

DRM Interoperability and Intellectual Property Policy in Europe

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1. Introduction

Apple's dominating music downloading service iTunes Music Store has brought interoperability debate once again on the table. This time, however, it all started in Paris – not Brussels, as one would have expected. The French parliament voted in March 2006 to add unique interoperability provisions in its implementation of the EU copyright directive. Although later watered down by the French Senate in May, the decision was largely seen in the public discussion as forcing Apple to open up its FairPlay Digital Rights Management (DRM) system to competitors. FairPlay adds copying and other restrictions to downloaded songs making them incompatible with other but Apple's own music players (iTunes software and iPod portable player). France's minister of culture commented their decision as "the dawn of an equitable internet" and predicted that other European countries would soon follow the suit. Others reacted more cautiously. Apple warned that the French implementation of the copyright directive "will result in state-sponsored piracy."¹

DRM interoperability is important for both consumers and competitors. Obviously, DRM usage terms such as those used by Apple may fail to guarantee the reasonable expectations, or "good faith", of online content buyers. To this date, consumer protection authorities at least in Denmark, Norway and Sweden have demanded that Apple should open up its format.² There is also ongoing competition law debate. Already in late 2004, the French competition council considered a case against Apple on the interoperability issue. Apple however won and FairPlay remained closed. The council explained that it was too early to consider whether Apple would have any meaningful dominant position in the markets that were just about to form. Now in 2006, depending on the estimate,

¹For these and other comments after the parliament's first vote see e.g. Financial Times, 21.3.2006 and Ars Technica, 22.3.2006. For example US Commerce secretary backed Apple noting that "we believe that intellectual property rights are being violated." Ironically, in 2002 before iTunes Music Store had opened, Apple's CEO Steve Jobs commented that "If you legally acquire music, you need to have the right to manage it on all other devices that you own." See Macworld 4.3.2002. For comments after the final revised text was accepted see e.g. Financial Times 30.6.2006.

² For an overview, see e.g. Financial Times 14.6.2006

Apple continues to have a steady 70-80% share of the growing market, which already exceeds over 5% of all recorded music sales. Thus, the competition law discussion is far from over.³

To be sure, Apple's music downloading service is just one example of a closed Digital Rights Management system controlled by a single company or organization in a given market. For example, the so-called copy protected CDs have typically had proprietary DRM systems meaning that the discs can be played only on record label-specific software players. Interoperability is also a matter of degree. In some cases interoperability information is available but only under restrictive and somewhat expensive licensing terms. This is for example the case of DVD format, where DVD Copy Control Association controls the necessary information to produce compatible DVD players. Arguably, proprietary DRM systems are in general problematic to both consumers and competitors.

As more and more content is being played through computer systems – a development commonly called as the media center PC – the technical interoperability of DRM systems becomes also more crucial. All parts of the media center must operate seamlessly with each other. Software systems must be able play, store and otherwise process content files be they DRM protected or not. Thus, for example Microsoft announced in late 2005 that it would support a certain future video format only because its DRM allows the making of back-up library on home PCs – something technically difficult and legally prohibited with the current DRM system on DVD format.⁴

This article analyses DRM interoperability in the light of EU copyright, competition and consumer laws. First, it is asked why copyright directive lacks an explicit interoperability provision and to what extent the directive, however, may allow the development and marketing of compatible devices. Then, the interoperability provisions in the 1991 software directive and their applicability to DRM systems are discussed. The situation is briefly compared to the United States and the possibility of national copyright policies is mentioned following the French example. Second, the article considers EC competition law as a means

³ In fact, a new competition law suit against Apple and Sony was filed in 2005 by French consumer association Union Federale des Consommateurs-Que Choisir.

⁴ See e.g. Ars Technica 17.10.2005: "Bill Gates on "anti-consumer" Blu-ray, and the "last physical format""

to enforce interoperability in DRM systems. Analogies are drawn from existing case law. Third, the role of consumer protection regulation in the DRM interoperability debate is discussed following the lead of Scandinavian consumer protection authorities.

