# INDICARE Monitor

## About Consumer and User Issues of Digital Rights Management Solutions

# INDICARE Monitor Vol. 2, No 2, 29 April 2005

## Content

The **IN**formed **DI**alogue about **C**onsumer **A**cceptability of D**R**M Solutions in **E**urope

# Editorial of INDICARE Monitor Vol. 2, No 2, 29 April 2005

By: Knud Böhle, ITAS, Karlsruhe, Germany

**Abstract:** In this editorial we announce a new INDICARE deliverable and introduce the articles of this issue of which most focus on DRM in the field of scientific publishing and libraries. As the use of DRM systems in this broad application field is complex and raises many questions we will continue to address it in the INDICARE Monitor.

**Keywords:** editorial – INDICARE

## INDICARE news

INDICARE was invited by the European Commission to the workshop "Towards reaching consensus on Digital Rights Management" held in Brussels on the 6th of April, 2005. The aim was "to share the result of the informal public consultation and the outcome of the High Level Group, and where possible to further explore ways to reach consensus on DRM" (European Commission 2005). *Carsten Orwat*, co-ordinator of project INDICARE, gave a presentation titled "Analysis of consumers' issues and paths for concrete approaches" which is available online like the other presentations (European Commission 2005; Orwat 2005).

This month INDICARE made available a compilation of all INDICARE Monitor issues of the first year 2004/2005 in a single volume. In a corresponding INDICARE article we briefly present this publication adding a bit of hindsight and a bit of foresight.

## About this issue

When we posted our call for papers for this issue on "science, higher education, and libraries" to an e-mail list of librarians the immediate reply was that DRM has no business in this field at all because of its character as a space of academic freedom. Open Access would be the appropriate answer (cf. INETBIB 2005). The four thematic articles we present in this special issue all recognize the special status of this field, however the authors come to a rather different conclusion about the role of DRM in there. In other words, sympathy for the rights of creators and cultural institutions like libraries makes them advocate prudently for a cautious use of DRM systems in these areas.

The use of DRM technology in this field need not necessarily be a fall from grace of mankind.

► First it seems to be often overlooked that the *expression of rights* is not per se the enforcement of rights, and that well received approaches like Creative Commons are in first place this: a transparent expression of rights. Therefore, talking about CC is also talking about DRM.

► Second, what DRM technology is and what it is not depends. For example, safeguarding integrity and authenticity of documents is safeguarding rights of creators and consumers. Technologies guaranteeing integrity and authenticity such as digital signatures or watermarks are in this sense contingent. A one man's security technology is another man's DRM technology.

► Third, in some cases DRM systems may indeed be a solution to leverage fair use exemptions. In the library context these include the right to lend, the right to preserve, the right to supply documents to third parties, the right to share.

Taking DRM as a *béte noir* – to use the expression of Richard Poynder here –- is apparently not the best approach to cope with the complexity of legal, economic and technical IPR matters. Reducing complexity may correspond to the logics of social movements facing intransigent opponents, but a balanced approach it ain't.

In this issue *Marieke Guy* and *Brian Kelly*, UKOLN, Bath, discuss the use of CC for digital libraries presenting the case of a project funded by JISC (Joint Information Systems Committee) in the UK. Their conclu-

sion is that comprehensible expression of rights is of great benefit, and that CC licences are about removing the barriers to sharing information.

Next, *Richard Poynder*, a freelance journalist and an expert in digital assets, investigates the role of digital rights management in Open Access. He starts where Marieke Guy and Brian Kelly had ended, stating that inserting machine-readable rights information into digital content like CC (in order to control how it is used) is "digital rights management". He can show that DRM, understood as a "set of tools to help creators maximise usage of their work" could support the Open Access movement especially with respect to the "green road" of OA, i.e. "self-archiving" of papers which are published by traditional commercial journal publishers.

*Pasi Tyrväinen* writes about fair use licensing in a library context. He claims that it is possible to support library exemptions and still maintain a high level of privacy with DRM systems. DRM systems are presented in his model as an enabler of the legal library exemptions. It is particularly interesting to see how – given an appropriate design of DRM systems – new business models may emerge from a closer interaction of public institutions and publishers. Libraries as superdistributors is just one of the ideas Pasi Tyrväinen puts forward in the three scenarios outlines.

*Karen Coyle*, a well known consultant in the library field, focuses her article on the role of digital rights management with respect to one particular library function, namely lending. She discusses primarily the state of the art in lending electronic books and audio books. Her conclusion is that for libraries to manage and lend published materials in digital formats some controls are required. She also concludes that digital products lead to new relationships between publishers and libraries involving DRM systems. Today however as

she points out there are important issues not yet solved with respect to acquisition and lending of digital materials. To achieve a win-win situation, both, libraries and publishers, have still to learn.

Out of focus, but with high relevance for the role of DRM in the preservation of cultural heritage, *Michael Rader*, ITAS, investigates the reissue of historical recordings. The preservation of the audio heritage is largely being undertaken by small enterprises who invest a lot in audio restoration. Reissues of historical material have generally not been protected against copying although such work is protected as intellectual property and although piracy for commercial purposes is significant. This brings in DRMs as an option to stop abuse. Studying a particular case, Michael Rader concludes that watermarks might be the best solution not to restrict consumer rights on the one hand and to facilitate the detection of "pirated" works on the other hand.

Last not least, we can include again comments on the INDICARE state of the art report. This time *Manon Ress*, director information society projects at CPTech (a non-profit organisation) hints particularly to the international dimension of DRM and the concerns of developing countries in this respect.

### Bottom line

In the next issue of the INDCARE Monitor we will continue the focus theme addressing further issues like "Science Commons", DRM and document supply centres, or DRM and preservation. If you feel stimulated to get involved in the debate about DRM in the field of "science, higher education, and libraries" feel free to propose a topic and to write for the INDICARE Monitor about it. The CfP with a list of topics we find relevant is still available (see INDICARE CfP 2005).

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**About the author:** Knud Böhle is researcher at the Institute for Technology Assessment and Systems Analysis (ITAS) at Research Centre Karlsruhe since 1986. Between October 2000 and April 2002 he was visiting scientist at the European Commission's Joint Research Centre in Seville (IPTS). He is specialised in Technology Assessment and Foresight of ICT and has led various projects. Currently he is the editor of the INDICARE Monitor. Contact: + 49 7247 822989, knud.boehle@itas.fzk.de

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# QA Focus information for digital libraries. A case study of CC implementation

By: Marieke Guy and Brian Kelly, UKOLN, Bath, United Kingdom

**Abstract:** Creative Commons (CC) licences are a way to clarify the conditions of use of a work and avoid many of the problems current copyright laws pose. This article describes how a CC licence has been used to maximise take-up of the deliverables from QA Focus, a JISC (Joint Information Systems Committee) funded project. It then looks at CC's potential in the European academic sector and discusses relevant issues.

**Keywords:** case study, copyright law, cultural heritage, Creative Commons, higher education, libraries, United Kingdom

### What is Creative Commons?

Creative Commons (CC) was started in 2001 by *Lawrence Lessig* as a consequence of an *un*successful law suit. Lessig had put in a complaint at the US Supreme Court to prevent fifty-year copyright (following the death of the creator) being extended to seventy-years. As this failed, CC was an attempt to "redesign copyright from within" (cf. Dreier 2004).

