,847 bricks, each corresponding to a designated geographic area. According to the order for reference, those bricks were created by taking account of various criteria, such as the boundaries of municipalities, postcodes, population density, transport connections and the geographical distribution of pharmacies and doctors' surgeries.
33) This is not the only time that DRMs have been taken to court in France. After the writing of this article, a French court ruled against Sony for not informing consumers that the files sold in its music store Connect cannot be played on players other than those manufactured by Sony and that those players are incompatible with files sold on other music stores. It also found Sony's policy to be an unlawful product tying. Sony is expected to appeal against this decision. See Tribunal de grande instance de Nanterre, 6ème chambre, 15 December 2006, Association UFC Que Choisir c/ Société Sony France, Société Sony United Kingdom LTD. Available at: http://www.juriscom.net/documents/tginanterre20061215.pdf
34) *Loi n° 2006-961 du 1er août 2006 relative au droit d'auteur et aux droits voisins dans la société de l'information* (Act 2006-961 of 1 August 2006 on copyright and neighbouring rights in the information society), available at: http://www.legifrance.gouv.fr/WAspad/UnTexteDeJorf?numjo=MCCX0300082L
35) Decision of the French Constitutional Council no. 2006-540 DC of 27 July 2006, available at: http://www.conseil-constitutionnel.fr/decision/2006/2006540/index.htm
36) Speech of Charlie McCreevy, European Commissioner for Internal Market and Services, *Music licensing for the 21st century*, Music Publishers' Congress,Brussels, 3 October 2006. Available at: http://europa.eu.int/rapid/pressReleasesAction.do?reference=SPEECH/06/558&format=HTML&aged=0&language=EN&guiLanguage=en
37) "Digital Rights Management": Report of an Inquiry by the All Party Internet Group, June 2006, available at: http://www.apig.org.uk/current-activities/apig-inquiry-into-digital-rights-management/DRMreport.pdf
38) See press release of the Norwegian Consumer Ombudsman, 7 June 2006, available in English at: http://www.forbrukerombudet.no/index.gan?id=11032467&subid=0
39) Act No. 47 of 16 June 1972 relating to the Control of Marketing and Contract Terms and Conditions. Available in English at: http://www.forbrukerombudet.no/index.gan?id=706&subid=0
40) The Norwegian Consumer Ombudsman has cooperated with Swedish and Danish consumer authorities in the case.
41) See OFT press release, 3 December 2004, available at: http://www.oft.gov.uk/News/Press+releases/Statements/2004/itunes.htm
42) For more information on this topic see: http://ec.europa.eu/internal_market/copyright/management/management_en.htm
43) See *European Commission Wary of Forcing Open Apple's iTunes*, 19 June 2006, available at: http://www.foxnews.com/story/0,2933,200085,00.html
44) Leo Cendrowicz, *Germany pledges EU digital rights charter*, The Hollywood Reporter, 18 November 2006, available at: http://www.hollywoodreporter.com/hr/content_display/international/news/e3i7be4e4a2f0b118dbab3cdf588db854a8
45) Speech of Viviane Reding, Member of the European Commission responsible for Information Society and Media, *Why Broadband Needs Content*. IDATE 27th International conference: Content industries and Broadband economics. Montpellier, 23 November 2005. Available at: http://ec.europa.eu/comm/commission_barroso/reding/docs/speeches/idate_20051123.pdf
46) See European Commission, Public Consultation on Content Online in the Single Market, July 2006. Information available at: http://ec.europa.eu/comm/avpolicy/other_actions/content_online/index_en.htm
47) See http://arstechnica.com/articles/culture/emusic.ars
48) See e.g. Guillaume Champeau, *1 million de dollars en une semaine et sans DRM*, available at: http://www.ratiatum.com/news3705_1_million_de_dollars_en_une_semaine_et_sans_DRM.html
49) See Yinka Adegoke, *YouTube seeks rights to thousands of music videos*, available at: http://www.usatoday.com/tech/news/2006-08-15-youtube-music-videos_x.htm
50) See e.g. Dan Nystedt, *Three Minutes: BitTorrent Founder Navin Talks DRM*, available at: http://www.pcworld.com/article/id,127232-pg,1/article.html
51) William Shakespeare, *All's Well That Ends Well*, Act 1 Scene 1.