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About Consumer and User Issues of Digital Rights Management Solutions

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The **IN**formed **DI**alogue about **C**onsumer **A**ceptability of **DRM** Solutions in **E**urope



Editorial of INDICARE Monitor Vol. 1, No 4, 24 Sep. 2004 "On present trends DRM will make a bad situation worse"

A short analysis of the position paper on Digital Rights Management by BEUC, The European Consumers' Organisation

By: Knud Böhle, ITAS, Karlsruhe, Germany

Abstract: On September 17, BEUC published a **position paper** on DRM (BEUC 2004). Without doubt, the outcome of the High Level Group (HLG) on DRM – frustrating for the solitary consumer organisation participating (INDICARE reported; see Orwat 2004) – was a major motivation to prepare this paper. The 10 page position paper is a good opportunity to learn about the views, perspectives, and requirements of BEUC with respect to DRM. First we will summarize BEUC's particular perspective on DRM and its diagnosis of the actual situation. Next we assort the requirements put forward by BEUC. In the concluding section we point to the great challenge consumer organisations are facing when dealing with systemic and, in a way, disruptive technologies like DRM which change the rules of the game.

Keywords: consumer rights, policy, fair use, privacy, innovation

BEUC's motivation to present a position paper on DRM

There are two obvious reasons why BEUC published a position paper on DRM: first the HLG report, prepared by a group of stakeholders on behalf of the European Commission (High Level Group on Digital Rights Management 2004), did not address the issue of consumer acceptance and trust as scheduled. Thus BEUC attempts to fill this gap in its own right. Secondly, as BEUC did not support two of the three chapters of the final HLG report ("private copying levies and DRM" and "migration towards legitimate services") the paper is a way to put forward its own position. The dissent within the HLG is explicitly addressed in the paper: Overall the consumer organisation blames industry for failing to supply in time competitive services which consumers want (cf. p. 5). Instead it wishes to criminalise consumers, disregarding consumers' legal rights (cf. p. 5), refusing to clearly state what consumer rights it is actually willing to concede; with respect to P2P networks industry ignores legal uses and positive effects, and industry does not distinguish appropriately between commercial piracy and private uses. With respect to levy schemes BEUC even argues that industry is too inert to implement DRMs in order to phase out levy systems more rapidly (cf. p. 9).

BEUC's perspective on DRM

BEUC has a clear and pragmatic understanding of DRM as a means to protect rightholders against copyright infringement, to give rightholders greater control over digital material, and to allow more flexible and differentiated product offerings. DRM *per se* is neither good nor bad but it bears considerable risks: "The current course of DRM development seems to aim at creating a new relationship between right holders and consumers, with altered consumer rights, freedoms and expectations and towards the general replacement of copyright law with contract law and codes" (p. 3). What is at stake is a new balance "how best to balance in the public interest the rights of right holders and consumers in the digital environment" (p. 1).

This perspective on DRM obviously exceeds a narrow-minded focus on consumer interests. The reasoning of BEUC has two focal points: one is on *fair B2C relationships* and the second is on *public policy and civil society concerns* such as innovation and creativity, competition, public access, digital divide, privacy, data protection, and free speech.

BEUC's DRM requirements

In the following we will try to present the DRM requirements derived from the position

paper without claiming to be exhaustive. We distinguish five areas of concern: (1) fair B2C relations and abuse of DRM, (2) shaping of technology, (3) creativity, innovation and competition, (4) legal framework, and (5) access and exclusion. The categorisation we use to reassemble the arguments and requirements of BEUC is different from the position paper's structure of content (see beginning of the interview with Cornelia Kutterer, BEUC, in this issue). We try to grasp the content properly and to put it under five headings indicating different clusters of policy concerns.

(1) Fair B2C relations and abuse of DRM

It is noteworthy that BEUC states that "fair trading" implies "fair use" (a central right granted by the legal framework in the US) and that fair use requirements therefore have to be acknowledged in Europe too (cf. p. 9). Of course contracts governing the use of digital material ought to be fair and transparent. BEUC is also in favour of labelling so called "usage-impaired works" (like genetically modified food). In terms of business models, the consumer organisation asks for B2C business models based upon the first-sale doctrine (p. 3). Fairness implies that abuse of DRM has to be avoided in particular with respect to "unlimited post-purchase control" (p. 3) by rightholders. Abuse need not be restricted to undue usage control. There are other more fundamental ways of abusing the access to the consumer's device. In this respect the right of privacy and private data protection are vital. BEUC demands that common rules of data protection (essentially: not to collect more data than necessary for a specific purpose, and not to store data longer than necessary) are also respected by DRMs. Even further, BEUC is critical about trusted computing which may infringe on personal property rights, and of course BEUC is against "technical-self-help measures" aimed to punish deviant consumers.

(2) Shaping of technology

BEUC asks for "fair use by design", a statement concerning the development of tech-

nology. The concept is similar to the concept of "value centred design" (see Bechtold in this issue). To put this requirement into practice BEUC demands consumer participation at all levels of the standardisation process (p. 5). They also demand the involvement of privacy advocates.

(3) Creativity, innovation and competition

BEUC also addresses innovation and creativity, which could be stifled by DRM. Competition is a major concern in this context. BEUC argues that in highly concentrated markets price differentiation as enabled by DRMs will not lead to price competition. BEUC also holds that DRMs are used to segment markets (e.g. regional code of DVDs), thus hampering competition. A further argument is that DRM protection may hinder research and the development of new technology thereby foreclosing legitimate competitors from entering the market (p. 5). They also share the view of many that digital information on global networks brings about new prospects for creativity. This opportunity however is threatened by DRMs, because on the one hand DRMs may impose restrictive usage rules and on the other hand they may be used to lock-up works from the public domain. Apparently the European Consumers' Organisation is annoyed with collecting societies arguing that their "monopolistic structure" (p. 6) would hinder competition. Pro-actively BEUC recommends policy makers to "withhold any attempt to make DRM systems mandatory on any media whatsoever" (p.6).

(4) Legal framework

BEUC is by nature active in the context of legislation. It clearly demands "enforceable consumer rights which cannot be overridden by contract terms or deployment of DRM systems, or technical measures" (p. 6). This requirement is formulated against the background of the European Copyright Directive which makes it difficult in the eyes of BEUC to enjoy the right of private copy. The same position is discussed elsewhere under the header "user rights".

(5) Access and exclusion

Another set of requirements can be derived from political goals defined by the European Commission at various times, namely access for all and exclusion of nobody. These goals are explicitly and implicitly incorporated in policy documents and declarations like the Lisbon objectives or the eEurope 2005 Action Plan (cf. European Commission 2002). BEUC requests the European Commission to stick to its own goals and urges policy to take those effects of DRM into account which may hamper the achievement of these goals. DRM ought not hamper public access, nor increase the digital divide and discrimination of consumers with disabilities and elderly people. With respect to the last concern, DRMs should be compatible with assistive technologies. Another type of access restriction refers to limitations of free speech by DRM, i.e. "to control how and who gets access to information thereby limiting journalistic investigative activity, commentary, and other fair uses without which the fundamental human right could not be exercised" (p. 9).

Bottom line

In my view, the many facets of potential abuse of DRM systems presented, and the idea of deriving fair use rights from acknowledged fair trade were especially stimulating. The major difficulty I encountered was to understand why BEUC strongly advocates the right to private copy and at the same time the abolishment of the levy system as soon as possible (the "current levy system is unfair and should be ended quickly"; see also the interview with Cornelia Kutterer in this issue).

A more general point is about the limits of consumer organisations. DRM is by nature a systemic phenomenon where legal, contractual, and technological artefacts concur or interfere, affecting consumers, citizens and the public interest. This challenge is met by BEUC with a holistic approach to DRM transcending a narrow view of consumer interest. At the procedural level this is apparent in a participatory approach which sees a role for BEUC in stakeholder dialogues to achieve consensus and by requesting participation of consumers especially in the field of DRM

standardization. The question is how a consumer organisation can achieve and organise the required competencies to directly influence technological developments at this level. The second question is how organized interests cope with an overlap of competency areas, e.g. consumer organisations and civil rights organisations, and which synergies or conflicts may result from this overlap.

PS.: A short remark on what to expect in this issue: for the first time you will find INDICARE interviews. My colleague *Bettina-Johanna Krings* talked to Prof. Dr. iur. *Thomas Dreier*, M.C.J., Director of the Centre for Applied Legal Studies, University of Karlsruhe about Creative Commons. The interview covers a broad range of questions, asking among other things about possible limitations on the one hand and possible new application fields for CC on the other hand. As Thomas Dreier is an outstanding expert in the field and played a leading role in adapting CC to German we can provide you with a thoughtful and knowledgeable interview. The second interview is about the position paper on DRM by Bureau Européen des Unions de Consommateurs (BEUC) issued this month. *Cornelia Kutterer*, Senior Legal Advisor at BEUC, answered to all my questions – even those not strictly related to the position paper. As it is very important for INDICARE to understand and reflect the position of consumer organisations, the editorial above has chosen the BEUC position paper as its subject.

Four articles in this issue deal with new socio-technical DRM developments and form an interesting thematic block. *Stefan Bechtold*, University of Tübingen Law School, introduces the concept of value-centered design of DRM and outlines some approaches which are currently underway in this direction. *Niels Rump* and *Chris Barlas*, Rightscom Limited, reflect the potential impact of bi-directional Rights Expression Languages and the consequences of such a paradigm shift. *Gergely Tóth*, SEARCH Laboratory, Budapest, gives an introduction to Privacy Rights Management (PRM), an interesting approach to combine DRM systems and Privacy Enhancing Technologies (PET) on common grounds. *Roy Melzer*, Reinhold

Cohn & Partners, Tel Aviv, analyses – from a consumer and legal point of view – the potential and risks of Rights Locker architectures, a new approach to digital content delivery.

As in earlier issues of the INDICARE Monitor, we are happy to include a conference

report on a hot topic. The overall question of the event was if Digital Rights Management is the end of collecting societies? "Not yet 'six feet under' " is the answer given by *Christoph Beat Graber, Mira Nenova and Michael Girsberger*, i-call, Lucerne.