The eleven CC licences are written using an American legal model and are available to download from the Web site. They allow copyright holders to assign a mixture of four different conditions (attribution. non-commercial**,** no derivative works, share alike) to their works. The aim is to clarify the conditions of use of a work and avoid many of the problems current copyright laws pose when attempting to share information. Each license is expressed in three ways: legal code, a commons deed explaining what it means in lay person's terms, and a machine-readable description in the form of RDF/XML (Resource Description Framework/Extensible Mark up Language) metadata. Copyright holders can choose to embed the metadata code in their HTML pages, which will then aid retrieval.

Take up of the licences has been very popular, but because their current wording does not work well with the law in other countries the International Creative Commons Project (iCommons) was instigated to adapt them for use outside the US. At the end of March 2005 the process of writing new licences has been completed for fourteen jurisdictions. Ten jurisdictions, including the United Kingdom, are at the finalising stages.

### Creative Commons and the education sector

The CC licences obviously have a lot to offer artists creating text, audio, video and images

for use on the Web. But what potential do they have for public sector communities, such as the academic and cultural heritage sectors? Within higher and further education many publicly funded bodies are involved in creation of resources that will aid learning and teaching of students and enhance research opportunities. One way to encourage use of these materials is by assigning CC licences.

## A Creative Commons case study: QA Focus

QA Focus was funded by the JISC (Joint Information Systems Committee) in the UK to develop a quality assurance (QA) framework which would help ensure that project deliverables funded under JISC's digital library programmes were functional, widely accessible and interoperable. The project, which was provided by UKOLN (a national centre of expertise in digital information management based at the University of Bath) and the AHDS (Arts and Humanities Data Service), successfully developed a quality assurance (QA) framework and a wide range of support materials.

Towards the end of the project the decision was taken to make QA Focus briefing papers available under a Creative Commons licence as part of the project's exit strategy. The project deliverables are to be available for at least three years after the end of funding, as required by the funders. However the project team were concerned that a passive approach would not be effective in maximising the project's impact across the community and that the approach advocated and lessons learnt could be forgotten or ignored. There was also a concern that the project's deliverables would become invalid or inaccurate over time, as a result of technological, legal, etc. changes. To ensure the deliverables continued to promote good practice in the long-term, a policy was developed to allow free use and modification of briefing papers.

*What licence?*
After discussions it was decided that users should be allowed to adapt and refine the QA Focus resources, enabling them to reflect local requirements, and to be distributed without seeking permission. A number of

possible licence models were investigated and three approaches considered:

1. Develop a bespoke licence
2. Modify an existing licence
3. Use an existing licence.

As the QA Focus framework encourages use of interoperable open standards an existing licence that matched requirements was considered the most effective route. There are several licences that encourage users to improve, manipulate, or build on existing work in any way (General Public Licence, Mozilla Public Licence, etc.). These place importance upon collective efforts to improve a digital resource rather than the more restrictive requirements of classical copyright. However many are primarily intended for software code and cannot be applied to information papers without modification.

After a review of available options the Creative Commons licence was chosen mainly because it is easy to understand by non-experts and widely recognised within the academic community.

CC version 2.0 offers six licences that allow unrestricted distribution but tailor specific use of the resource e.g. non-commercial, no-derivatives, etc. To satisfy the QA Focus requirements a CC licence was chosen that:

► Allows others to copy, distribute and modify briefing papers, on the provision that credit is given for the creation of the original documents (attribution)

► Is used for non-commercial purposes only (non-commercial)

► Specifies that derivatives must be classified under the same licence (sharealike).

Confirmation was obtained from host institutions to ensure they supported the policy decision and the recommended licence.

The choice of an existing solution significantly reduced the time required to develop and implement a licence. It was agreed that the licence would only apply to the briefing documents as the case studies contained project-specific information which would be inappropriate for others to modify. The decision also avoided the need to spend

time in obtaining permission from third parties to apply this licence to their materials.

The briefing papers were updated to include the CC logo and text. In addition the machine-readable description of the licence was embedded in RDF format on the HTML pages.

## Discussion

The assignment of CC licences to the QA Focus briefing papers was a relatively straightforward process, but there are a number of issues that need to be considered before committing to a CC licence.

*Legal status of CC*
One area for concern in the past has been that the legal status of CC licences in the UK has yet to be clarified, although consensus is very near indeed. The same applies to many other European countries. However if the licences have no legal standing this should make little difference to those wanting to share resources. Until the time each country's licences become legal they will at least provide an indication of intention. QA Focus felt that this slight uncertainty should not hinder the policy decisions or the implementation of the licences.

*Free availability and/or income generation*
Another area for consideration is the tension between allowing resources to be freely available and the need for income generation. Although use of a CC licence is principally about allowing resources to be used by all this does not mean that there has to be no commercial use. One option is dual licensing, which is fairly common in the open source world. A copyright holder can chose to have a business model, which involves licensing their work for free alongside a commercial licence. MySQL, TrollTech, Red Hat and Sleepy Cat are all software developers who have all successfully used a dual licensing approach. The commercial work can have some form of added value, such as extra editorial content. Distributing work under a CC licence is also a very good way of advertising your expertise, potential as a speaker etc. Many feel that their academic writing makes them more money through advice giving than it ever would through article sales.

*CC not always appropriate*
When choosing a CC licence or working on a policy for the use of such licences it is vital to take into account scope. The same CC licence may not be appropriate for all resources available and sometimes a CC licence may not be appropriate at all, for example when external people have also contributed to work; as was the case with the QA Focus case studies. When using work commissioned from external parties it is also important to clarify the rights issues prior to publishing.

*Expected impact of using CC licenses*
As mentioned earlier, using a Creative Commons licence, as a means of maximising impact across the community, was part of QA Focus's exit strategy. At present there is no formal proof that use of the licences has increased impact, although interest in QA Focus documents by both the community and funding bodies continues. At present an official announcement of the documents' CC licence status has yet to be made, mainly because the QA Focus team are waiting for CC to have legal status in the UK. Once wider dissemination takes place QA Focus will be monitoring closely use and modification of the documents through site statistics and close watch of the community. Using works that have CC licences attached will be easier in the future as more search engines allow searching of the machine-readable code embedded in pages. Search engines like Google and Yahoo now allow users to search for freely available material, but at present do not index UK CC space. In the future this could provide richer searching without any additional effort needed within institutions and if felt to be useful could provide motivation for dedicated searching tools within the community. Adding a CC license could have significant impact on shaping Internet user's behaviour as they may well search initially for resources which have liberal licence conditions.

## What can Creative Commons offer the European academic sector?

The use of CC licences for academic resources is an area of great potential. Many academic organisations have a vast amount

of material available for users. Making it clear to these users, through a comprehensible expression of rights, how these resources can be used is of great benefit. It will allow resources to have a consistently wide impact and will help minimise difficulties in repurposing in the future. In the UK JISC is increasingly encouraging reuse of learning resources and CC licences are a way to achieve this goal.

Recently many academic organisations have begun to use CC licences as part of their preservation strategy. Projects like the UK Web Archiving Consortium Pilot Project are investigating the long-term feasibility of archiving selected Web sites. Rights issues cause many problems and having them re-solved prior to the end of a project can really help uptake of resources.

In awareness of the potential of their licences for the academic sector Creative Commons have begun initiating a number of academic focused activities. Most notably in January 2005 they launched Science Commons, an exploratory project to apply the philosophy of Creative Commons in the realm of science. The mission of Science Commons is to encourage scientific innovation by making it easier for people to share scientific intellectual property.

## Bottom line

CC licences are about removing the barriers to sharing information. Surely this is what education is all about.