In the end, the article discusses whether there is a need to recognize interoperability as a general principle in the EU intellectual property policy and what measures could be used to strengthen such policy. Competition policy approach is suggested to provide a formal legal doctrine that could be in the long term implemented in intellectual property laws. In the meantime, consumer protection law can be used as a transitional tool for opening up the most far-reaching DRM systems.

2. DRM Interoperability in Copyright Law

2.1 Copyright Directive

EU copyright directive from 2001 mentions DRM interoperability only briefly.⁵ Recital 54 of the directive recognizes the incompatibility issue but only states a modest wish without any obligations:

“In an increasingly networked environment, differences between technological measures could lead to an incompatibility of systems within the Community. Compatibility and interoperability of the different systems should be encouraged. It would be highly desirable to encourage the development of global systems.”⁶

Interoperability was not a major issue during the preparation of the directive. Already draft versions of the directive included the recommendation-style interoperability recital. Probably the main reason why the approach to interoperability wasn't more proactive was that in 2001, when the directive was finally accepted, there wasn't yet any markets for DRM and thus DRM interoperability remained a non-issue in daily politics.

⁵ 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

⁶ Also of note is recital 48, which states that DRM systems should not prevent “the normal operation of electronic equipment and its technological development.”

Having said that, one can ask to what extent does the copyright directive then prohibit the development of interoperable systems without the authorization of the DRM provider? A common understanding is that DRM can be used to control the development of compatible systems. However, with close reading of the directive, a counter-argument can be constructed: the directive might actually allow compatibility functionality in many cases. Article 6(2) of the directive bans the circumvention of DRM in the case the circumventing (or in this case compatible) players or devices:

“(a) are promoted, advertised or marketed for the purpose of circumvention of, or (b) have only a limited commercially significant purpose or use other than to circumvent, or (c) are primarily designed, produced, adapted or performed for the purpose of enabling or facilitating the circumvention.”

Suppose one wants to produce and market a music player compatible with files encoded in certain proprietary DRM standard. Based on the article 6(2), one can claim that with certain architectural and marketing decisions the compatible player would not fall in the directive’s definition of an anti-circumvention device. First, if DRM compatibility would not be explicitly marketed – except as necessary information to consumers about the technical features of the player – that could guarantee requirement (a). Second, if the compatible player would also play a number of other file formats and perhaps have some extra functionality to simply playing the files, that could guarantee requirements (b) and (c).

2.2 Software Directive

EU software directive from 1991, around the era of software copy-protections, takes a more firm and proactive approach towards interoperability.⁷ Article 6 of the directive establishes a mandatory interoperability provision, which has many nuanced requirements. During the national implementation process of the EU copyright directive, there was some controversy whether the provision could be applied to DRM systems. At least Danish policy makers explained that the

⁷ Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs.

copyright directive does not need a DRM interoperability provision since it is already implemented through the software directive.⁸ To compare, in Finland an implementation proposal stated that the interoperability exception for software required an explicit amendment to make it clear that it would not apply to DRM systems.⁹

The law drafting history shows that the interoperability provision in the software directive was the result of intense lobbying from two equally powerful groups.¹⁰ The issue of interoperability was already reality in the software markets so it was easy to see the practical benefits of a pro-interoperability decision. In the end, the scope of the provision ended up being rather broad. Recital 23 states one of the rationales of the provision as follows:

“...an objective of this exception is to make it possible to connect all components of a computer system, including those of different manufacturers, so that they can work together”

Would that apply to DRM systems as well? For example, a DVD player software clearly is a component in a computer system. In the light of recital 23, the crucial question is, with what kind of component the player software interoperates in order to play DVD discs. If the answer is the actual movie content on the DVD – hardly part of a “computer system” – then the interoperability provision may not apply. However, if the answer is the DRM system required to decode the disc contents, then the provision most probably would apply. A technical DRM system obviously is a component in a modern computer system.