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Talking about the BEUC position paper on Digital Rights Management

"DRM causes serious risks to consumer rights and societal rights and we urge the Commission to actively engage in exploring these risks"

By: Cornelia Kutterer, BEUC, Brussels, Belgium interviewed by Knud Böhle, ITAS, Karlsruhe, Germany

INDICARE-Interview with **Cornelia Kutterer, Senior Legal Advisor at BEUC** (Bureau Européen des Unions de Consommateurs), on the occasion of the organisation's position paper on Digital Rights Management released 15/09/04 (BEUC 2004). Cornelia Kutterer is a German lawyer, holding a master's degree in Information technology and communication laws. The interview was conducted by **Knud Böhle**, ITAS.

Abstract: BEUC's 10 page position paper on DRM aims to "set out a clear consumer perspective". This perspective comprises rights of consumers in a narrow sense and societal rights. While chapter one and two sets the scene presenting a general assessment of the current situation, the main part addresses seven issues of consumer acceptance: (1) recognition of consumer rights, namely the right to private copy, to fair commercial practices, and to be informed and refunded for faulty products, (2) a fair, competitive and balanced regime, (3) the right to privacy and private data protection, (4) right to free speech, (5) the Digital Divide, (6) right to

maintain the integrity of private property (Trusted Computing), and (7) a chapter on the current levy system which is regarded as unfair. The paper finishes with a fourth chapter containing concluding remarks. The purpose of the interview is to better understand the motivations and arguments of BEUC, and to challenge their reasoning here and there.

Keywords: consumer, consumer rights, fair use, acceptability

INDICARE: It is evident that the position paper of BEUC is kind of "minority report" with respect to the report of the HLG on DRM (cf. INDICARE Monitor Vol. 1, No. 2, 30 July 2004). It is clearly stated that no consensus of industry view and consumer view could be achieved, and that the HLG dismissed dealing with consumer acceptance and trust issues as scheduled at the outset. What are the main points where BEUC dis-sents from the industry view?

C. Kutterer: We object both to the content and also to the omissions of the parts dealing with migration to legitimate services and levies. We feel that without the recognition of consumer rights and the wider public interest these parts fall short of their purpose. The main points of disagreement are touched upon in our paper but take the example of the following statement: "the way forward is a system based on existing exclusive rights backed by technologies that ensure a secure environment where such rights can be licensed and enforced". This is clearly not a balanced approach with recognition of consumer rights or limitations to the exclusive rights. Or look at the reference on the origin of the private copy in the 1960s in Germany. This omits that de facto non-enforceability of the reproduction right was based on a conflict with the inviolability of the private sphere. It further states "alternative compensation schemes or similar measures are clearly not the way forward for the dissemination of content in digital networks and for the development of new and innovative services". We would not support DRM to the extent that it excludes even a discussion on alternative schemes. As for the paper on migration to legitimate service, we simply do not support the usual lamentation about private copying that ruins the entertainment industry. We also have clear doubts about balance as regards the industries' interest of

raising consumer "awareness" and "acceptance".

INDICARE: Was the difficulty in achieving consensus in the HLG a result of the composition of stakeholders chosen?

C. Kutterer: A consensual approach to achieve appropriate conditions of digital rights – which meet the interests of all stakeholders – is a meritorious goal we share. We welcome the Commission's attempt to offer stakeholders a platform for discussion in order to reach consensus on DRM. However, the more diverse interests are, the more difficult it becomes to achieve consensus and time constraints were not helpful. But we also must accept that where consensus cannot be achieved (without foreclosing further discussions) political decisions may be necessary.

INDICARE: Let me add a more general question about the configuration of stakeholders concerned with DRM and the relation of BEUC to them. We can imagine that parts of the industry sympathise more with BEUC and consumer interests than others. One could also expect that civil rights NGOs, scientific organisations are natural allies of consumer organisations. How would you characterize the formation or configuration of stakeholders and the position of BEUC in this?

C. Kutterer: Yes, I believe some parts of the industry "sympathise" more than others with our interests. More importantly, we find it regrettable that scientific organisations (for example cryptologists), civil rights NGOs or privacy advocates were not presented in the HLG. We do share many concerns with them but this does not make them dispensable. Within the group we were the only consumer/user representation.

INDICARE: I could imagine that there is more overlap of interests between BEUC and

part of the IT industry than with copyright industries?

C. Kutterer: In delivering the devices for content distribution the IT industry seems to be more concerned with consumer interests. But we agree with the copyright industry that creative work must be adequately protected and compensated. The main question is what adequate protection means.

INDICARE: As the position paper demonstrates, DRM it is not just about consumer rights, but about civil rights and societal concerns too. How does, let's say a classical consumer organisation like BEUC define its spheres of competence in DRM matters? Is delineation of spheres a problem in the DRM field if we think e.g. of the overlap with data protection and privacy advocates, or civil rights organisations?

C. Kutterer: In the digital environment consumers are subject to privacy laws as much as they are part of the society; they may even become authors, editors, producers and distributors of informational goods (Wikipedia is a good example). There is no strict borderline in defending the rights at risk. Delineation of spheres is clearly not a problem.

INDICARE: When did BEUC first get concerned with DRM?

C. Kutterer: BEUC has been actively involved in policy making during the legislative process of the Information Society Directive. In that context we were very concerned about the extensive protection of technological measures. Obviously copy protection has been topical before.

INDICARE: What exactly is the purpose of this paper and why was it due right now?

C. Kutterer: The final report failed to address the fourth subject, that is "acceptance and trust by users with particular emphasis on security and privacy" and falls short of considering the broader interests at stake, in particular consumer rights which we defend. We are addressing the topic. DRM deployment is a key priority for us (and our members) and merits high consideration in the light of the ongoing implementation of the Information Society Directive as well as the

forthcoming review process on the application of technical measures under the aegis of the Contact Committee. The Contact Committee represents competent authorities of the Member States which will examine the impact of the Information Society Directive on the functioning of the internal market, explore difficulties deriving from the application of this Directive and assess the digital market in works, in particular private copying and the use of technological measures.

INDICARE: It will be impossible to cover all aspects you address in your position paper. Therefore I will just pick out some items which raised a special interest, and about which I would like to learn more. To start with, it was interesting to note that even with respect to the interoperability part of the HLG report where consensus was reached, the position paper now adds further interoperability requirements. Could you explain why the HLG report falls short even with respect to interoperability?

C. Kutterer: We felt it was necessary to refer to interoperability also in regard to future generations of devices.

INDICARE: Talking about interoperability leads inevitably to standards and standardization as addressed in the position paper. You put forward that consumers should participate at all levels of the standardisation process in order to ensure that privacy and data protection concerns become integral part of standards. How could this wish be put into practice and what role could BEUC play in this? I can imagine that the organisational embedding will be difficult, think of e.g. participation in DRM standardization efforts of the Open Mobile Alliance. I can also imagine that it will be very hard to gain the technical competencies to evaluate the different technical approaches like Rights expression languages etc.

C. Kutterer: We suggest that compliance with data protection laws and consumer rights should be verified as early as possible, at best when developed. Consumer organisations take an active role in standardisation bodies and provide technical expertise (ANEC, the European Association for the Co-ordination of Consumer Representation

in Standardisation, is the European consumer voice in standardisation). However, this is clearly not the case when proprietary standards are set or developed by private consortia.

INDICARE: If we assume that participation and co-operative shaping of technology is a very hard task for a consumer organisation, why has BEUC chosen this approach, instead of traditional lobbying?

C. Kutterer: This is not an approach instead but **in addition** to our efforts in policy making. "Shaping of technology" will surely not be enough to ensure that consumers have the rights they should have in the digital environment.

INDICARE: There are good reasons to centre the debate on DRM on the Copyright Directive. However it would be interesting to know from a consumer organisation, if and how far consumer protection rights could be extended in order to counter-balance the weaknesses of copyright legislation and to safeguard consumer interests?

C. Kutterer: In the first place, we call for enforceable copyright limitations which cannot be overridden by contract terms or deployment of DRM systems. We advocate a 'fruit of the poisoned tree' rule that would allow for legitimate circumvention of technical measures where that technology has been used to hinder or restrain usage that is not relevant under the copyright law (for example, personal appropriation of a work like cracking in the regional control mechanism of a DVD). This said, we suggest that consumer protection law should provide an additional tool to safeguard consumer interests in this context. This field must be further explored. Consumer law must be capable of restoring the disequilibrium that characterizes consumer contracts in the digital environment by ensuring balanced formation of consent, avoiding procedural and substantive ambiguity, and providing rules on redress and refund. Last but not least, competition law must ensure a competitive environment to deal with the likelihood of unlawful extension/leveraging of dominance into second markets through DRM deployment (think of printer cartridges and automobile electronics,

or the announced acquisition of Content-Guard by Microsoft and Time-Warner).

INDICARE: BEUC asks for fair commercial practices and hints at some examples where this is currently not the case (e.g. the regional code of DVDs). Do you think that the proposed directive "concerning unfair business-to-consumer commercial practices" COM (2003) 0356 will improve the situation for consumers with respect to DRM? Has BEUC been involved in the shaping of this proposal?

C. Kutterer: We generally need further discussion on contract law and consumer protection law in this context. The unfair commercial practise proposal is a key instrument for consumers (and consumer organisations) and will serve as a safety-net against rogue traders. The proposal may be relevant to digital distribution of content but mandatory information obligations on usage-impaired works and information on national copyright limitations must be set. We are also paying attention to the forthcoming revision of the directive on unfair terms in consumer contracts. The unfair terms directive could play a centre role in achieving a balance in the digital distribution chain to reduce illegitimate usage restriction of legally acquired works while maintaining the positive effects of the DRM model. What is necessary is that we look at the effects of application of certain contract terms.

INDICARE: In the US there is currently a debate about the proposed Digital Media Consumers' Rights Act (DMCRA) put forward by Congressman Rik Boucher in order to re-establish fair use conditions. As "enforceable consumer rights" are high on the priority list of BEUC, you probably have assessed the American way to strengthen "fair use". What can Europeans learn from the US and what should the European way look like?

C. Kutterer: Many of our demands such as labelling requirements for usage-impaired "copy-protected" CDs or the prohibition of foreclosing non-infringing uses through technological measures can equally be found in the proposed DMCRA. We fully support the intention of this proposal. Obviously, the

legal frame provided by the U.S. presents relevant differences but some issues that are valid in both jurisdictions have been less explored in the European debate, for example the validity of contractual derogations. In the U.S. debate, much more attention is also drawn to efficiencies, which inherently take the wider perspective, i.e., the benefits for society into account.