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**About the author:** *Marieke Guy* works for UKOLN, a centre of expertise in digital information management based at the University of Bath. She is currently a member of the Interoperability Focus team, publicising and mobilising the benefits and practice of effective interoperability across the library, information, education and cultural heritage communities. Interoperability Focus is a national activity, jointly funded by the Joint Information Systems Committee (JISC) of the Further and Higher Education Funding Councils and Museums, Libraries and Archives Council (MLA). She previously worked on the QA Focus project. Contact: by phone 01225 385105, e-mail: M.Guy@ukoln.ac.uk.

*Brian Kelly* also works for UKOLN and is UK Web Focus, responsible for providing advice on Web technologies to the UK higher and further education and cultural heritage communities. He was the project manager for the QA Focus project, which developed a quality assurance framework for digital library development work. Contact. by phone 01225 383943; e-mail: B.Kelly@ukoln.ac.uk

# The role of digital rights management in open access

By: Richard Poynder, Freelance Journalist, United Kingdom

**Abstract:** Growing conviction that scientific progress will significantly benefit if scholarly articles and research papers are made freely available on the Web has given rise to the Open Access (OA) movement. While there is some awareness that OA articles may require digital rights management (DRM), there is currently only low-level interest in the topic, with many OA advocates maintaining that it has no relevance to OA. The issue is complicated by the fact that there are currently two ways in which research papers are made OA, each of which has different implications from a rights point of view.

**Keywords:** policy analysis – copyright law, Creative Commons, DRMS design, Open Access, scholarly publishing, stakeholders

## Introduction

OA has gained a lot of traction over the last year, but it has also attracted considerable resistance from commercial and society publishers. Since they currently generate substantial incomes from selling subscriptions to their journals scholarly publishers fear that if research is made freely available on the Internet these revenues will be significantly threatened.

Given the consequent struggle simply to make Open Access happen many OA advocates argue that worrying about DRM today could prove a distraction from the more important task of "freeing the refereed literature."

Since many also view DRM as synonymous with the use of "technical measures" designed to restrict access, rather than as a broad set of tools for managing rights in a digital environment, there is a tendency to see DRM as an issue for proprietary interests alone. The danger is, however, that if the OA movement fails to engage with the topic those proprietary interests may set the DRM agenda, to the possible detriment of OA.

Nevertheless, some preliminary work on DRM is being done by the OA movement, and the growing success of the Creative Commons (cf. sources) may encourage OA advocates to take a greater interest in the topic.

## What is DRM?

Any discussion of DRM in the context of OA has first to seek to define the term. The con-
tinuing controversy surrounding P2P and illegal file swapping, for instance, has led many to conclude that DRM amounts to little more than "locking up" content with electronic padlocks. Indeed, since this perceived emphasis on restricting access is viewed as the very antithesis of OA, DRM has become the *béte noir* of many OA advocates.

What this overly narrow view of DRM overlooks, however, is that digital rights management implies something broader than access control alone. It can also be used, for instance, to ensure correct author attribution, to certify document integrity and provenance, to prevent plagiarism, and indeed to enable creators assert their rights in ways that encourage – rather than restrict – access.

It may be helpful in this regard to view DRM as a two-layered cake. In this model the first layer consists of metadata that define the usage rules (rights) associated with the content. Then on top of this can be placed an (optional) second layer of software-imposed limitations on copying, printing, viewing etc. (i.e. technical measures) in order to enforce the usage rules.

Some OA advocates argue that neither layer is relevant in an OA environment. After all, they say, the aim of OA is to make research papers available to everyone, without restriction. It may be that the use of technical measures – even for apparently harmless purposes such as ensuring document integrity – will prove "politically" unpalatable for the OA movement (although Frederick Friend's INDICARE article (Friend 2004) appears to

demur on this). There are, however, strong reasons for arguing that the use of rights metadata does have an important role to play, and will for this reason be the main focus of this article.

## What authors require

It is clear, for instance, that in making their research freely available on the Web researchers have no intention of giving away their IPR. Their only aim is to allow others to read and build on their work without facing the obstacle of the toll-barriers represented by increasingly expensive journal subscriptions.

In fact we know researchers want to maintain control over their work on the Web because they have told us so. In 2002, for instance, when the JISC-funded Rights MEtadata for Open archiving (RoMEO) Project (cf. sources) asked researchers for their views 55 percent of those surveyed (both OA and non-OA authors) said they wanted to limit usage of their works to certain purposes – e.g. educational or non-commercial.

And while over 60% were happy for third parties to display, print, save, excerpt from and give away their papers, they wanted this to be on condition that they were attributed as the authors and that all copies distributed were done so verbatim.

What RoMEO made clear, says *Steve Probets*, a lecturer in information science at UK-based Loughborough University who was involved in the RoMEO Project, is that "authors *are* interested in maintaining some form of control over who can do what with their articles."

As *Brian Simboli*, a science librarian at Lehigh University in Bethlehem, PA puts it: "The shift from toll-access to open access may (illogically) encourage people to assume that the whole concept "intellectual property" has or should undergo some sort of sea change. Intellectual property is still intellectual property, regardless of how it is accessed."

*Some rights reserved*
What the RoMEO survey also revealed, however, is that the "all rights reserved"

model of classical copyright is more than most researchers want. "[T]he protection offered [to] research papers by copyright law," the report concluded "is way in excess of that required by most academics."

In other words, when releasing their work on to the open seas of the Web OA authors are interested in asserting only some of the rights of traditional copyright (e.g. the right to be named as author), while waiving other rights (e.g. the right to copy or make derivative works). That is, their wish is to make their papers available on a "some rights reserved" basis.

But if researchers don't make clear to their readers on what basis a paper has been released, how will their readers know? They may mistakenly assume, for instance, that a paper has been made available without any restriction on its use and reuse, as if it had simply been placed in the public domain. Alternatively, they may feel constrained about using a paper in the more liberal way the author intends, for fear of legal reprisal

Consequently, if they dismiss DRM OA authors risk depriving themselves of a useful mechanism for specifying on what basis they are making their work "freely" available.

*Expression of rights*
For this reason, in 2002 Project RoMEO began developing an XML-based system designed to express rights and permissions in an OA environment. These issues are not unique to OA authors however. Motivated by the same desire to provide greater licensing flexibility for web-based content, for instance, in 2002 a number of intellectual property lawyers, including *Lawrence Lessig* (cf. sources) and *James Boyle* (cf. sources), founded Creative Commons (CC).

By separating out the basket of rights provided by classical copyright Creative Commons aims to give creators greater flexibility to mix and match those rights they wish to assert, and those they want to waive.

The applicability of Creative Commons to OA was immediately apparent to the Project RoMEO team, who incorporated CC licences into the work they were doing. Explains Probets: "[T]he feelings of the Romeo Pro-

ject were that the Creative Commons licences would be sufficient to specify the majority of restrictions/conditions required by authors (e.g. that authors are attributed, or that derivative works or commercial uses are allowed)."

Probets, however, questions whether inserting rights metadata into OA papers can be classified as DRM. "I'm not sure that I would regard these licences as a DRM solution", he says. "[They] indicate the ways the work can be used; they do not technically enforce that these conditions/restrictions are applied."

This, however, is surely too narrow a view of DRM. How better to describe the process of inserting machine-readable rights information into digital content in order to control how it is used than "digital rights management"?

Others argue that utilising rights metadata without any means of enforcing their prohibitions is pointless. By the same reasoning, however, we might conclude that it is a waste of time creating any rule, or law, unless it can be physically enforced at the point of potential infringement. We also know that anyone happy to infringe copyright law can circumvent most if not all the electronic padlocks devised to date.

## Two roads to OA: The case of the "Gold Road"

For researchers wanting to better manage the rights in their papers, however, there is a more immediate problem than enforcement – namely how they establish and define their rights in the first place. And since there are two ways in which researchers can make their papers OA a one-size-fits-all approach is not currently possible.