In fact, the recital suggests that the interoperability provision covers not only interfaces towards other “pure” software components but also interfaces towards any system component from other manufacturers that should “work together”

⁸ See also recital 50 of the copyright directive, which states that the anti-circumvention provision “should neither inhibit nor prevent the development or use of any means of circumventing a technological measure that is necessary to enable acts to be undertaken in accordance with the terms of Article 5(3) or Article 6 of Directive 91/250/EEC. Articles 5 and 6 of that Directive exclusively determine exceptions to the exclusive rights applicable to computer programs.”

⁹ See chapters for Denmark and Finland in Ian Brown (ed.) (2003): *Implementing the European Union Copyright Directive*. Foundation for Information Policy Research. The Finnish proposal did not end up in the final law.

¹⁰ For a historical narrative see e.g. Jonathan Band and Masanobu Katoh (1995): *Interfaces on Trial*. Westview Press.

with the software component. Since software components can in many places be replaced by hardware components, an opposite interpretation would imply a significant reduction in the scope of the interoperability provision. Thus, there are strong arguments to support the view that the interoperability provision in the software directive applies to all system components in the future media center PC. Unfortunately, there is so far no case law regarding this question. Some analogy can be perhaps derived from the experiences in the United States.

2.3 Comparison to Digital Millennium Copyright Act

The United States has had the general protection for DRM since the passage of Digital Millennium Copyright Act (DMCA) in 1998. The act has more fine-grained DRM-regulation than the copyright directive. Most importantly, the act has a specific mandatory provision in section 1201 (f) for reverse engineering for the purpose of interoperability between software components. The details are much in line with EU's software directive.

The legality of reverse engineering for DRM interoperability has been on trial already a few times. In *Chamberlain v. Skylink* the Chamberlain Group tried to use DMCA to ban Skylink to produce a interoperable and competing garage door opener.¹¹ The case was decided in favor of the defendant based on the fact that the Chamberlain Group did not forbid its customers to use alternative openers (there was no binding license agreement on that issue) and therefore there was no infringement.

In *Lexmark v. Static* the outcome was similar but the court's reasoning was somewhat different. Here Lexmark tried to use DMCA to prevent Static to make compatible printer cartridges but failed to show that their DRM had something to do with the access control to their software in question.¹² One of the judges concurred and wanted to additionally highlight the competition aspects of the case:

“We should make clear that in the future companies like Lexmark cannot use the DMCA in conjunction with copyright law to create monopolies of

¹¹ *Chamberlain Group, Inc. v. Skylink Technologies, Inc.* (Fed. Circuit, 2004), 381 F.3d 1178

¹² *Lexmark Int'l, Inc. v. Static Control Components, Inc.* (6th Circuit, 2004), 387 F.3d 522

manufactured goods for themselves just by tweaking the facts of this case.”

In *Davidson & Associates v. Jung* the court enforced DMCA against the defendant, who ran a compatible game server that could be used to create an alternative network for plaintiff’s game software. The competing product was lacking a check for pirated software. In other words, it did not have a proper DRM system implemented and instead of interoperability it aimed to simply substitute the original product. The court argued that this was against one of the criteria in 1201 (f) because:

“When a party provides access to a non-infringing, emulating server as an alternative to a server protected by the publisher’s access controls, this constitutes “circumvention” of the access controls employed by the publisher’s server.”¹³

In summary, there are clear tensions to interpret DMCA’s anti-circumvention provision in accordance with competition policy. A competitor, which circumvents a DRM system in order to achieve compatibility with his own DRM system would probably be safe. However, the cases have been mostly decided by the unique facts and the arguments used are not so persuasive that they would constitute a solid ground for case law.¹⁴ One possibility is that the political will to clarify DMCA reaches such a level that proposals like Digital Media Consumer's Rights Act will pass in Congress.¹⁵

2.4 French Law

¹³ *Davidson & Associates v. Jung* (8th Circuit, 2005), 422 F.3d 630. The case is commonly referred to as *Blizzard v. BnetD*. According to the judgment, it was also relevant that the license agreement of the product in question forbid reverse engineering

¹⁴ For a summary of the cases from DRM interoperability perspective see e.g. Dan L. Burk (2005): “Legal and Technical Standards in Digital Rights Management Technology”, *Fordham Law Review*, p. 537-, who goes on to suggest the application of (US specific) misuse doctrine to justify interoperability in the case anti-circumvention regulation would not allow it.