INDICARE: The issue of collecting societies and in particular levies is very controversial, while your statement clearly says that the current levy system is unfair and should be ended quickly. I would have expected this statement from device manufacturers, and was surprised by this clear-cut statement. In my feeling there is a slight contradiction in your reasoning, or I have simply missed the point: On the one hand there are many good reasons you mention why DRM systems should be deployed cautiously if at all, especially because the risk is high that usage rights like private copy will be undermined. On the other hand you are in favour of abolishing levies as soon as possible, because DRM systems are available. Their deployment of course would increase the risk that the right to the private copy will be undermined. Can you help me to get your argument right?

Let me add another remark before you answer: Is there enough empirical evidence for your reasoning? Supposed 80% of blank disks (price 50 Euro Cent or less) were used to copy CDs or downloaded music, wouldn't it be fair to put at least a slight levy on them to compensate creators and rights holders?

C. Kutterer: We do believe in the need to compensate creative work. But we do not accept double payment. Most consumers are unaware that levies are embedded in the price of many products capable of recording music. Some European countries have opted for levies, which apply to blank media, reprographic equipment and equipment with a recording function, whilst others do not raise any levies at all. Does that seem to be reasonable and fair? These objections to the levy regime, however, do not make DRM deployment a solution without flaws and risks.

INDICARE: In your paper you ask policy makers to refrain from mandating DRM. The association coming to mind is of course the "broadcast flag". Do you envisage that we soon will have a debate about the broadcast flag, and what will BEUC do?

C. Kutterer: We are not aware of any plans to mandate DRM. But we are concerned that in the context of the treaty "on the protection of the rights of broadcasting organizations" negotiated at International level (WIPO) this may become topical.

INDICARE: The position paper obviously addresses the European Commission. What are the next steps you recommend to policy-makers in order to make progress on the consideration of consumer concerns in DRM?

C. Kutterer: DRM causes serious risks to consumer rights and societal rights and we urge the Commission to actively engage in exploring these risks. We need a better solution in a highly dynamic Information Society to adequately take into account the public interest. We therefore urge the Commission to look at these risks when reviewing IP law and to strengthen the effectiveness of data protection laws. We suggest that the Commission should convene a similar HLG on the dangers of DRM and refrain from becoming a promoter of certain industry interests or the promoter of "awareness" under the agenda of these industries. We call on the Commission to become aware of the contractual implications and consumer law aspects that are at stake and we support the use of competition law to encounter abuse of intellectual property by using technology and cross-licensing to foreclose entry to markets.

INDICARE: I think we can leave it at this for the moment. With your last answer summarizing BEUC's policy recommendations we have reached a good final point, and now it's up to INDICARE to see what will happen. Thank you very much for this very informative interview and your willingness to also answer questions beyond the position paper.

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Value-centered design of Digital Rights Management Perspectives on an emerging scholarship

By: Stefan Bechtold, University of Tübingen Law School, Tübingen, Germany

Abstract: An emerging interdisciplinary scholarship does not take DRM systems as given constants that are exogenous to the policy process, but asks how DRM systems could be altered in a value-centered design process so that important policy and legal values are preserved. This article provides a short overview of this emerging scholarship. Examples of such scholarship may be found at the intersection of technology and copyright law, privacy law and competition policy.

Keywords: value-centered design, trusted computing, copyright, fair use, privacy, authorized domain, rights locker, rights expression language

Introduction

Over the last few years, many authors have written about how DRM privatizes and replaces copyright law, how it undermines copyright limitations, threatens the interests of users and the public at large and inhibits creativity and innovation by unjustly extending intellectual property protection. Although the author shares many of these concerns, it is important to realize that DRM technology is much more flexible and plastic than some DRM critics acknowledge.

An emerging scholarship therefore does not take DRM systems as given constants that are exogenous to the policy process, but asks how DRM systems could be altered in a value-centered design process so that important policy and legal values are preserved. While the idea to shape technology in order to accommodate it with public values is an old one, it has only recently been seriously applied to DRM. This article provides a short overview of this emerging scholarship. As will be described below, examples of such scholarship may be found at the intersection of technology and copyright law, privacy law and competition policy.

DRM and copyright limitations

DRM has been severely criticized for over-riding various copyright limitations and for protecting content providers at the expense of legitimate interests of users and the public at large. Although this may be true for many current commercial DRM implementations, it is questionable whether such effects are inherent in the concept of DRM or whether they are just the outcome of a particular kind of implementation of DRM technologies. Four examples may illustrate this point.

Rights expression languages (REL) and rights messaging protocols (RMP)

First, whether a DRM system respects fair use and other copyright limitations or not depends on the design of its rights expression language (REL) and the supporting rights messaging protocol (RMP). Rights expression languages enable a DRM system to express a rich set of usage rules in machine-readable metadata that may be attached to content. With rights expression languages such as XrML, the permission to copy, delete, modify, embed, execute, export, extract, annotate, aggregate, install, backup, loan, sell, give, lease, play, print, display, read, restore, transfer, uninstall, verify, save, obtain, issue, possess, and revoke content may

be expressed in a machine-readable form. If fair use privileges and other legitimate interests of information users cannot be expressed in an REL, such interests simply do not exist within the system. Therefore, it is of utmost importance that RELs include semantics to express not only the interests of creators and rights holders, but also of information users. In a paper from 2002, Deirdre Mulligan and Aaron Burstein from the UC Berkeley outlined changes to XrML that would create such a "symmetric" REL.

A DRM system does not only have to be able to express a wide array of rights in its rights expression language. In order to enable bi-directional negotiations between rights holders and users about which rights should be granted under which conditions, a DRM system also has to include rights messaging protocols (RMPs) that support such bi-directional negotiations. Most current DRM systems do not allow the users to engage in extensive negotiations about usage rights. Although general electronic commerce systems that enable negotiations between contracting partners have existed for some time, researchers have only recently begun to develop DRM systems with such functionality.

Currently, it is unclear how to distribute the technological components that are required for symmetric DRM systems between the REL and the RMP. While some researchers attempt to integrate much functionality into the REL, others contend that such functionality should be located exclusively in the RMP. In general, research in this area is still very scarce. It is also quite complex since it requires intensive interaction between technologists and lawyers and, in the case of RMPs, transcends the traditional borders of DRM research.

Fair use infrastructure

Second, in an article from 2001, Dan Burk from the University of Minnesota and Julie Cohen from Georgetown University proposed, among other things, a 'fair use infrastructure'. According to their 'key escrow' proposal, beneficiaries of copyright limitations could turn to external third parties in

order to receive decryption keys for DRM-protected content so that they could benefit from copyright limitations. This is another example of an attempt to alter the design of a DRM architecture in order to solve the tension between DRM and copyright limitations on a technological level. It is interesting to note that this proposal has some similarities to the relationship between technological protection measures and copyright limitations as regulated by Article 6 (4) of the European Copyright Directive of 2001.

Authorized domain architectures

Third, DRM systems will increasingly include a so-called 'authorized domain' (sometimes also called 'family domain'; a related concept is called 'rights locker architecture'). The idea behind such architectures is to enable consumers to access content not only from one particular device, but from a number of devices they own. If a consumer acquires a music file, for example, he may then listen to the music not only on his MP3 player, but is also allowed to copy it to his hi-fi system, car radio or mobile phone. In an authorized domain approach, compliant devices are organized into home content delivery networks where legally acquired digital content can freely be played by any device part of the network. In such an architecture, digital rights are made portable among various platforms as permissions to use content are no longer bound to a particular device the consumer owns, but to the consumer himself.

Authorized domain architectures are an attempt to approximate a DRM environment to copyright limitations. They are an example of how engineers respond to consumer expectations and legal values enshrined in copyright laws. Of course, authorized domain architectures have their own problems and they are not a perfect solution to translate copyright limitations into the digital realm. However, they are an example of a value-centered design process that attempts to take extra-technological values into account while a DRM architecture is designed.

Digital Media Project

The Digital Media Project, which was started by Leonardo Chiariglione in summer 2003, attempts to lay the technical foundations of a successful digital media environment that respects the interests of creators, rights holders, consumers and various value-chain players. One part of the project includes the identification and specification of "rights and usages" which consumers have traditionally enjoyed in an analogue media environment and which should also be expressible in a Digital Rights Management environment. Although the project is still in its early phase, it has already produced interesting results and could considerably facilitate the development and implementation of value-centered DRM systems.

Privacy-preserving DRM

DRM systems use various mechanisms to identify and track users within the system. They have the potential to monitor what people privately read, listen to or watch. Although the tension between DRM and privacy has been recognized for several years, a clear regulatory approach as to how to reconcile DRM with privacy interests does not yet exist. In a recent paper, Julie Cohen (2003) from Georgetown University argued that part of the solution to reconcile DRM with privacy interests should be a value-sensitive design process. She argues that, in certain cases, the functionality of a DRM system has to be restricted on a technological level in order to preserve some flexibility for privacy-preserving private access and copying, while simultaneously protecting information providers against large-scale commercial copying. A value-sensitive design process would also investigate methods of building in limits on monitoring and profiling of individual users. Finally, it would consider the desirability of implementing limitations on self-help mechanisms used by rights holders to protect their interests. Such design approach should not be understood as to limit the functionality of a DRM system. Rather, it should be understood as a way to reconcile competing values – interests of creators, rights holders, and users – on a technological level.

Trusted Computing and "owner override"

Over the last two years, trusted computing platforms such as the "Trusted Computing Group" and Microsoft's "Next-Generation Secure Computing Base" project have received a considerable amount of attention from technologists, lawyers, economists and cyberpolicy activists. Trusted computing architectures ensure that a computing platform always behaves in the expected manner for the intended purpose. In particular, such architectures provide evidence about the integrity and authenticity of the platform to both the platform's owner and to arbitrary third parties. Thereby, this architectural approach attempts to increase trust in the computing environment. Many observers have pointed out that trusted computing architectures might be used by application, service and content providers to create lock-ins and hinder competition in client application markets. Recently, Seth Schoen (2003) from the Electronic Frontier Foundation (EFF) has proposed to enable trusted platform users to send false integrity metrics to the remote application, service or content provider (so-called "owner override"). Thereby, the remote provider could no longer base his decision whether to interoperate or not on the particular client application that is running on the users' trusted computing platform.