For researchers using the "Gold Road" to OA matters are relatively straightforward: they can simply publish in one of the new-style scholarly journals produced by OA publishers like BioMed Central (BMC) (cf. sources) and the Public Library of Science (PLoS) (cf. sources). By reversing the traditional subscription model and charging authors (or more likely their funders) a fee to publish, rather than charging readers to read, golden publishers are able to make research papers freely available on the Web without any access costs.

More importantly, by treating publishing as a service provided to the author, rather than as a property transaction in which the publisher acquires copyright in return for publishing a paper, both BMC and the PLoS are happy to use the Creative Commons Attribution Licence (cf. sources) as a default option. The terms of this licence are printed as a copyright notice on all their articles, as well as being inserted into them as machine-readable metadata.

Why that particular licence? Because, explains PLoS' *Andy Gass*, the CC Attribution Licence best meets the OA criteria outlined in the Bethesda (cf. sources) and Berlin OA declarations (cf. sources). These, he says, specify that in making their papers OA authors grant "to all users a free, irrevocable, worldwide, right of access to, and a license to copy, use, distribute, transmit and display the work publicly, and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship … [as well as] … the right to make small numbers of printed copies for their personal use."

But while the Gold Road is the most logical route for researchers wanting to make their papers OA there are today only 1,600 (out of a total of 24,000) golden scholarly journals in which to publish.

## Two roads to OA: The case of the "Green Road"

For this reason many researchers opt instead for the "Green Road". Rather than publishing with an OA publisher, they continue to publish in traditional subscription-based scholarly journals, but then "self-archive" an electronic copy of their papers, either on their home pages, or in an e-print archive such as their institutional repository or a centrally-based archive like PubMed Central (cf. sources) or arXiv (cf. sources).

However, the rights situation on the green road is complex, since traditional subscription-based journals generally insist that authors assign copyright as a condition of publication. As a consequence, researchers relin-

quish all control in how their IPR is managed. The RoMEO study, for instance, found that in 90 % of cases authors are asked to transfer the copyright in their papers. Moreover, while 92 % of scholarly journals now allow their authors to self-archive it is a far from ideal solution. As authors are not permitted to use the publisher's PDF, for instance, the self-archived version may be somewhat different from the publisher's version.

More problematically, the rights status of self-archived papers is vague and frequently misunderstood. Indeed, there are reasons to believe that general confusion and uncertainty over copyright represents one of the greatest obstacles to self-archiving today, and perhaps explains why still only 15 % of authors self-archive. "The fact is that copyright raises its head all the time when authors are asked about OA, and it is acting as a deterrent to self-archiving," says *Alma Swan* (Swan 2005), co-founder and director of UK-based scholarly publishing consultancy Key Perspectives (KPL). "So it can't be ignored".

The solution, suggests *John Ober*, director of the policy, planning and outreach office of scholarly communication at the California Digital Library (cf sources), is for publishers to "turn their publication copyright policies into the appropriate 'set' of Creative Commons elements"

This would clarify the situation over self-archiving, confirm its legitimacy, and so give self-archiving authors the same transparency over rights as is currently available to those publishing in golden journals. As a consequence OA would receive a significant boost.

*Reducing the value of self-archiving*
Far from helping to facilitate self-archiving, however, most subscription-based publishers today appear more intent on emasculating it. The fact is that as research funders like the National Institutes of Health (NIH) (cf. sources) and Wellcome Trust (cf. sources) increasingly encourage researchers they fund to self-archive their papers, publishers are becoming more and more concerned that their revenues are under serious threat. In response, they are actively seeking ways in which they can hobble self-archiving.

Having succeeded in persuading the NIH to water down its policy on public access to research (cf. NIH 2005), for instance, more and more publishers are insisting that papers are only self-archived on an embargoed basis, demanding delays of between 6 and twelve months between publication and self-archiving. This, say critics, significantly reduces the value of self-archiving, particularly in areas like biomedicine.

Publishers are also insisting that authors provide a link from the archived version to the official version of the article on the publisher's web site, and that they include the article's unique Digital Object Identifier (DOI) (cf. sources). The aim is to drive users away from the free version of the article that has been self-archived, to the for-fee version on the publisher's web site.

The next stage in this strategy may be for publishers to change direction and, instead of prohibiting authors to self-archive the publisher's PDF, to actively encourage it. This would give publishers an opportunity to reassert their ownership of the article, to reinforce their brand, and to charge authors in the process. But the real attraction is perhaps that the PDF file format is ideally suited to the use of second-layer DRM (technical measures) enabling publisher-determined usage rights to be incorporated into the articles.

The logic here is compelling. After all, as *Chris Barlas*, a senior consultant at Rightscom (cf sources) points out, to date scholarly publishers have seen little need for DRM. As he puts it: "[M]ost of the STM publishers currently use some kind of subscription system with password protected access to sites as their form of protection." As scholarly papers increasingly leak out of these proprietary databases, however, publishers will surely want to establish new ways to protect their proprietary interests.

Certainly Springer Science+Business Media (cf. sources), the second largest STM publisher, has begun to go down this road. While it permits authors to self-archive their own versions of papers, Springer now also invites them to self-archive the final published PDF. To do this, explains Springer's executive vice president corporate communications *Sabine*

*Schaub*, authors can purchase Springer's PDF file from DRM vendor Aries, to whom Springer has outsourced the function. Aries will then "download the article from Springer Link [Springer's online database], wrap it with a DRM system called DocuRights, and send it to the author for posting or distribution".

Once it is encased in DocuRights, explains Aries' *Lyndon Holmes*, the article becomes a "pay-per-view object" with usage rules determined by the publisher. "The publisher can, for instance, specify the number of computers a particular PDF can be opened on". Amongst other things, DocuRights also allows publishers to restrict the number of times a paper is printed and/or viewed.

The attraction to researchers is that using the publisher's PDF allows them to offer the final, definitive version of their article, in a clean professional format. Moreover, since today 78 % of authors who have never self-archived are unaware of how to go about it publishers are clearly in a powerful position to persuade them that archiving a PDF reprint is a better way of providing OA. However, while authors will still be able to provide Open Access (by themselves prepaying for usage) it is not the kind of solution envisaged by OA advocates.

*Take the initiative*
Confronted by continuous publisher foot dragging over OA some have concluded that, rather than accepting whatever terms publishers impose, it is time for authors to take the initiative over rights. To this end the Scholarly Publishing and Academic Resources Coalition (SPARC) (cf. sources) has produced a downloadable Author's Addendum (SPARC 2005) that researchers can print and attach to the publication agreement publishers ask them to sign on the acceptance of their articles.

The aim of the Addendum is to modify the publisher's agreement to make explicit the fact that the author is retaining sufficient rights to self-archive, and to also require that the publisher provides a free PDF version of the article – moreover, with no DRM functionality incorporated into it. More specifically, explains *Michael Carroll* a law professor at Villanova University who authored the Addendum, it ensures "that the author retains all rights necessary to grant a Creative Commons Non-Commercial-Attribution License". A second version of the Addendum that will allow the author to simultaneously reserve these rights and then grant the Creative Commons license is now in draft, explained Carroll in a recent post to the liblicence mailing list (Carroll 2005).