¹⁵ HR 1201 IH Digital Media Consumers' Rights Act of 2005. If accepted, the act would add e.g. the following statement into copyright law: “...and it is not a violation of this section to circumvent a technological measure in order to obtain access to the work for purposes of making noninfringing use of the work”. For more discussion see e.g. Timothy B. Lee (2006): *Circumventing Competition: The Perverse Consequences of the Digital Millennium Copyright Act*. Cato Institute.

If the presented interpretations of the directives with the backing of United States case law are correct, meaning that the circumvention of DRM systems is lawful for competitors, is the interoperability debate misplaced? In fact, one can find some market evidence suggesting that the interpretations might indeed hold out. For example several anti-circumvention implementations of Apple's FairPlay standard have been available since 2004.¹⁶ At least so far Apple's strategy has been to make its DRM system incompatible with anti-circumvention solutions upon each new version release.¹⁷

This also reveals the main weakness in the directives' and DMCA's approach towards interoperability. It is definitely not enough to "wish for" interoperability (copyright directive). A better way is to clearly allow interoperability (software directive and DMCA). And even more progressive approach is to encourage and facilitate competition through mandatory interoperability. This is how the DRM interoperability provision was proposed in the French copyright directive implementation. As it turned out, the French legislature finally adopted a revision, which does not require interoperability but only gives the authorities a possibility to enforce interoperability case-by-case.

So France is the only EU member state, where the parliament voted for explicit DRM interoperability provisions in the national copyright directive implementation. The much debated interoperability provision proposed in March 2006 essentially provided that:¹⁸

- One can request interoperability information from a DRM provider and a court can order the provider to release it
- Only information transmission charges can be applied and no royalties for use can be charged
- DRM provider can not prevent the publication of the source code of an interoperable computer program

¹⁶ Real's Harmony, DeDRMS, and Hymn. Two last mentioned have been implemented in various open source software players.

¹⁷ One reason why legal cases have not been initiated may be that the anti-circumvention implementations – with one exception – have been in open source players.

¹⁸ Loi sur le droit d'auteur et les droits voisins dans la société de l'information, abbreviated as DADVSI, article 7 as proposed in March 2006.

The provision was proposed by local free software supporters and objected by some media and software industry lobbies. It went significantly further than article 6 of the software directive, or DMCA for that matter, which do not mandate the release of interoperability information, do not guarantee royalty-free release terms and do not guarantee a right to publish interoperability information in source code form. The rationale for the new detailed requirements in French implementation were the principles of free software and open source: in order to implement an interoperable component in open source, there should be no royalty-requirements nor prohibition for the publication of the source code.¹⁹

As noted, this was not the final word. In May 2006, after much lobbying especially from the media industry, the French senate amended the interoperability provision now providing that:²⁰

- A regulatory authority will mediate interoperability requests; it has the power to impose fines of up to 5% of the global turnover if its decision are not followed
- DRM provider can however escape interoperability requests (1) if it has acceptance from all copyright holders to keep the format secret and non-compatible, or (2) if there is a security risk that the DRM could be then unusable because it would be generally circumvented
- Licensing terms for interoperability information must be non-discriminatory and may have reasonable royalties; obviously the regulatory authority will finally decide whether the DRM provider can prevent open source implementations

The parliament voted for the revised text in June.²¹ After that it was finally reviewed and accepted by the Constitutional Court in July, which stressed that licensing terms must bear reasonable compensation further decided by the regulatory authority.²² The court did not elaborate the exact method to calculate

¹⁹ For more details, see e.g. Mikko Välimäki (2006): Copyleft Licensing and EC Competition Law, *European Competition Law Review* (Volume 27, Issue 3), p. 130-136.