The relationship between trusted computing architectures and DRM systems is a very complex one and is beyond the scope of this article. Although the author is, ultimately, not convinced by EFF's proposal for several reasons, it is just another example of how to influence technological architectures at the design level in order to incorporate legal and policy values.

Conclusion

While the idea of value-centered technology design is not novel, it has only recently been explicitly applied to the area of DRM. Various researchers are exploring this idea in various areas, but no coherent research plan exists. However, the recent Digital Media Project could develop into an important platform upon which value-centered DRM systems are designed. Using a value-centered design approach is complicated by the fact that it requires close interaction between

technologists and legal scholars or economists, leading to the usual advantages and limitations of interdisciplinary research. Technologists have to find ways to think about public policy, and lawyers and economists have to find ways to understand technology and its implications. Most importantly, as Barbara Fox and Brian LaMacchia (2003) from Microsoft have pointed out, technologists need appropriate incentives in order to engage in value-centered design research in the first place.

It is also important to note that a value-centered design approach towards DRM may have inherent limitations. Some policy problems may not be controllable on a technological level. Some legal doctrines are inherently flexible and vague, thereby making their technological implementation very hard. Furthermore, DRM policy problems always involve balancing various interests. Value-centered design processes may provide a very helpful tool to implement a certain balance of interest, but they do not offer

any assistance how to find this balance. Finally, as John Erickson from HP Labs and Deirdre Mulligan (2004) have recently pointed out, automating policy enforcement by technology has fundamental disadvantages as enforcement has to be reduced to simple yes/no questions, which may not be feasible in all cases of policy enforcement.

Bottom Line

Applying value-centered design processes to DRM systems is a promising and still largely unexplored field. In general, no one knows whether a balanced DRM system that protects both the interests of rights holders and of users as well as the society at large is ultimately feasible both from a technological and a business perspective. As all technology, DRM is malleable, and one should not miss the opportunity to engage in a value-centered design process that shapes DRM appropriately.

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From couch potato to active consumer. Potential impact of bi-directional Rights Expression Languages

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Abstract: Today Rights Expression Languages are uni-directional: content providers declare *their* rules for Digital Rights Management Systems. The consumer has to agree and adhere to these rules if he wants to access the content. In principle, the same type of technology could also be used to express conditions under which a consumer would accept such "content rules" and what the content provider may do with the data collected from the consumer. This paper briefly investigates the consequences of such a paradigm shift towards a bi-directional use of rights expression languages whereby consumers could be empowered to actively shape the content commerce relationships they engage in.

Keywords: rights expression language (REL), symmetric REL, bi-directional REL, consumer

Introduction

Digital Rights Management is a set of technologies to enable owners of information to control the use of that information in the digital environment. While the technologies are capable of being used to protect and mediate any kind of information, they have been primarily developed with a view to the protection of intellectual property, such as published text, recorded music, movies and games. These technologies are the basis of most digital content offerings today. One critical technology – amongst many others – is a means to express the rules under which information can be used, either by the legitimate owner's business partners (aggregators, distributors, retailers etc) or by end user consumers.

Examples of such languages are plentiful, ranging from very simple (sometimes even binary) expressions to govern access to content in very specific application domains, e.g. the "forward lock" mechanism in the OMA specification 1.0 (Open Mobile Alliance

2004), to complex and generic XML-based languages, e.g. MPEG REL (ISO/IEC 2004) or the Rights Expression Language in OMA's 2.0 standard.

Uni-directional use of RELs

Currently, these languages are being deployed by content providers to express their business rules with respect to the content made available. These rules – often called "Rights Expressions" – are then associated with the content itself. When a user attempts to interact with the content the rules are then interpreted and enforced by a Digital Rights Management system, effectively constraining the end user's freedom of interaction: The end consumer has to agree to the rules if he wants to access the content.

Examples of such content services are plentiful, ranging from Apple's iTunes store via RealNetworks' services to MovieLink and Overdrive's services to support eBook library lending. Many of these services currently use their own proprietary rights lan-

guages. For instance Apple's iTunes – the leading commercial online music distributor today – using its own rules language, allows users to play the tracks on their PC or Apple iPod portable device but does not allow the content to be transferred to other users' devices.

While rights expressions are intended to enable information owners to set the rules under which content can be used, the two leading languages being deployed today (MPEG REL and OMA REL/ODRL) can also incorporate conditions, by which the creators of rights expressions can impose obligations on the user. These obligations may involve users, including end user consumers, in many different types of activity, such as providing the content provider with information about the use of the content, so revealing patterns of usage, demographics and other consumer information. In the currently envisaged deployment of rights languages, users have to agree to such obligations in order to access content.

Bi-directional use of RELs

However, it is possible to imagine a different scenario, in which the technical capabilities of Rights Expression Languages become available to both the owners of information and to its consumers so that the latter can also exercise control over their own information, such as the attributes of their identity or their commercial preferences. As such data is, from the computers' perspective, no different than the content data itself, it would be possible to govern its use using a Rights Expression Language. The terms "symmetrical Rights Expression Languages" (Bechtold 2003, Bechtold 2004) or "bi-directional Rights Expression Language" have been coined for this concept; we prefer the latter term as, for all practical uses, those rules set by the content owner and those set by the consumer will differ significantly, thus not creating real symmetry.

While DRM technology providers have long since recognised that digital rights management systems are capable of being used in such a scenario, commercial systems to actually implement this are still to emerge.

From couch potato to active consumer

Envisage a scenario where a user retrieves a piece of content accompanied by a set of rules defined by the content provider. Using a rights language, it would be possible for the consumer to protect her own personal data, which could then be used to bargain with the content owner. In this scenario, the consumer wants access to the content and the content owner wants access to the consumer's data, which has a commercial value in terms of purchase patterns etc. So instead of just accepting the content owner's set of rules, the user starts a negotiation and sends back a rule set incorporating the terms under which he or she is prepared to do business. For example, she may want to have the ability to burn two CDs instead of one and pay €1.50 more for this benefit; or she may not wish to provide any usage data.

After receiving the counter offer from the customer, the content owner can decide whether to accept the counter offer or to continue the negotiation. In either case he would send an updated rule back to his customer, who can also either accept or continue until an agreement has been reached or either side gives up.

In such a scenario, the customer would be enabled to become a more active participant in the content value chain and would move away from being the couch potato he is – or rather has to be – today. In total, the online content world would look more like today's physical world, where people have the ability to negotiate.

Consequences of such a paradigm shift

Such a paradigm shift will, however, not be without substantial consequences for both technology deployment and business processes.

Technical consequences lie in two areas. Firstly today's Rights Expression Languages are not deployed with a view to bi-directional use (Bechtold 2003, Bechtold 2004). They can, however, be extended to cater for such needs, which would require the current unidirectional REL standards – notably by MPEG and OMA – to be extended. Secondly, the negotiation mentioned above will

require some user interface tools to enable negotiation to take place, and to make the resulting rule sets readable and accessible to humans. But more importantly – mainly on the content providers' side – some automation is required. This, in turn, calls for "intelligent agents" that can read and interpret and compare REL rule sets and negotiate on behalf of humans.

Secondly, there are business process questions that arise from using bi-directional Rights Expression Languages. Not only would the use of bi-directional Rights Expression Languages enable negotiations with consumers – which may tend to make content commerce increasingly complex and expensive, making it difficult to analyse in terms of cost/benefit – but questions of trust also emerge. When machines act on behalf of humans, there is a question about the extent to which they can be trusted (by both the party engaging the computerised agent and his potential business partner). And there is the additional question of what happens if there are known bugs in certain agents and some malicious party uses these flaws for their advantage – unknown to and unintended by their partners/victims?

Thirdly, there are questions relating to copyright legislation which is always imple-

mented country by country. This would mean that the use of a bi-directional REL would require any negotiation between an owner and a user about rights be conducted on a strictly national basis. For instance, if a user were negotiating about copyright exceptions, which are defined differently in civil code and common law countries, the ability to negotiate would have to be strictly confined to a specific jurisdiction.

Bottom line

Bi-directional Rights Expression Languages have been discussed for as long as Digital Rights Management systems have been in use. While today only uni-directional Rights Expression Languages either in use or are planned for commercial use, the introduction of a bi-directional language could give rise to new consumer behaviour. It has the potential to move the user from being a couch potato to become an active consumer. But before that can happen there are still many problems that would need to be addressed, ranging from purely technical issues to questions of cost/benefit, trust and even IP licensing for the use of technology in consumer applications.

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Chris Barlas has more than twenty years experience of rights management. In the mid 1990s, he led the European Commission supported Imprimatur project. Subsequently he was involved in other successful European Commission projects including which delivered the widely adopted analysis of metadata interoperability. He has also worked as a writer and producer in television and radio. As a Senior Consultant at Rightscom, he has advised a leading software company on its eBooks strategy, a major distance learning institution on third party rights management and an international bank on its publishing work flow technology. In the public sector, he edited the CEN/ISSS DRM study and co-authored WIPO's recent report on DRM. Chris has been active in international standards development. At MPEG, he co-edited the MPEG-21 Rights Data Dictionary, published in April 2004 and took an early leadership role on standards at the Open eBook Forum. At Rightscom he recently assumed responsibility for developing the market for Ontologyx.

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DRM and privacy – friends or foes? An introduction to Privacy Rights Management (PRM)

By: Gergely Tóth, SEARCH Laboratory, Budapest, Hungary

Abstract: During the design and implementation of DRM systems consumers' privacy is often neglected or poorly considered. However with the growing understanding of core DRM requirements and functions it becomes more and more obvious that the same or similar techniques used to protect and manage rights in intellectual property could be used to govern personal information and thus better address privacy issues. Korba and Kenny (2002) have proposed a new approach, Privacy Rights Management, to combine DRM and privacy. In this article first the core functions of DRM systems and the mechanisms of providing privacy will be compared, before the new approach is presented and discussed and some common aspects are described. Afterwards PRM, (Korba and Kenny, 2002) is introduced as the result of the symbiosis between DRM and privacy-awareness.