Will this prove acceptable to publishers? While agreeing that "the intent of the Addendum is entirely reasonable", *Peter Banks*, a publisher at the American Diabetes Association (ADA) responded to Carroll's post by cautioning that several clauses in the Addendum were unacceptable. "Were we presented with this Addendum, we would decline to publish the paper. I am quite sure a majority of publishers would do the same" (Banks 2005)

In reality it is highly unlikely that subscription-based scholarly publishers will allow authors to manage their own rights. Indeed, many have come to see copyright ownership as key to their survival. While they could adapt by converting to an OA publishing model, most publishers view this as far too risky financially, and certainly less profitable. Publishers' efforts, therefore, appear to be focused on reducing the impact of self-archiving. Embargoes are one way to do that. A more powerful long-term strategy would be to encourage authors to self-archive the publishers' version and arm it with second-layer DRM. As such, the self-archived article would potentially become a Trojan horse capable of transforming OA articles into "pay-per-view objects". Such doomsday scenarios are no doubt overblown. But they serve to remind us that ignoring rights issues could prove a risky strategy for the OA movement.

For the moment, however, most OA advocates appear happy to sit on their hands. It is, for instance, nearly two years since the funding for Project RoMEO ended. While its work was inherited by the Open Archives Initiative (OAI) rights group (cf. OAI 2004), to date most of that group's efforts have been devoted to developing rights expressions for

OA *records*, not for the underling *resources*! This means that even where OA publishers and self-archiving authors include rights metadata in their papers there is currently no OA infrastructure able to exploit those metadata to good effect.

Given the continuing scepticism over rights this is perhaps unsurprising. "It is harmless to make rights explicit in metadata, but that's not the priority", says leading OA activist *Stevan Harnad*. "The priority is the *content* (for which these metadata would be part of the decoration)". In other words, until the number of self-archived papers increases there is no point in fussing over rights. But as Swan points out, uncertainties over rights are a major deterrent to self-archiving today – suggesting the movement may face a chicken and egg stalemate.

Moreover, since the 1,600 gold journals can at most make just 5 % of scholarly research OA such a stalemate would represent a significant obstacle to the wider movement. Harnad insists, however, that all that is necessary today is for governments and other research funders to *mandate* self-archiving. After that, he says, all the other dominoes will "fall naturally (and anarchically) of their own accord".

But is that enough? After all, the NIH's decision not to mandate (but merely encourage) its researchers to self-archive appears to have been partly influenced by uncertainties over copyright. This suggests that until the copyright situation is clarified uncertainty over rights – and how they are managed – will remain a serious obstacle to OA. What better reason for OA advocates to seize the DRM nettle?

### Summary and outlook

One can view DRM in two ways: as a proprietary and totalising means of locking up content and forcing restrictive usage rules on users in order to maximise revenues; or as a set of tools to help creators maximise usage of their work (without ceding ownership) by specifying what rights they wish to retain and what rights they are happy to waive.

While some question whether the use of Creative Commons licences can be classified as "digital rights management" their heavy reliance on machine-readable metadata to control usage suggests it is entirely reasonable to use the term DRM. After all, why should proprietary interests bent only on locking down content have a monopoly on the term. Why should not this overly proprietary definition be challenged?

More importantly, perhaps, the OA movement faces the clear danger that if it does not more actively promote an alternative view of DRM, then proprietary interests may succeed in foisting a more restrictive model on scholarly publishing, with the risk that some of the OA movement's recent gains could be lost. With luck, the growing success of the Creative Commons – and the recent founding of the Science Commons – may help OA advocates see the relevance of DRM, and encourage them to promote a broader definition of rights management.

At the very least, by assisting researchers to utilise more liberal Creative Commons licences when publishing in traditional journals, OA advocates could introduce greater certainty about the legitimacy of self-archiving. Not only would this provide a boost to the movement, but it would help to demonstrate that digital rights management is not just about "monetising" content, but is part of a larger initiative focused on creating a rights management regime more suited to a networked environment.

"Personally, I think DRM is really important in the context of OA", says *Herbert Van de Sompel*, a member of the OAI rights group. "It can, indeed, be about protecting authenticity of works, and avoiding plagiarism … [and] … and even CC licences would cover this. But there is another increasingly important aspect. Readers of the future will more and more be robots that will try and make sense of what they 'read' (by mining content), and present their analysis to humans. It is important that such use be explicitly allowed; in the current environment, one really doesn't know whether it *is* OK to mine content from OA repositories".

## Bottom line

Until there is much greater clarity over rights, and how they are managed, the OA movement may struggle to make significant progress. Increasingly it appears that only by grappling with these complex issues can the movement hope to achieve its objectives.

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**About the author:** Richard Poynder is a freelance journalist who writes about information technology, telecommunications, and intellectual property. He contributes to a wide range of specialist, national and international publications, and is editor and co-author of two books: *Hidden Value* and *Caught in a Web, Intellectual Property in Cyberspace* (cf. sources).

# Fair use licensing in library context – A privacy-preserving lending service with a revenue sharing business model

By: Pasi Tyrväinen, University of Jyväskylä, Finland

**Abstract:** Any technical solution intended to support library exemptions and other fair use provisions has to take into account national regulation, the local use context, and the requirements of business models. In this article a model is proposed for dealing with these challenges. It is exemplified for the library context claiming that it is possible to support library exemptions and still maintain a high level of privacy with DRM systems. Finally new business models for libraries are sketched based on revenue sharing using superdistribution and delivery chain tracking.

**Keywords:** technical analysis – business models, copyright law, DRMS design, fair use, libraries, P2P, privacy, public sector, superdistribution

## Introduction

Consumers see digital rights management (DRM) systems primarily as a tool for piracy protection in digital content distribution. These DRM systems provide access to encrypted content only on the hardware identified in a digital license. This kind of *hardware locking* restricts fair use, e.g., when lending digital material from libraries or by preventing copying content for private use. There is common agreement on the need to design DRM systems and electronic commerce business models which allow fair use (ACM 2003). Various means have been proposed to implement fair use, e.g. by implementing it with licensing rules in DRM systems (Mulligan and Burstein 2002), by licensing protocols, by watermarking, by authorising protocols etc (see reviews of alternative designs in Bechtold 2004, and Tyrväinen 2005). However, the intelligence about contextual factors needed for interpreting the legal limits of fair use cannot be 100 % implemented in the licensing rules of DRM systems, especially in the US legal context (von Lohmann 2002).

*Fair use, identification and privacy*
In this paper we use the term *fair use* (or fair dealing) as a general concept referring to the legally protected right of people to use content based on exemptions and limitations of national copyright laws (EU2001/29/EC, US 2000). These variations in national legislation increase the complexity of implementing it within DRM systems. Nevertheless, approximating fair use by licensing would be a useful service for the customers. With such a service one could avoid the need for costly human evaluation of fairness of use in a vast number of cases and thus encourage content providers to support fair use cases – although a small percentage of the cases would still need human intervention. In both cases identification of the use context and of the persons or the organization in question is needed.

*Identification* is a double-sided problem with respect to fair use. Customers registering for a media provider's service with their account identity or credit card identity can be traced and media distributors can link together all customer purchases, which threatens customer *privacy*. DRM systems connecting the right to use content products to a hardware identity enable the use of this hardware identity for tracing even when customers purchase their products from multiple vendors. However, media vendors would certainly like to identify the context in which they enable free use of products based on fair use exemp-

tions. For example, they would like to identify the party claiming to be a library and requesting rights to lend copies to their customers. In case the library can be identified, the media provider may trust the library and let it identify the library customers, to the extent needed. Clearly, some fair use cases have higher requirements for identification of *trusted second parties* (such as the library) than what is expected from an individual (here the third party) borrowing content from the library.