²⁰ It was a close call as well: 11 votes against 10 in the Senate supported the interoperability provision.

²¹ DADVSI, article 7 bis A, as adopted by the parliament in June 30, 2006. The vote for the amendment in the parliament was tight: 164 votes against 159.

²² Somewhat oddly – taking into account the interoperability provision in the Software Directive discussed above – the Constitutional Court also stated that reverse engineering

the compensation. Obviously, there is still room for a single one-time fee, which would satisfy the requirements of open source developers.

So despite heavy criticism the French legislature indeed kept the interoperability provision in the law. As noted, the finally adopted text is however substantially softer to DRM providers than the March 2006 text. Interoperability is not mandatory and is only applied case-by-case under guidance from the regulatory authority. Even if an interoperability request is accepted, an open source implementation may not be possible because of royalty or security (secrecy) requirements.

One can find economic arguments to both support and criticize the French interoperability policy. On one hand, the barriers to entry are lowered if new companies are given necessary “recipes” to compete in the markets for DRM content. Consumers would be also clear winners because of new compatible products. On the other hand, the business models of new companies may be restricted if they do not have the option to try new open source models as well – this now depends on case-by-case analysis. Further, one can argue that *ex post* intervention in general decreases incentives to compete before there is any DRM standard in place. Thus, there may be less incentives for anyone to introduce a new and more innovative DRM standard when one is already in place. In other words, the society would lose the benefits of “standards races”.²³

In practice, both market and technical facts suggests that an open – even mandated – DRM standard could be beneficial for everyone. First, DRM is not complex nor new technology. There has been a number of alternative DRM standard proposals on the markets since the late 1990s. Many of them have much more functionality than Apple’s FairPlay, which currently dominates online music markets. Second, many of the alternatives are truly open to any implementation including open source and free software.²⁴ It is well known that intellectual property may not support innovation – and can be even harmful to it – when the platform is the Internet. For example, the competition in web

a DRM system for interoperability would not be lawful. Interoperability would always require mediation and compensation.

²³ For economic arguments for and against competition law intervention in network industries see e.g. Massimo Motta (2004): *Competition Policy*. Oxford University Press, p. 484. He concludes that it is difficult to form a general policy towards compatibility.

²⁴ Open source compatibility requires royalty-free licensing terms. For example, recently much promoted Sun’s DReaM satisfies that requirements.

browsers has been intensive the last ten years even though the HTML standard has been open and without intellectual property restrictions. Thus, the only real question is, whether intellectual property legislation is the right regulatory instrument to intervene in DRM markets. Typically, compulsory licenses for interoperability have been issued through competition law assessment subject to the facts of the individual case.

3. Interoperability in Competition Law

3.1 Existing EC Case Law on Refusal to License

Digital rights management systems are often used to extend *other* intellectual property rights outside their statutory scope. Famous examples are e-books that prohibit quotation, private printing and the option to read the book aloud.²⁵ DVDs and copy-protected CDs typically restrict the right to make private backup-up copies. Thus, it seems evident that DRM systems can not enjoy any kind of *per se* “immunity” towards competition law assessment. The question is, in what circumstances can the use of a DRM system (e.g. simple refusal to license, or refusal to license with fair terms) be held against EC competition law?

If a company in a dominant position refuses to license intellectual property, that can be interpreted in certain exceptional circumstances to constitute an abuse of the dominant position and thus violate article 82 of the EC treaty. According to Magill decision, the criteria for these exceptional circumstances is that: (1) the refusal prevents the creation and marketing of a new substitute for which there is potential consumer demand, (2) there is no justification for the refusal, and (3) the refusal monopolizes a separate secondary market and thus causes potential losses to consumers.²⁶ The criteria were developed in IMS Health decision, where a company holding the copyright to a *de facto* standard refused from licensing it to competitors. It was stated that a compulsory license can be issued if “it is determinative that two different stages of production may be identified and that

²⁵ Popularized in Lawrence Lessig (2004): *Free Culture*. Penguin Books.