Keywords: privacy, privacy rights management (PRM), privacy enhancing technologies (PET)

Introduction

DRM (Digital Rights Management) techniques have been widely deployed in the digital world to enable only legitimate access to the intellectual property of rightholders. On the other hand customers require privacy, which creates a conflict with the currently deployed DRM systems that track consumer habits and personal information. However at a closer look we will realize that both DRM systems and privacy enhancing technologies share common goals.

Relationship: Privacy & DRM

DRM was invented by the content industries to manage rights to different intellectual properties, and to prevent consumers from illegal usage: e.g. consumers should only *listen* to music downloaded from on-line

stores, they should not *distribute* the songs purchased. As the business incentive to enforce the interests of content publishers is strong, DRM systems nowadays use sophisticated cryptographic functions and are backed by legislation.

In order to compare them with privacy mechanisms later, let's draw up a simplified, common scheme of DRM systems:

Rightholders allow distributors (e.g. on-line stores) to control their intellectual property (e.g. songs). *Distributors* use DRM systems to protect the assets by means of secured databases and cryptographic algorithms. Rights on the items controlled are well defined: e.g. consumers who have paid may listen to the songs, radio stations may even broadcast them, but nobody may alter them.

On the other hand *privacy* is a key concern of consumers. Furthermore, in Europe, privacy is defined as a human right under Article 8 of the 1950 European Convention of Human Rights and Fundamental Freedoms (ECHR 1950) and it is addressed by Directive 2002/58/EC of the European Parliament and the Council (Directive 2002). Among others, the following privacy principles are defined: usage and disclosure limitation (i.e. data collectors and processors may only use personal information under certain conditions), retention (stored personal information has to be disposed of after a given time) or safeguards (stored and processed data has to be protected from illegitimate use).

As current practice shows, during the utilization of their protective functions DRM systems are regularly at odds with privacy principles: they collect different kinds of personal information about customers (ranging from identification data, such as names and credit card numbers, to access patterns and habits, like how many times a certain video has been watched). Currently privacy issues are handled by privacy policies, but as business is using technology to protect and manage its interests, consumers become also more and more keen on using technological means to achieve privacy.

Ultimately, and quite surprisingly, we have to realize that both issues (DRM and privacy) share some common functions: in either case some assets (e.g. songs or billing information) are controlled by third parties, and have to be protected by these third parties from illegitimate use. Furthermore in either case different access rights might be defined and specified (e.g. only listen to music for 30 days or a one year retention period for shipment data).

Privacy Rights Management

To define PRM, the similarities between DRM and privacy systems are further described: management by third parties, protection, and access rights. These make clear the basic functions of a PRM system which uses DRM techniques to manage personal information – according to the requirements of consumers and legal provisions.

► **Management by third parties:** In the DRM scenario control over intellectual property is entrusted to the distributors' DRM systems. The aim is to disseminate the property in a controlled fashion focusing on the interests of the rightholders (i.e. usage only if paid for). With privacy the scheme is similar. Personal information owned by a data subject is entrusted to data controllers (and indirectly to data processors). Data controllers need to comply with the privacy principles set out in the legal framework and the consumers' intents. This similarity illustrates why the two scenarios resemble each other in essence.

► **Protection:** In DRM systems assets are protected by several means: on the server side secured databases and controlled environments are used, whereas on the client side (i.e. the consumers') special hardware and software techniques ensure that only legitimate usage is possible. On the other hand data controllers are implemented to protect managed personal information. Considering the common requirements, it is trivial to ask why the same DRM protection measures (e.g. encryption, protected content formats, controlled environment etc.) should not be used for personal information as well. For instance record stores offer songs in encrypted format that can only be decoded in special devices and only if required keys are present. The same technique could be used for private information as well: data controllers could also store data in such DRM-protected formats where access can be effectively restricted.

► **Access rights:** Finally to round up the whole scheme, in the DRM environment Rights Expression Languages (RELs, such as ODRL) are used to express what a consumer may perform with the property accessed (e.g. the REL describes that she may only listen to the song for 30 days). Such rights information is usually tightly attached to the protected format used to store the information. In the same manner access to the managed personal information also has to be controlled (by

law and by the consumer), e.g. using RELs, the consumer may specify that, for instance, the provided e-mail address may be used to contact him by the data controller but it may not be handed over to other third parties (cf. the same restriction as purchased songs may not be shared with others).

Discussion

Korba and Kenny (2002) propose the use of ODRL, the REL already used by different DRM systems, to express privacy expectations of consumers regarding personal information about them. In this way, with PRM, consumers could individually set their preferences against the different data collectors.

In current business models, however, companies use privacy policies to express how they process personal information. From this perspective the next step seems to be the uniformization of these privacy policies. The Platform for Privacy Preferences (P3P) Project, coordinated by the World Wide Web Consortium (W3C), aims to define a machine-readable language for formulating how a system processes private information. P3P is currently gaining momentum and seems to be becoming the standard used by companies.

It is not yet clear if these two approaches are at odds, vital questions can be raised however:

- ▶ What if the preferences of the consumer are formulated stricter using PRM than in the P3P policy of a company? Could a compromise be achieved, and if so, how? Will the company accept the consumer's requirements, but raise the price?
- ▶ What if the PRM's settings are more forgiving? Could the company create revenue from using more personal information and thus, eventually lower the price?

Further research and a better understanding of privacy and business models is needed to come up with the answers. A similar problem is explored by Rump & Barlas (2004) in their INDICARE Monitor article on bi-directional Rights Expression Languages.

Bottom line

By analyzing the core functions of DRM and privacy mechanisms, Korba and Kenny (2002) point out that although the anticipated conflict exists, ultimately both share common functions: management of assets by third parties, requirement for protection and restricted usage governed by issued rights. By combining both, a powerful synthesis, Privacy Rights Management can be constructed, using DRM techniques to protect both intellectual property and personal information with the same elaborate techniques. It remains to be seen if PRM defines the next evolutionary step of DRM systems.

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Rights locker architecture – the next step? Potential and risks of a new approach to digital content delivery

By: Roy Melzer, Reinhold Cohn & Partners, Tel Aviv, Israel

Abstract: The growth of bandwidth leads to the integration of new content distribution technologies and models. One example is the possible integration of right locker architectures. The article addresses this technology from a legal point of view and analyzes the possible advantages and impediments that might result from the integration of this model.

Keywords: Right locker architectures, bandwidth, privacy, digital contracts

Introduction

The digital content delivery is facing tremendous changes since the advent of the Internet. Those changes are primarily led by the constant expansion of the net bandwidth. Broader bandwidth enables various new web-based applications with different methods to disperse digital content efficiently. Those new possibilities alter the content industry and change the way people use and enjoy consumer electronic products, media, and entertainment. One indication of change in the consumers' consumptive behaviour is the increasing demand to access digital content from portable devices like laptop, PDA and mobile phone, a tangible manner in the shade of the third generation of wireless services.

Enabling the user to access digital content either from his home stationary or from his mobile devices raises some challenges regarding the traditional DRM model. In the current technology, users' digital rights are annexed to the protected content that is fixated in a particular device and can be accessed either directly, or from any other device that stores another private copy of the content. However, the user cannot access the purchased content from any other device, though he already acquired the right to use the content. Rights locker architecture tech-

nology presents a model that circumvents this content fixation problem.

The "Rights Locker" model

In this model, the content resides only on the rightholder's data server memory. The user practically purchases only the right to access the content and not a physical copy of it. The user rights are stored on a server that was configured to hold authorization information. At the moment of purchase, the authorization server updates the user rights and stores them in accordance with the transaction contract.

Whenever the user desires to access the content, an adjusted application at the user device sends a request to the authorization server. After the server verified the request, the content is streamed to the user from the data server. The same procedure takes place irrespective of the used device, enabling the identified user to access content.

This is not a theoretical model. For example, Digital World Services (DWS 2004), a provider of software for secure delivery of digital content, implemented "rights locker" technology in its ADo2RA system, a content independent digital distribution infrastructure, that is designed to enable content providers and retailers to package, protect, and deliver digital content across multiple devices.

Customer advantages of "Rights Lockers"

Apart from the accessibility, rights locker architecture provides several additional advantages for the customers. The acquired data is backed-up safely, proofed from hardware failures or viruses hazards. Additionally, the user does not have to allocate new memory for the content, and therefore the hardware costs reduce.

Content supplier's can now offer new business models, based on access control: Different contracts regarding the same data can suit different customers better than the current prevailing download model by offering variant prices, based on time periods or number of access permissions. The right to access the content can be sold not only to individuals but also to groups of people, reducing the price per capita (i.e. access is bought for a group of employees).

Drawbacks and uncertainties

The adoption of the new technology still has to face several impediments. From the technological point of view, the current bandwidth is not sufficient to enable real time streaming in a quality that will satisfy the average customer. It seems that the "rights locker" model will only proliferate when bandwidth will allow streaming of content at the same quality of service known in today's apparatus (i.e. supplying real time streaming of songs and movies at the same quality as playing them from the memory of the used device). However, reaching this quality threshold is just a matter of time. According to Edholm's Law (Cherry 2004), in about five years third-generation wireless will routinely deliver 1 Mb/s, allowing audio streaming directly to mobile phones. Wi-Fi technologies will deliver 10 Mb/s wireless access for PDA and laptops, allowing video and audio streaming simultaneously.

From the legal point of view, the current European copyright legal frame is phrased in terms of usage, not access. An authorization is needed from the right holder to carry through actions like reproduction, communication to the public and making available to the public. The copyright directive defines the lawful use of the content and the usage exemptions in terms of "private copy" or

"fixation of the content". However, full integration of the rights locker architectures means that no physical copy of the content would be stored on the consumer devices. The user will "access" the content subjected to contract stipulations rather than "use" as in the sense of lawful use definitions and exemptions.

Even though, one can argue that the new technology is just a new way to handle DRM by mobilizing the digital rights rather than confining them to certain data files, with other words: a way to adjust to the new broad wireless bandwidth surrounding. However, if rights locker architectures will be adhered, a re-thinking of existing terms and definitions in copyright law is required: Sharing files with friends is not "space shifting" anymore but sharing access to the same content, Peer-to-Peer phenomena might transpose into password sharing and "private copying" will be subject to the contract terms.