*From product copy management to license management*

Prior to digitization, illegal content use could most easily be recognized at the point of creation of copies. This is mostly true also for digital products. But when DRM systems are used, the focus shifts from creating copies of protected content products to the creation of licenses enabling use of the content products. In superdistribution (Mori and Kawahara 1990) protected content is distributed freely, but requires purchasing a license for use. Thus creating the licenses enabling use of the content is the context where fair use should be evaluated.

The next question is, should the usage rights declared in the licenses be based on the *identity of the person* or on the *identity of the hardware*? Use of hardware identity is commonly considered less user-friendly. However, in the library customer case, linking all the content borrowed by a customer with the customer identity would be more likely to infringe privacy than linking the products with multiple hardware identities unknown to the library.

### Proposed approach for fair use licensing

*Supporting privacy with product copy managers*

To improve privacy we propose an arrangement, where the customer is able to get a temporal digital license from another trusted party in order to use the content on his hardware. For this purpose, the customer needs to pass some information received from the trusted library to the other trusted party. The primary role of the new trusted party is thus to create digital licenses for the customer hardware. Secondly, the trusted party should

keep record of the number of product copies lent by the library with the license of the library, to satisfy the requirements of media vendors. For this reason, we refer to this trusted party as a *product copy manager* (PCM). Although this particular PCM knows the hardware identities associated with the product, it will not be able to connect the data with any identification of the customers or to connect it with other data located at the various places of purchases (or other PCMs when multiple equipment is used).

By separating multiple places of purchases, multiple trusted PCMs and multiple hardware identities we avoid many problems encountered by related approaches. These include the single dongle problem (e.g. single hardware identity) and the problem of cumulating customer data by a trusted party as observed by Knopf (2005). Note that in the approach of Knopf there exists a role of a TTP (trusted third party), while we separate the roles of a trusted second party (a library) and the role of a trusted PCM. Knopf also uses watermarks for personalizing the content for consumers while we prefer carrying hardware identification information in licenses embedded in the content or transmitting separately from the content according to the superdistribution mode. Note also, that a PCM should not be mixed with the actual DRM systems controlling the use of content (for further details see Tyrväinen 2005).

*Two-phase approach for fair use licensing*

In the library case the library was the second trusted party, which was identified to the extent needed for the fair use license during the license acquisition process. The third party (a customer) communicated only with the trusted second party and the PCM binding the license to a specific hardware, in the context identified by the special library license granted to the second party. This can be generalized as a two-phase approach for fair use licensing.

► In the first phase, the second party (the library) is identified to the extent needed for trusting it; the special license is purchased (e.g. a library license), and the second party will receive a license template (e.g. a library customer template),

to be delivered to third parties. Special cases may require human judgement (for further details see Tyrväinen 2005 and Erickson 2003). Note that according to the EUCD fair use should be enabled only when content has been legally purchased.

► In the second phase, the third party (a library customer) trusted by the second party receives the template and acquires the hardware locked digital licenses for his equipment from the PCM. This second process does not include monetary transactions or negotiations and can be automated.
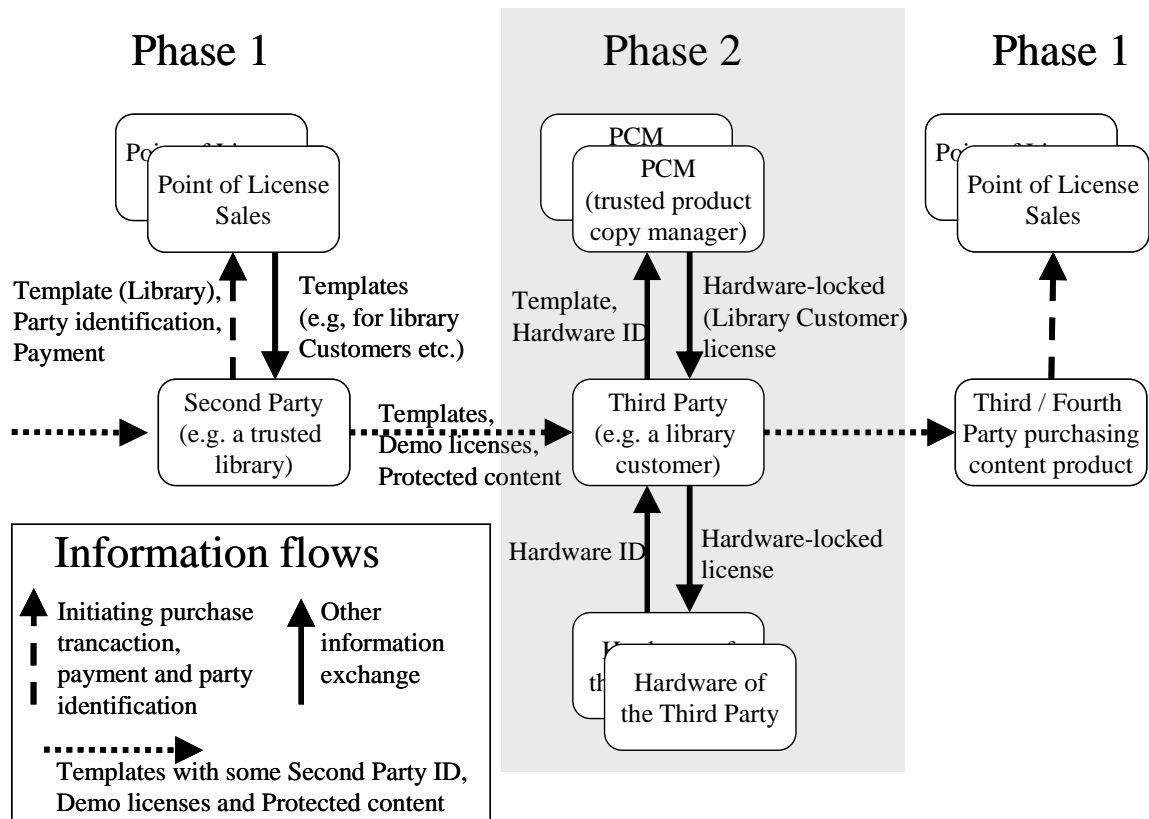


**Figure 1:** Two-phase model for fair use licensing

The fair use exemptions included in national law define the kinds of license templates needed; library licenses, educational licenses, and personal copy licenses being probably the most common. Each of the exemptions may require a different level of identification of the second party at the point of sales and in the templates as well as in between the second and the third party. Also the conditions of the licenses vary.

Fortunately, the same content can be used with a multiplicity of license types each defined for a specific fair use case in each national context, and the same license types can be applied to large categories of products (e.g., to all songs) simplifying the product management problems of media distributors.

However, fairness will have to be determined by human judgement in some percentage of the cases even when using this approach, depending on the national regulations. The following examples will demonstrate how the context of the process is captured.

*Product copy owner identity supporting privacy of personal copies*
In the case of personal copies the same person purchasing a content product in the role of a second party, can acquire hardware locked licenses for other equipment with *personal copy templates* from a PCM. In this case the media distributor trusts the person to use these personal copies for personal use only, within the legal limits of fair use. The PCM can limit the number of personal copies

per person for each product, for example, using *product copy owner identity* in the templates. Still the PCM is unable to identify the person behind the product copy owner identity and unable to connect the data with other products purchased by that person. However, in some cases the customer might like to be identified as the distributor of license templates using customer identity rather than the product copy owner identity known only to the point of sales selling the license to the second party.

*Customer rewarding in peer-to-peer marketing*

Consider a case, where a customer (the second party) has purchased a content product for private use and receives, among others things, a *promotion license* and a *distribution template*, which the customer delivers to a third party with the protected content. Using the promotion license the third party is permitted a limited use of the content on any hardware, e.g. to play the first 15 seconds of a song.