²⁶ Radio Telefis Eireann (RTE) and Independent Television Publications Ltd. (ITP) v. Commission of the European Communities, European Court of Justice, Joined Cases C-241/91 P and C-242/91 P, 6 April 1995.

they are interconnected, inasmuch as the upstream product is indispensable for the supply of the downstream product.”²⁷

From the perspective of software development, interoperability (or compatibility) standards can be interpreted as such “upstream products” subject to competition law analysis. Already in 1984 the Commission settled a competition law investigation against IBM after the company agreed to disclose its compatibility standards.²⁸ The criteria for opening up a proprietary interface are being currently debated in the ongoing Microsoft case. Commission stated in its 2004 decision that the need for interoperability may supersede any intellectual property justification:²⁹

“...on balance, the possible negative impact of an order to supply on Microsoft’s incentives to innovate is outweighed by its positive impact on the level of innovation of the whole industry (including Microsoft). As such, the need to protect Microsoft’s incentives to innovate cannot constitute an objective justification that would offset the exceptional circumstances identified.”

At the moment, one of the main issues is on what terms Microsoft should disclose interoperability information. Especially free software and open source developers have expressed concerns that restrictive licensing terms could make it impossible to use the information.³⁰

3.2 Application to DRM

There has been so far one notable case where a national competition law authority assessed the refusal to license a proprietary DRM system. In late 2004,

²⁷ See *IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG*, European Court of Justice, Case C-418/01, 29 April 2004, section 45. It is therefore relevant to separate different interconnected parts of development. In *Magill* decision, it was relevant to separate between different markets (primary and secondary markets).

²⁸ For a summary of the case see e.g. Richard Whish (2003): *Competition Law*. Fifth Edition, LexisNexis UK. p. 666.

²⁹ See section (783) of Commission decision of 24.03.2004 relating to a proceeding under Article 82 of the EC Treaty (Case COMP/C-3/37.792 Microsoft). Microsoft claimed that its patents and trade secrets could not be licensed on competition policy grounds since software directive’s interoperability provision only applied to software copyright.

³⁰ See Välimäki (2006) for details of the issues and arguments.

the French competition council considered a competition law case against Apple's FairPlay DRM.³¹ iTunes Music Store had opened in 2003 and it became almost instantly the market leader. From the beginning, music bought from Apple's Internet store was playable only on Apple's iTunes software and iPod portable device.

The case ended in Apple's favor. In its decision, the council noted that it was still too early to define markets for DRM and thus it was unclear whether Apple's FairPlay was in a dominant position in that market. The council especially mentioned Microsoft's WMA standard as a competitor that might be in a more powerful position. Further, even though Apple might have had dominance in the markets for portable players (iPod), it did not abuse that market power since there were multiple sources to get music to iPod. iTunes downloads were only a minor share of the total.³²

The basic facts of the French case were insufficient to establish a compulsory licensing of DRM interoperability information. But this does not mean that the compulsory licensing option could not be applied to DRM systems as well. In fact, one can argue that dominant DRM standards should be always treated with suspicion as they can be used to leverage intellectual property rights beyond their statutory scope. In such a situation, intellectual property and competition laws are in direct conflict. One can even ask, why would there be need for "exceptional" circumstances to establish a compulsory license?

4. Consumer Protection Law and Interoperability

In addition to competitors, also consumers' interests are at stake in the interoperability debate. The current European consumer protection law framework gives flexible tools to consumer protection authorities to intervene against the use of any consumer contract terms, which are unfair.³³ It appears

³¹ 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. The case was filed by Apple's competitor VirginMega.

³² See Giuseppe Mazziotti (2005): "Did Apple's refusal to license proprietary information enabling interoperability with its iPod music player constitute an abuse under Article 82 of the EC Treaty?" *World Competition* (Volume 28, Issue 2), pp. 253-275 for more details of the case.