Moreover, the technology facilitates copyright enforcement. Firstly, this is because the supplier can encrypt the transmitted signals, and thereby impede the fixation of the content. The supplier can digitally tag each transmission of the content, enabling easy tracing of the origin of the fixated copy. Thirdly, the content supplier can easily monitor the use of content, regarding the frequency of use and the IP address of the user devices to enforce the purchase contract.

Open questions

The integration of "right locker" technology might have substantial implications on the current legal frame and therefore should be examined by copyright legislators. In regard to the access agreements, the contract frame should raise questions regarding access control: can a database owner criminalize a user who stores "private copies" on his hard-drive when the contract terms prohibit this? Can the supplier control the access to the content eternally or is he obligated to enable free access to content after the expiration of the content copyright? And even if the release of the content to the public domain is obliged, what are the incentives for suppliers to enable access for content that is in the public domain. From the customers' point of view,

basic rights should be secured. User's privacy might be endangered because of the ability of content owners to monitor the central repository server and to document user actions. Dilemmas for possible legislation can be what are the limits of access data compilations? Who should hold the ability to access this information? And what uses of the data is the supplier entitled to? It seems that this problem is inherited in the technology and will require a continuous monitoring mechanism to guard the users' human rights.

Bottom line

It is still early to estimate in the light of the current bandwidth potential if rights locker architectures will succeed to enter the content delivery market. The integration of the technology holds great advantages for customers especially by enabling various access possibilities from different devices. However, the impediments and dangers to customers' privacy should be kept in mind.

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"Some rights reserved" Creative Commons in between unlimited copyright and copyright anarchy

Prof. Dr. iur Thomas Dreier, University of Karlsruhe, Germany interviewed by Bettina Krings, ITAS, Karlsruhe, Germany

INDICARE-Interview with **Prof. Dr. iur. Thomas Dreier, M.C.J.**, Director of the Centre for Applied Legal Studies (Zentrum für Angewandte Rechtswissenschaft), University of Karlsruhe. The interview was conducted by **Bettina-Johanna Krings**, ITAS, Karlsruhe, Germany.

Abstract: Creative Commons (CC) as standardised licensing agreements for digital goods were introduced in Germany on 11 June 2004. Professor Thomas Dreier, the Director of the Centre for Applied Legal Studies (ZAR) at the University of Karlsruhe, played a leading role in adapting CC to German Copyright Law. Among Thomas Dreier's areas of specialisation are legal issues of the information society. He is acknowledged nationally and internationally as an outstanding expert on copyright matters related to new technologies. The interview conducted by Bettina-Johanna Krings, ITAS, focuses on Creative Commons exploring the foundations of the CC, problems of adaptation to national law, the personal motivations of Prof. Dreier to support this new approach, limitations of CC, their role with respect to innovation, DRM and commercial interests, and finally scientific publishing.

Keywords: Creative Commons, copyright, innovation

INDICARE: *How would you describe the basic ideas behind Creative Commons in a few words?*

Th. Dreier: In public, there is currently awareness that copyright is constantly extended in order to encounter the perceived loss of control over copyrighted material which is due to digital and networking technology. Moreover, technical protection measures are used to extend control over the exploitation of digital goods to maximise profits – intruding ever further into the private sphere, restricting use and preventing people from making creative use of them. There is a wish to counteract these developments with the help of Creative Commons seeking to ensure a pool of goods, i.e. a growing number of creative works, from which anyone can essentially serve themselves.

INDICARE: *Well, an increase of control and protection measures is part of the normal historical development of information technologies...*

Th. Dreier: Yes, that is the normal historical development. CC mainly responds to the needs of those who consciously make use of someone else's copyrighted material in an artistic way. It started with what is called appropriation art, where the artistic statement in making an exact copy of a famous work and signing it as one's own consists in drawing our attention to the strange concept and the aura of "the original". Increasingly, we have people who make collages from existing material, for example film sequences. Those people consistently intrude with each snippet they use into existing rights. In these cases, licensing is often impossible because film copyright owners, Hollywood for example, have better things to do than licensing snippets, or, if they do license snippets, the price asked for its use is prohibitive to the artist. In such cases, the entire creative and economic transaction process collapses and this is what CC seeks to counteract by creating commons, a pool of free works. In the framework of CC however, copyright is not completely abandoned. The creator can still exercise control by retaining or reserving certain rights for himself.

INDICARE: *In this sense, do CC apply mainly to the artistic domain?*

Th. Dreier: That is why they're called *creative commons*, commons for creativity. We're dealing first and foremost with the artistic field, mainly text, music and images. To better understand the origin of the CC we have to recall the following situation in the US: the legal scholar Lawrence Lessig attempted through a complaint at the Supreme Court to prevent the extension of the fifty year copyright following the death of the creator to seventy years. He was unsuccessful, and I believe that after failing to attack copyright from the outside, he now wishes to redesign it from within – a completely legitimate approach. By this approach he can on the one hand ensure legal certainty and on the other hand ensure that there are enough creative works available to build upon.

INDICARE: *What does the creative process have to do with CC?*

Th. Dreier: Historically seen, nobody has ever produced from scratch but always in their creative work built on the work of others. In the extension of copyright the proponents of CC see a threat to this principle. Against the background of certain creative strategies, they are moving against this. Apart from appropriation art just mentioned, think about the DJ culture which rests entirely on the use of parts of existing recordings, even if they are re-used as no longer recognisable sound sequences. If I scratch and perform this scratching publicly or mix it onto my own recording, I have of course used someone else's recording rights and these rights have naturally not been licensed by the producer of the recording since DJ culture is tangential to them. Hence, the whole artistic activity is threatened by the exclusive rights. This is indeed just being discussed intensively in the US. Someone known as DJ Danger Mouse has taken the Black album by Jay-Z and the White album of the Beatles and mixed them together to make a "Grey album" and was promptly served with a cease-and-desist notice. It is situations like these that can be regarded as the starting point of CC. Of course, another

starting point of CC is the model of open source software.

INDICARE: *You took part in the project in Germany yourself. What were your reasons?*

Th. Dreier: I was spontaneously fascinated by the way the CC-project used the new opportunities of communication technology to create contractual relationships. Of course, it was possible to conclude contracts over the net in the past and that could be quicker than using letters or faxes. Moreover, for some time technicians tried to integrate all of these differentiated user relationships into the data set of the respective works. For instance a model was developed in which these were included in the header of the dataset before the protected object itself. In this approach there is a need to ensure that the data were not removed or forged etc. That was fairly complicated and – in spite of legal protection against the removal of such rights management information – is still rather insecure. There is also the model of collecting societies. These hold the rights to the works, and a user can access not only the data but also the conditions of use via collecting societies. Lessig reversed this principle and said: All what has to be done is storage of the license in one place and this place is then signposted by each user who wants to place his or her work under this particular licence with small, simple icons as figurative pointers. Under the CC-approach, the licence does not travel with the work, but only the pointer.

This was the aspect that stood in the foreground for me. This development is in my eyes an example of how communication technology changes the structure of user relationships. There is a type of transaction emerging which would have been impossible or extremely difficult in that shape before. That fascinated me and at the same time it is good to help artists create an environment in which some of them obviously feel comfortable. Even if it is at odds with the rationality of the, let's say, commercially oriented system.

It should be added that the legal text and the symbol of each of the different CC-licenses is not all of CC. In addition, to all of the CC-licenses (attribution; non-commercial; no

derivative works; share-alike; the founders' copyright-licence doesn't exist in Germany) there is a layperson's version, and a machine-readable version, which makes it possible to trace and locate works which have been placed by their authors under a CC-licence.

INDICARE: *What is the relationship between CC and German Copyright Law?*

Th. Dreier: The idea of the license is mainly American. In addition, if I as a German protect my work with an American license, there's naturally the question why I also need a German license. However, there are mainly two arguments for developing a parallel German CC-license: one is the marketing aspect – a license can be truly popular only if it is written in local language. In addition, the Federal High Court (Bundesgerichtshof) requires all clauses to be comprehensible for users, which probably means that German users must have the opportunity to read the clauses in German.

The second aspect is that if we decide to issue a German license so that it may be understood in Germany, it has to be adapted to German law. For CC the main task consisted of keeping the basic idea and looking for ways to materialise and codify this basic idea in German law. For example, what we in Germany call "distribution" forms part of "public communication" under US law. Also, the German license had to be adapted to the surrounding legal context. To give an example, since the 1970s we have had consumer-friendly legislation controlling general contractual terms and conditions. If a clause of a particular contract is formulated in a way that transcends what is legally permitted, then it is a priori invalid. This is the incentive for those who draft standard contractual term and conditions to conform whenever possible to the limits as set by the law. As the CC define a set of business relationships by pre-formulated contractual terms and conditions, this requirement had to be fulfilled here too.

INDICARE: *Does that mean that there is no need for internationally valid CC?*

Th. Dreier: As I've said before, I don't see a real need. People always use their national license and in that way release the work

world-wide. This is testimony to the cross-border nature of the Internet. Behind this are a whole series of legal matters of detail into which I won't go any further here. Just one important aspect: the German author cannot abandon all of his or her rights. Even if, in the license, the author promises that he or she will make no use of these rights, a user can never be certain that the author will not change his or her mind. That is something that cannot be regulated neither by an American nor a German license. But I don't believe that it will often lead to problems in the framework of CC because the people who use CC want their works to be freely available on the Internet, and to be accessible free of charge. All in all, an attempt is made to transform the ideas behind the American licenses 1:1 and to develop licenses with a similar structure. Of course, when it comes to legal fine-print, things look slightly different and a perfect 1:1 transformation is impossible.

INDICARE: *Is the CC model accepted?*

Th. Dreier: In the U.S. the model is well-accepted. The same goes in general for Germany, but I can't quote any up-to-date figures. But I was very surprised when I was approached by some of my law students at the University of Freiburg who told me that they have already used CC. Interestingly, awareness of CC is orders of magnitude greater among the technicians here in Karlsruhe or among students with an interest in technology in Freiburg than in the classical copyright community. In Germany the realisation that something new is emerging has not yet arrived in the copyright community. But I can't guess how big CC in Germany might turn out to be. I think that an interesting question in the context of CC is its non-commercial nature. CC is a model developed from A to Z for non-commercial use. There is deliberately no royalty.