If the third party decides to purchase a personal license and uses the distribution template containing the identity of the second party, the distributor can reward the second party for the sales activity. This type of rewarding can be considered fair, but requires disclosing identity of the second party, to some extent (for further details on delivery chain tracking in peer-to-peer marketing, see Tyrväinen, Järvi and Luoma 2004).

There exists a trade-off between privacy and identification of the parties. The level of customer identification needed for customer rewarding in the peer-to-peer marketing model is not necessary for content products purchased for private use without intent to receive reward for sharing it with friends. Thus the level of tracking applied for the delivery chains needs to follow the requirements of each fair use case or business model.

## New business models for libraries and other public institutions

When libraries lend content to customers, whom they have identified (face to face), the proposed approach provides a high level of privacy for the customers, whose identity is not connected with the product data in any phase of the process, and whose one hardware identity is connected with the product copy identity of the library in one PCM. However, there are also situations, where the libraries and schools would like to disclose their identity to more than one point of license sales.

In libraries and in educational use we can envision cases, where a library customer or a student at school would like to purchase the content product after getting familiar with it. In these cases the library or the school would already have been identified properly, and would certainly be very happy to receive a share of the revenue, to prop up the restricted budget of a public administration entity. The impact of schools and libraries on the purchase of content products is well known, and being able to quantify the impact would contribute to the creation of business models. This closer interaction of public institutions and media vendors can be seen either as an opportunity for the institutions or as a threat to the independence of public services.

One possible future scenario includes increased revenue from media vendors to the libraries and schools. In this scenario the libraries and schools would still purchase the content products from media vendors with prices similar to those under current discount policies. In case some of the customers or students would like to purchase the product after using it with the special license, the second party identity would be used to direct sales provision to the library or school in question. This would probably guide the purchases of libraries to follow closely their customer demand, towards the content with most marketing effort.

Another scenario includes outsourcing of content product lending to external service providers. In this scenario the technical effort and market follow-up is outsourced while the control over selection provided is kept in the hands of the library or the school, with reasonable costs.

In a third scenario the service providers would not need public funding. It would suffice to get their income solely from the

media companies in the form of sales revenue sharing. This scenario is somewhat similar to the use of promotional versions or pre-releases for product marketing used commonly in the software sector of content business. It is likely, that in this last scenario public libraries would be needed to maintain a balanced offering of content products for the public.

## Bottom line

It is possible to support library exemptions while maintaining a high level of privacy and enabling use of personal copies with DRM systems. This includes an opportunity to gain shared revenue when lending is combined with content superdistribution and delivery chain tracking.

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**About the author:** Dr. Pasi Tyrväinen is Professor of Digital Media at the Department of Computer Science and Information Systems at the University of Jyväskylä. He received his doctoral decree at Helsinki University of Technology in 1994. His previous affiliations include R&D management positions at Honeywell Industrial Control and Nokia Research Center. His research interests include digital rights management, enterprise content management, communication genres, and software business. Contact: http://www.jyu.fi/~pttyrvai/ or Pasi.Tyrvainen@cc.jyu.fi

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# The role of digital rights management in library lending

By: Karen Coyle, Digital Library Consultant, Berkeley, CA, USA

**Abstract:** Libraries purchase and lend a wide variety of materials, from the most common of trade items to small press publications and even ephemeral resources. They also serve heterogeneous communities with a wide range of interests, skills and resources. As cultural materials become available in new technologies libraries endeavour to make these available to their target communities. From the very earliest digital products, libraries have worked to present these to their users. Libraries are now lending electronic books and audio books using technology that is very similar to that used for the sale of these same formats. But both libraries and publishers need a paradigm shift before digital materials achieve the revolution over the Gutenberg legacy.

**Keywords:** policy analysis – business models, electronic books, e-payments, lending, libraries, preservation – USA

## Introduction

As new technologies come into being, the world's cultural objects change shape accordingly; from the clay tablet to papyrus, from the printed book to web-based documents, each takes the form of the technology of its era. Over thousands of years libraries have collected, organized, and made works available (to all, or to a select few) in these formats, and library services have developed to take advantage of the new technologies. In particular, the portability of the printed book in 18th century and beyond meant that libraries could lend works to users, and the mass production of printed texts in the 19th and 20th centuries saw a great proliferation of libraries and the extension of library use and lending to the general population.

The inexpensive reproduction of works has allowed libraries to move their energies from the conservation of objects to the dissemination of highly mobile containers. While the term "library lending" evokes an image of books for most of us, some public libraries in the United States count non-book materials such as music discs, films, and spoken books, as a full thirty percent of the materials they lend. Library lending, however, is both costly and insecure, with both wear and non-returns taking their tolls. Wouldn't it be great to be able to lend materials that could not be damaged or stolen, and that would be guaranteed to return at the appointed time? This, then, is the promise of digital lending.

## Libraries and digital delivery

Libraries have been delivering works in digital formats for over a decade. The delivery of digital works to library users follows two basic models: there is the "all you can eat" model in which users have access to a database of digital materials with no restrictions on how many users can access an item at a time (although licenses may restrict total simultaneous uses to the database from any institution); the other model is an imitation of the lending of hard copy works, and is often called the "one user/one book" model. Within these two models there are different possible delivery options, with some systems presenting portions of materials on the screen but not allowing downloads or offline use, while others do allow downloading of digital items. It is in this latter case where technical enforcement of license terms comes into play, and this is the type of protection that is most often referred to as digital rights management.

The "all you can eat model" is primarily used for research materials, especially journal articles. With the development of large databases of digital full text, academic library users are well-served with instant access to a significant collection of materials. Access to these journal articles is through an institutional subscription, not unlike the subscription to the same materials in paper format. The only technical controls for these materials are on access, which is generally managed through a proxy server on the institution's network, and which limits access to

members of that institution's community. Users can download and keep copies of articles, somewhat like making a photocopy of articles in the analogue world. The downloaded articles, which are predominantly in Adobe PDF format, have no technical protection that would further restrict copying or printing, although they may be protected against alteration. This model works well for academic materials and will probably continue to do so, although there is some tension between publishers and libraries over costs and over the relationship between the digital license and the hard-copy subscription.

This model is not viable for those materials where units are normally sold individually, especially those materials that might be deemed of a "popular" nature. Books, videos, and musical recordings are in this category. These materials need to use the "one user/one book" model, and require some technical protection on the content files to satisfy publishers that the materials will not be pirated once they have been delivered to end users. In the entertainment arena we have seen the struggle between users and publishers over the unauthorized trading of works in digital form. Books and other lengthy texts have not had the same degree of problems with piracy (for both technical and market reasons), but book publishers have been cautious about delivering their products in a digital form that would open the door to piracy.

The first electronic book products were available only on proprietary hardware, such as the Gemstar (later Rocket) e-book reader. The device protected against unauthorized copying by allowing communication only with the e-book vendor site through phone lines or an Ethernet connection. Some libraries experimented with lending these e-book devices pre-loaded with a selection of books, but the devices did not catch on commercially and the e-books themselves eventually became unavailable.

The first computer-based e-book lending systems that were developed for libraries in the late 1990's, in particular the netLibrary system (cf. sources), required users to read the books online with only one page image downloaded to their computer at a time. This method was used because there was no available technical protection for downloaded files. The books were "checked out" to the library patron and could not be viewed by another library user until the lending period ended. The check out process effectively locked the book so that it could not be accessed until the current loan period ended. Although called "lending," from the user's view this was not at all like using printed books, especially in terms of the quality of the reading experience.