³³ Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts.

that consumer protection law may also be applicable when a company tries to “lock” consumers with DRM.

Consumer protection authorities have been slow to react to online sales of copyrighted works but now it seems that the Apple controversy has finally changed the situation. The first case has been started in Norway.³⁴ Norwegian Consumer Council filed a complaint with the Consumer Ombudsman against iTunes Music Store Norge in January 2006. The complain was based on the section 9a of the Norwegian Marketing Control Act.³⁵ It allows the Consumer Ombudsman to intervene and essentially prohibit the use of unfair terms and conditions in consumer contracts.

The Ombudsban’s initial reaction came in June and was positive to the complaint.³⁶ According to the Onbudsman the agreement used in iTunes is unfair since it forbids the removal of DRM and effectively locks consumers into Apple’s proprietary systems.³⁷ Further, the Ombudsman pointed out that the agreement reserves for Apple a right to unilaterally alter the usage terms of already purchased content. Apple responded to the Ombudsman in August and made it clear it was not ready to compromise regarding DRM. Apple maintained that DRM issues were already solved in copyright law and remained outside of the Consumer Ombudsman’s area of competence.

The case is still ongoing. So far it seems clear that both the Consumer Council and Consumer Ombudsman are highly critical of Apple’s interoperability policy but Apple is not willing to compromise. If the final outcome of the case is against Apple, it means that the company has to either change its term of services or cease to offer the service in Norway. In addition, the case can have European-wide consequences since European consumer protection laws are harmonized to a large extent. It must be noted, however, that consumer authorities only protect

³⁴ The Swedish, Danish and Finnish consumer authorities have signalled that they may follow if the “lead case” results in a positive outcome.

³⁵ The law implements the aforementioned Directive 93/13/EEC.

³⁶ See Norwegian Consumer Council’s press release “The Consumer Council of Norway is on track to win case against iTunes” 6.6.2006 at <http://forbrukerportalen.no/> and Norwegian Consumer Ombudsman’s press release “iTunes violates Norwegian law” 7.6.2006 at <http://www.forbrukerombudet.no/>

³⁷ According to iTunes Terms of Service Art 9b: “You shall be authorized to use the Products on ... Apple-authorized devices ... You agree that you will not attempt to, or encourage or assist any other person to, circumvent or modify any security technology or software that is part of the Service.”

consumers. Thus, the consumer law approach may fall short of forcing Apple to open up its DRM format to competitors.

5. Interoperability as an Intellectual Property Policy Principle?

Stronger action to further DRM interoperability is needed because as long as DRM can be used to leverage intellectual property, that will also eventually happen. For example Apple mandates the use of its incompatible proprietary FairPlay system to every musical composition sold at its market leading music store – including from artists and labels, which do not want to use any DRM in the first place. Their policy has nothing to do with technology – it is simply a rational business decision in the current legal environment.

There are basically three ways to go: intellectual property law, competition law or consumer protection law. Each approach has its advantages and shortcomings. Based on the French lead, intellectual property law is in principle a possible instrument to further DRM interoperability. At EU-level, the same could be achieved by implementing the existing competition policy horizontally into intellectual property laws much like in the case of the enforcement directives. The content market will be sooner or later European-wide and any national approach will therefore evidently fail.³⁸ Further, horizontal scope is required because otherwise software patents and trade secrets could still form a serious barrier for the creation of compatible products.³⁹ A unified approach could be created, which does not discriminate any business model including open source and free software.

³⁸ Commission is currently pushing hard to create efficient internal markets. See Commission Recommendation of 18 May 2005 on collective cross-border management of copyright and related rights for legitimate online music services.