INDICARE: *How do you see the relationship between non-commercial and commercial use?*

Th. Dreier: The idea is that CC enable free use, naturally in the restricted sense that rights are granted. If someone grants permission for non-commercial use, author credit

and reciprocity under this license, he or she has merely granted permission for non-commercial use. If someone wishes to use the same work for commercial purposes, he is faced with normal copyright and would normally have to develop an individual contract with the owner. Here, CC would be of no use. That's exactly what it's all about: CC are somewhere in the middle between total exclusivity and copyleft. Lessig puts it nicely: they're somewhere in the middle between "everything is locked away legally and technically" on the one hand and "total copyright anarchy" on the other hand. It's not "all rights reserved" or "no rights reserved", it's not "copy left", but it's "some rights reserved" and in that way really a well-balanced medium approach.

For example there were problem areas in Germany since the libraries basically wished to take part in the project by providing the distance lending facilities of their archives. However, historically, scanning, transmission and maintenance of data usually takes place against fee payment. This was a source of income that the libraries didn't want to abandon. This wish of libraries cannot be reconciled with CC in their present form.

INDICARE: *Do commercial users have any interest in participating in CC?*

Th. Dreier: I'm not sure if commercial users really want to participate, but the example of libraries shows that a new user market is emerging in which everyone wants to take part. The mechanism does have a certain attractive function. But at the moment I don't see any way to home on the commercial use track. At least it's not foreseen in the basic concept. There are attempts being made to add further modules. For example, it would be possible to combine CC with a kind of micro payment. This is not unthinkable, but the original idea of CC is that use is free of charge. On the other hand you can say that technical protection measures, that is DRM, only make sense if I can, first, make money out of them and, second, diversify my products. It's only then that I can offer different qualities of use priced differently. If I leave away the staggered pricing there is little sense in selling one CD completely free of

copy protection and the other with copy protection. You could thus say that CC integrate the non-commercial side and DRM the commercial side. In this sense they meet head-on, and to that extent the model of CC could be called the strategic attempt to counteract the all too rapid advance of DRM and its associated access to information only for payment.

INDICARE: *Let's turn to the efficiency and limits of the CC approach*

Th. Dreier: Before such considerations there is the big question: how do we organise the attribution of immaterial goods? From classical economic theory we learn that we have to make such goods artificially exclusive since they are not so by nature. There is thus no real sense in making an exception. In contrast, Lessig tries to cut the over-protection for these goods. I think whether this will ultimately be successful in any respect depends on many things, including problems which have not been researched thoroughly up to now.

INDICARE: *Which problems?*

Th. Dreier: Take for example the question of the preservation of these goods: Is access in the long run really easier if I put them freely on the net? The search engine now obviously tells me that it can find the goods. But who will guarantee that the search algorithm can still find my protected work tomorrow? Whose job is it to see that my data format is maintained? Today, on the other hand, the famous back catalogue of the record producers and the potential for centralised libraries archiving digitised works make it quite likely that my stuff stays accessible.

INDICARE: *Is this a big question-mark in the framework of CC?*

Th. Dreier: Possibly there is this uncertainty. Today by access we usually mean quick access via the Internet, a question of quantity. However there is also qualitative access: how do we store goods in the long run? This question of how to get access to the goods is practically ignored. People assume that there will always be access on the net and as a result only concern themselves with the time – the average 0.14 Google sec-

onds needed to get access seem fabulous – and the costs - which often seem prohibitive. Hence, a cost-free, quick access seems rather tempting at first sight. However, in my opinion qualitative access is a critical aspect which should be considered regarding Lessig's project.

INDICARE: *In your work, you stress the innovative character of CC in the economic sense, but you also see some possible drawbacks. Can you expand on this point?*

Th. Dreier: As I've said before, copyright had been invented in order to incite creation. Assuming that the assumption that copyright does indeed incite creation, then the incentive to create is diminished if you take away, or even limit the exclusive rights of copyright. The essential question is: is this assumption true, or to what extent is it true? Rightholders say yes it is; the generation in favour of CC, who sees the world as distorted by too many protective regulations, has its doubts. CC postulates that creative work grows and flourishes if artists are not bothered by alien intellectual property rights. On the other hand classical economic theory says people are only creative if they can be sure that they will be paid afterwards. The principle that the creator is to benefit from the revenue from the exploitation of his work is basically a cornerstone of our copyright law. The law maker can intervene in the freedom of contracts to protect the author. And now we have authors just coming forward and saying that doesn't interest us one bit, or at least only partly. The question is where and under what conditions this can work.

There are probably fringe areas in which you can have a first mover advantage, i.e. the first person to do something draws peoples' attention to himself. During a conference in Berlin it was a Swiss who put his film under CC license. He had wanted to market his film and discovered he couldn't find a distributor because all of the distribution chains were connected with the big companies, and because the small cinemas had to find ways to make money. There was no room for no-name products, so he uploaded his film freely on the net, and, to his surprise, got fabulous

download figures. However, he just was the first to put a film on the net with a CC-licence and that brought him much of the attention for a film for which financing had already been secured prior to putting it online. Moreover, the online-distribution didn't generate any additional direct income which this filmmaker might have used to produce his next film. More important, however, I presume that the second, third and any other people putting their films on the net will not gain the same degree of fame as the first. As long as not many people have used CC there might still be a myth associated with it. Once CC becomes day-to-day routine, this myth will fade and we will see what CC really means for an increase in artistic production. We might well see that the material placed under a CC-licence is different in nature from what is being exploited commercially.

INDICARE: *In which areas could CC work?*

Th. Dreier: You can already guess that it won't work wherever people have to earn their living with creative work. For instance, in my opinion, in the field of classical journalism, CC won't work. There, the products, the texts, can't simply be given away, and if you give your texts away for free, it is no longer classical journalism but blog-culture. I always tell my students that a frustrated 17-year-old writes his love poems without giving copyright protection a thought because he has entirely different reasons for doing it. But for everyone else, even in the open source area, it works in the way that people who have gained fame and honours want to capitalise on it in other ways. That might be participation in conferences, it could be being given credit, but in the end most are looking at the commercial distribution area or at areas surrounding it and try to convert their fame into remuneration. In other words: the success of CC will depend on how many possibilities there are to earn money with related activities, unless we contend ourselves with works created by waiters, taxi-drivers and the jobless.

There is another important point: I strongly caution against seeing the word "free" as a

panacea and pulling the carpet from under the feet of entire professions or simply dismissing whole branches into poverty (such as depriving journalists of their legitimate income). That can't be openness nor is it democratic. As I've said before, CC will probably work better in some areas and less well in others, but it hasn't been tested yet in which area it works which way. But CC are slowly gaining support and is obviously being greeted with open arms by several hundred of thousands of artists. If that's a real need, why not supply it?

INDICARE: *Can you think of other fields for CC than the artistic field?*

Th. Dreier: Yes. Another area Lessig has been thinking about is the so-called scientific commons. These imply the question whether the CC structure cannot simply be translated to the field of scientific publications. This discussion is making massive progress over here as well. University libraries or other large libraries like the one here in Karlsruhe are increasingly feeling stifled by price increases being enforced by monopolistic publishers, mainly in the scientific, technical and medical (STM) field. And here there is much debate about reconstructing the model so that scientists, who are paid by the State anyway, put scientific results at general disposal. Of course, if such a decision were taken, STM-publishers wouldn't completely disappear but they certainly would have to restructure their fields of activity. They could still organise peer review, and offer services that university libraries could not do, etc. They could work as portals and platforms opening the gates to, and drawing for their commercial publications from the wealth of articles deposited in huge pre-print archives. In this way, two markets could be created: the large, free pool and the commercially organised market. Publishers might not even suffer any losses, quite to the contrary. It would be a model that could give great relief to public research institutions as a whole, provided costs for organising preprint-servers are not too high. Again, CC could jump in to facilitate transactions. Of course, CC in the scientific domain would have to be further differentiated. CC for physicists would probably look different than CC for legal people. I

doubt if there could be a “fit all” for all fields, which really fulfils the needs of all disciplines.

INDICARE: *In your work you often refer to the progress of technological development, which might unhinge valid legal provisions. How do you see the relationship of technology and law today?*

Th. Dreier: I feel we don't know. Somehow, we're standing in the middle of it all. On the one hand we can see a nice continuity of technological development. This continuity goes from printing via music cylinders, gramophone records, wireless and television broadcasting to the Internet, in short, we see an ever-increasing improvement in the performance of reproduction and communication technology. On the other hand, we have, without noticing it, enormous discontinuity of copyright. For, if we look at the structure of copyright law, we see that it was conceived for books, music and paintings. If in the past we were dealing with individual transactions, today we are dealing with billions of simultaneous transactions and this brings with it an enormous enforcement problem. This is because the old model whereby an author secures his or her rights and then starts exploiting them obviously cannot work with these user numbers. If we took every single file-sharer to court, the courts would collapse. The problem is that law is increasingly becoming a mere set of guiding rules: people should behave in a certain way; if the rules are broken the potential sanctions are usually not enforced. If they are enforced and do have impact on individuals, as has been the case in a series of law suits in the US, they have exaggerated impact. This example hints to the pressing question: What can law really do?

INDICARE: *Is DRM a possibility?*

Th. Dreier: One basic problem of DRM is its acceptance. For DRM, the situation is that full-scale usage is inherent in the set of data, which has only been artificially throttled. And if people have the complete data set in their possession, I think it is difficult to explain to them that it has been throttled so that they pay less. However, it is a basic assumption that DRM and product diversification

must be built to enable economically sound digital markets. This assumption is however very controversial. Some economists say that more overall welfare is being destroyed in this way than we can win. Disregarding technical issues, this seems to me to be a major problem.

Otherwise, I quite like DRM as an option. I think the most desirable system would be one that allows the rightholder to choose what he or she wishes to do with his material, whether he or she wants to diversify and protect it against unauthorised, unpaid-for use by DRM, or whether he or she opts for a CC-license.