³⁹ Amending e.g. the list of exceptions in the copyright directive would fall short of reaching the goal. In addition, the Commission does not seem inclined to transplant the exceptions in the copyright directive to other intellectual property directives. See Commission staff working paper on the review of the EC legal framework in the field of copyright and related rights, Brussels, 19.7.2004, SEC(2004) 995

Commission's recent copyright policy initiatives have continued to recognize the need to further DRM interoperability. For example an EC Communication from 2004 stated:⁴⁰

"A prerequisite to ensure Community-wide accessibility to DRM systems and services by rightholders as well as users and, in particular, consumers, is that DRM systems and services are interoperable."

However, this is only another wishful statement from 2004 without any concrete actions since. Commission seems to believe that markets will define an open and non-discriminating DRM standard and that the content industry then accepts its use. Neither of these assumptions has proven to be true.⁴¹

Meanwhile, differences in the interoperability policy between member states can be extreme: take France and Finland as an example. Obviously, national intellectual property policy makers may not realize the importance of the interoperability issue or simply fail to take charge. Unfortunately it seems that the EU lacks a focused interoperability policy, and it is not realistic to hope any kind of "interoperability directive" any time soon.⁴²

What about competition law? Commission's decision in the Microsoft case in 2004 is a promising start in that regard. It can be only hoped that the Court of First Instance will follow and define a prospective interoperability doctrine that will guide competition in the markets of online content for the distant future. In

⁴⁰ 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, COM/2004/0261 final.

⁴¹ One possible reason why the Commission fears intervention are the problematic experiences when a particular named DRM system has been mandated in legislation. This was the case of e.g. Serial Copy Management System for DAT-tapes and Macrovision for analogue video cameras in the United States in 1990s. See P. Akester and R. Akester (2006): Digital Rights Management in the 21st Century. *European Intellectual Property Review*. (Volume 28, Issue 3), pp. 159-168. One must note that an intervention can be completed – as the French legislature did – without mandating a particular open standard.

⁴² Tilman Lueder, head of Copyright Unit, DG Internal Market and Services, stated in a recent seminar speech held in Vienna, March 2006, the following: "A new policy based on impact studies, evaluation reports and "soft law" policy recommendations appears, at this stage, to be the most promising tool for fostering new business models specifically designed for the digital environment." The speech was titled "How can copyright policy foster market entry and innovation?"

the long term, a well defined interoperability doctrine could be also implemented within individual intellectual property laws. If, however, the competition authorities fail to intervene effectively, the market will continue to concentrate. And in the distant event of a European-level competition law investigation there is always the risk – as experienced during the Microsoft case – that the dominating company in question may eventually open up its format but on unfair terms and after the markets have already tipped.

Thus, for the time being, consumer protection law may be the only viable option, which can bring quick results. As explained, the outcome of the Norwegian “lead case” can be applicable in other EU countries as well. If the authorities succeed, their colleagues in other countries could follow to prohibit the use of DRM to tie consumers to a single vendor. As an advantage compared to competition law, the consumer protection approach does not require prior market-dominance tests. As a clear problem the consumer protection law approach requires enforcement in each jurisdiction and it may not help competitors hoping to get an access to interoperability information.

Finally, the rhetorical discussion used in the DRM interoperability debate so far needs backing from economic analysis. Does interoperability in particular circumstances increase competition and generate welfare? One can study the French copyright directive implementation as well as Norwegian consumer authorities’ actions as empirical tests. Did those companies that opposed the interoperability initiatives retreat from affected markets? Did incentives to compete increase or decrease? Did consumers lose or win? Obviously, interoperability benefits the vast majority of those involved and even the monopolist can continue to leverage the market power through alternative means. In stakeholder interviews conducted before the current debate the only parties having reservations towards DRM interoperability were record labels and movie studios. They explained – well in line with the economic theory – that in emerging markets interoperability may not be suitable until the markets have lifted off.⁴³ Apple’s iTunes did just that for online music.

⁴³ See note 19 above and CEN/ISSS Final Report on Digital Rights Management. September 30, 2003. p. 96-100. Of 12 stakeholders who answered the question on interoperability, only MPA and IFPI were cautious. Most of the others expressed views that the lack of interoperability impeded the uptake of DRM systems and generally decreased consumer experience.