INDICARE: *In this sense, could DRM be viewed as an alternative concept to CC?*

Th. Dreier: I think so. DRM attempts to secure copyright on the one hand and on the other hand to take advantage of the potential of technology to enable product differentiation and price differentiation. In theory that way DRM will benefit both the producer and the user. The consumer must no longer buy a CD which he can infinitely listen to or copy many times but buy music having far lower scope of usages – either because it is copy-protected or because it is provided only as a stream roaring past the hearer's ear once. There certainly is a market for such product differentiation. For example, some record shops provide the model of one-time listening: You can have a nice evening, a little uncomfortable maybe, but if you want, you can listen to music at will for a whole evening. At some point you'll no longer do that and use the system to get information and to decide which CDs to buy. In the end, you most of the time spend more money after having listened to some of the tracks of many CD's this way than you would have done in case you could only see the jackets of sealed-off CDs.

This is a point where legal reasoning and economic theory do not easily agree. From the legal viewpoint DRM and protective mechanisms seem more in the line of defence: the rightholder doesn't want consumers stealing his stuff! Economists, however, see it the other way around and say: all this money is being invested in defensive protec-

tive mechanisms to defend existing market shares. When you could instead be investing the same money and creative thinking in offensive strategies aimed at opening new market segments and getting consumers to buy more than they're doing now. In a way,

the concept of DRM is just as fascinating as that of CC. However, it is much easier to apply CC.

INDICARE: *I think we have covered many issues related to CC, and I thank you kindly for the interview.*

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Collecting societies – not yet "six feet under"

A brief review of the international symposium "Digital Rights Management: The End of Collecting Societies?" at the University of Lucerne, Switzerland, June 24 and 25, 2004

Christoph Beat Graber, Mira Nenova and Michael Girsberger, i-call, Lucerne, Switzerland

Abstract: Despite ubiquitous digitisation and the advent of Digital Rights Management Systems, it seems that collecting societies are not quite yet "six feet under". Even in a world of rapid technological developments collecting societies will keep providing services to authors, users and the public facilitating the management of rights and performing additionally certain important social and cultural functions. However, agreeing on the future of collecting societies and on the particular design of both individual and collective rights administration is not an easy task and the opinions of the major stakeholders are diverse and often conflicting.

Keywords: Collecting societies, cultural diversity, symposium, Switzerland

Introduction

The moment for the symposium was well chosen – not only because visiting Switzerland in early summer is most charming, but mainly due to the fact that a forum discussing the future of individual and collective management of authors' rights was genuinely needed in the face of intensified digitisation and the advent of Digital Right Management systems (DRMs). Responding to that need, as part of their general activities in communications and copyright law, the research centre i-call of the University of Lucerne Faculty of Law, organised in cooperation with the Swiss Federal Institute of Intellectual Property and with the support of the Mercator Foundation an international symposium on this highly controversial topic under the charged title "Digital Rights Management: The End of Collecting Societies?".

The reason for the controversies in the field and for putting forward the above question is at least twofold. On the one hand, DRM systems provide a technological infrastructure that can be used for a multiplicity of purposes, ranging from clearing rights and securing payments to enforcement of those rights. These technological means that could provide business models with low transaction costs and if deployed extensively ultimately render the existing remuneration schemes obsolete, interfere directly with the established systems of rights management and create a whole new reality. Considering the widespread digitisation and notably the pervasive nature of the Internet as information environment, "the legal framework for the protection of copyright and related rights ... has to match these realities", as pointed out

by the European Commission in a recent Communication.

On the other hand, the existing system of collective rights management, which was in the focal point of the symposium's discussions, has admittedly come to play a special role in society. Besides facilitating the establishment of unified methods for licensing, collecting and dispersing royalties, over the time, collecting societies have indeed evolved to perform various *social* and *cultural* functions. Moreover, one should not forget that the very intrinsic objective of copyright protection, beyond the economic rationales, is to promote creativity and thus cultural diversity and cultural identity. DRMs cannot (yet) provide solutions to these general social necessities and indeed might seriously hamper them considering the possibilities of control of access that DRMs offer and the inherent content industry concentration.

The symposium programme

The programme was structured in two parts – stock-taking and analytical keynote speeches with following formal discussion on the one hand, and two podium discussions, on the other. Against the background of the above-outlined problematic, the speakers were organised into three thematic modules that elaborated respectively on the *social and cultural policy*, *human rights* and *competition law* aspects of "rights' management" trying to capture all its implications in a technologically dynamic environment. The faculty challenged with this intricate task comprised:

- ▶ Prof. Daniel Gervais, University of Ottawa,
- ▶ Prof. Adolf Dietz, Max Planck Institute for Intellectual Property, Competition and Tax Law,
- ▶ Dr. Alfred Meyer, SUISA (Swiss Society for the Rights of Authors of Musical Works),
- ▶ Prof. Christoph Beat Graber, University of Lucerne,
- ▶ Prof. Hugh Hansen, Fordham School of Law,
- ▶ Dr. Dorothea Senn, King's College, and

- ▶ John Palfrey, Berkman Center for Internet and Society, Harvard Law School.

The symposium discussions

If one thing has become clear and all of the speakers – from the "copyright" and the "copyleft" agreed on, if not with the same level of enthusiasm, is that collecting societies are still needed and that they will have to change in order to live up to the challenges of the moment and still be meaningful and efficient in the future. Prof. Gervais particularly stressed this point in his keynote-speech. While struggling with fragmentation of standards, laws and markets collectives will have to adapt their business practices if they want to survive. Their role would then in his view not diminish but rather *change*. In any future business model, be it only a DRM-based or one involving collectives as well, some forms of centralisation and standardisation would be key to an efficient trade in digital goods. Due to their governmental supervision, collecting societies might provide for more transparency than a DRM scenario and by employing centralised licensing, often referred to as a one-stop-shop, the efficiency might significantly improve. Prof. Dietz agreed on the need for change in the rights' administration mechanisms but called for protection of cultural diversity within the changed design. In that regard, he emphasised that the creation of one-stop-shops should only be permissible under the condition that tasks concerning cultural aspects are left to the individual national collectives.

The second thematic module looked at DRM from the unusual and rarely discussed perspective of human rights. Prof. Graber pleaded for using freedom of expression and information as essential point of reference for decision making (by the legislator rather than courts!) and for the further shaping of copyright law in the midst of the ongoing technological (r)evolution. As a foundation of any democratic society, freedom of expression and information is to be the basis for setting limits and granting exceptions of copyright both in the analogue world and in the digital era. As for the fate of DRM and collectives he argued in favour of finding synergies between the two systems and for safeguarding

the important role of collecting societies as promoters of cultural diversity and cultural identity. Prof. Hansen responded by dismissing the claim for enhanced significance of freedom of expression and information and defended from a "copyright" standpoint the need for maximal protection of authors' rights.

As usual when discussing copyright and digitisation, it is easier to focus on how the law should be rather than how it is. It was thus very refreshing to follow the DRM-focused elaboration of Dorothea Senn on the *Microsoft* (MSFT) decision, taken by the European Commission early this summer. She saw the case in issue as an example of DRM-market dominance with possible spill-over effects on other markets due to the inherent network externalities in the software market and the lack of interoperability among DRMs. With this first decision and the upcoming judgement on the MSFT appeal, the competition law complications of DRM have made it to the courts and one can be curious about the stance of the Community Courts on the "Microsoft" case in the light of the *Magill* and *IMS-Health* decisions on the "essential facilities" doctrine. The fact that the European Commission is well aware of the risk of market dominance in the DRM solutions market has been recently proven again by the opening on August 25 of an in-depth investigation into the proposed joint acquisition of ContentGuard – a company that is active in the development and licensing of standards for the DRM-market – by Microsoft and Time Warner. Building upon Senn's legal analysis of DRMs, John Palfrey of the Berkman Center for Internet and Society wrapped up the first day's discussions stressing the need for a more open approach towards copyright and access and ultimately, a balance between public values and individual interests.

Sources

- ▶ European Commission Communication, The Management of Copyright and Related Rights in the Internal Market, COM(2004) 261final, 16.04.2004.
- ▶ Commission Decision of 24.03.2004 relating to a proceeding under Article 82 of the EC Treaty, Case COMP/C-3/37.792 Microsoft, C(2004) 900 final.
- ▶ European Commission Press Release, Commission opens in-depth investigation into Microsoft/Time Warner/ContentGuard JV, IP/04/1044, 25.08.2004.

The podium discussions during the second symposium's day were more practice-oriented and addressed the problems posed by the implementation of the EU Digital Copyright Directive and the two WIPO Internet Agreements. Within the latter framework, several copyright lawmakers including H el ene de Montluc, Vittorio Ragonese and Mih aly Ficsor, examined the concrete national situations and agreed – this time with almost equal level of enthusiasm – that easy, fast and fairly cheap lawful access to digital content is still lacking (most notably on the Internet). The representatives of the music and film industries were, nevertheless, quite as firmly fixed as the Alps surrounding the very conference venue in their pro-copyright position coming up once again with the slightly worn-out argument of "the industry is losing money...". Insufficient willingness for compromise was shown in that sense and the bargaining will surely continue.

Bottom line

In their present status of technological sophistication and implementation, DRMs do not present a policy solution to ensure the appropriate balance between the interests involved, be they the interests of the authors, other right-holders or those of the users. DRM systems are not in themselves an alternative to copyright policy in setting the parameters either in respect of copyright protection or the exceptions and limitations that are traditionally applied by the legislature. Although they might facilitate to an extent the management of rights in a digital networked environment, they do not have the potential to cater for the cultural and social implications of rights' administration and might indeed constrain cultural diversity. In that sense, it seems that collective societies are not rendered obsolete by the advent of DRMs but will most certainly have to adapt.

- ▶ For a full collection of the conference contributions, see Graber/Govoni/Girsberger/Nenova (eds.), *Digital Rights Management: The End of Collecting Societies?*, Berne: Staempfli, 2005 (forthcoming).

About the Authors: Authors are members of i-call. i-call, founded in 2002, stands for International Communications and Art Law, Lucerne. It represents a research centre of the Faculty of Law of the University of Lucerne formed under the Chair of Prof. Dr. Christoph Beat Graber. i-call's field of research is focused on the interplay between technological, economic, cultural and particularly legal developments of international markets for media and communications that occurred in the last couple of decades and are still unfolding. Contact: christoph-beat.graber@unilu.ch / tihomira.nenova@unilu.ch / michael.girsberger@unilu.ch / <http://www.i-call.ch>.

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