## Library lending becomes reality

Although there hasn't been a breakthrough technology that would make electronic reading as popular as its paper counterpart, the availability of software that both facilitates the reading experience and secures the digital content has greatly increased both the willingness of publishers to make their content available and the desire of consumers to purchase that content. Digital content can now by downloaded by consumers to a variety of devices, and can be read off-line.

Libraries have been able to take advantage of the fact that the lending of digital content is compatible with the sale of that same content. In fact, OverDrive (cf. sources), the company whose software is used in book-related e-commerce, is also a major provider of electronic content systems for libraries. In a sense, library lending is the same as a sale, only with a time limit imposed. At the end of that time limit, the rights management software in the downloaded file turns off file access an thus prevents further uses of the content. The book "returns" to the library automatically with no action required on the part of the borrower.

The first lending systems had only one way for the book to return to the virtual shelf, and that was through the expiration date on the loan. This required no communication between the downloaded file and the lending system; each acted independently on the time limit. Even if a user no longer needed the item, it remained checked out and unavailable to others for the duration of the loan period, and because of this libraries were setting very short loan periods, which was

discouraging to some users. With current lending technology, users can return a book to the library at any time before the return date. Through an interaction between the checkout system and the rights technology protecting the item on the user's device. This is just one example of how developments in digital rights management (DRM) have made it possible for libraries to provide better service to their users.

Libraries purchase electronic books just like they do their print counterparts through companies that serve the library market. The information about the books is entered into the library catalogue, but instead of a number indicating where the book can be found on the shelf there is a link that takes the user to the virtual shelf of the e-book lending system. All interactions with the e-books go through the library's system, which has user information and authentication routines, and which must record the status of an item ("on shelf," "checked out") for display to library staff and users. Although the user's impression is that the e-book is in the library, in fact the books are stored on a third-party site that delivers the DRM-enabled file to the user's device. At this point in time, the economics of DRM technology do not allow libraries to securely store and deliver electronic files.

Points of purchase for e-books offer consumers a choice of formats corresponding to various brands of reading software and the particular DRM of that brand. Libraries have to select a format when they purchase an e-book. If they wish to have more than one format available they have to purchase each separately, and generally at full price. For this reason, libraries tend to limit their selection to the most widely available software, which today is the Adobe Acrobat format. The Adobe Reader software is available for free for most operating systems, including those of the common hand-held devices which are popular with e-book enthusiasts.

### Lending beyond text
Because lending uses technology that is very similar to the technology for sales, in essence any digital formats that can be sold can also be loaned by libraries once the additional lending capabilities are in place. A small number of libraries are beginning to lend audio books. Books "on tape" are very popular items in libraries that lend them, especially in areas where automobile commuting is common. Library lending follows the same model of services as provided by sales points for these files: end users can download the audio book to a personal computer or to a mobile device, or they can burn the audio book onto CDs. All of these actions are secured by the lending system to prevent unauthorized copying of the files to other devices. Although the CD format is unprotected, only uncompressed files are released for these copies. This is the same format that is used in the CD audio books that are sold in stores, and therefore represents a level of risk that publishers have found acceptable.

Lending of musical works and of motion pictures could become technically possible but are not currently available. Some of the issues relate to industry expectations, and others to technology capabilities such as bandwidth. It may also be the case that rights management techniques that are sufficient to protect one form of content will not be suitable for all forms of content. As we see with the relatively low level of protection on academic journals, risks vary both by format and by commercial expectations for different materials. It does appear, though, that the level of rights management that is appropriate for the sale of content is also that which protects the content for library lending.

### Libraries: what do they really want?
Lending of e-books and digital audio books by libraries is still very new, and libraries are in the learning stages in terms of what works and what doesn't. From the point of view of libraries, there are some unsolved issues relating to the acquisition and lending of digital materials. These are:

► Book publishers have a revenue model based on the hard copy world of sales of physical items, but the technology of digital lending does not allow the libraries to actually take possession of the digital item. Libraries must purchase items over which they cannot exercise normal rights of ownership.

► The storage, delivery, and control of digital materials require sophisticated secure systems. These systems are not affordable to individual libraries, but are usually run as a central service by a vendor. Libraries are dependent on the vendors both for current services and for long term access to materials they own. Should companies fail, and some have, libraries lose access to books they have purchased.

► There is no one standard format for digital delivery, yet each formatted version of an item requires a separate purchase. At the same time, libraries cannot forego obtaining materials in analogue formats, so increasingly libraries are needing to purchase multiple copies of an item to satisfy the format needs of their clientele.

► Library services attempt to provide a unified view of the cultural and intellectual sphere, with items from many different publishers and sources treated equally in terms of organization and access. There are many different sources for digital materials, often with their own proprietary technology for access. This may serve the marketing of materials, but it is not conducive to end-user research or bibliographic services.

► The proprietary formats in which digital materials are issued are not suitable for long-term preservation and access.

Most of these points evidence the difficulties of a transition period in terms of content technology, where the capabilities of the new technology and the market structures in place based on earlier technology are not compatible. The use of individual copies as the basis for the market breaks down in an environment where copies are made each time a user opens a work. One of the promises of digital rights management is that it could re-focus content delivery around rights rather than copies, which could make it possible to solve some of the problems listed above. For example, libraries could be allowed to trans-

form materials to different end-user formats as long as the total number of items in use does not exceed the library's license. The problem of the need for persistent access over time could also be solved by allowing libraries to store a specially formatted archival copy that is not delivered to end users, while at the same time they lend protected copies in consumer formats. All of these capabilities require DRM that guarantees that the digital files will be secure and that publishers will receive payment as agreed.

What this will eventually mean is a move from a market based on copies to a market based on rights. The technology that this will require is not yet in existence, but the required changes are not just technological; huge leaps must be made in the intellectual property markets and in the habits of librarians and those they serve. Some desired features, such as the ability to lend multiple copies when user demand increases for a particular title, are well within the capabilities of the current lending technology but do not meet the accounting needs of publishers, whose system of royalty payments makes the use of micro payments particularly complex. Improvements in the e-commerce middle layer will allow us to experiment with new models of secure file delivery.

### Bottom line
Many library professionals view digital rights management as a restriction on use, and it is true that the capability to create restrictive technologies exists. But for libraries to manage and lend published materials in digital formats will necessarily require some controls. If libraries can learn to view digital formats as delivery mechanisms rather than as a substitute for physical copies we may be able to develop a suitable paradigm that is beneficial to libraries and to their users. And if publishers can transition to a revenue model that is based on licenses rather than copies, we will be able to make use of the advantages that digital formats have over their analogue equivalents.

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# Preservation versus exploitation – Dilemmas in the reissue of historical recordings

By: Michael Rader, ITAS, Karlsruhe, Germany

**Abstract**: While the market for the reissue of historical recordings seems sufficiently attractive for there to be multiple reissues of the same recordings, there is the additional aspect of the preservation of the audio heritage. This is largely being undertaken by private actors who invest substantial time and money in audio restoration and research. A recent court decision acknowledges that such work is protected as intellectual property. Even so, different interests in this field are a barrier to enforcement of rights so that digital watermarks might prove the most acceptable solution.

**Keywords:** legal analysis, economic analysis – IPR, piracy, preservation, public domain, users, watermarks

## Introduction

The reissue of historical recordings has in general been very much a niche market catering for collectors rather than the more general customer. In Europe and most other regions with the exception of the US, recordings older than 50 years enter the public domain. In view of the restricted market, it might surprise bystanders to discover that there are multiple reissues of recordings considered more readily marketable, e.g. in the classical domain the works of early 20$^{th}$ century tenor Enrico Caruso, in the jazz area recordings by such household names as Louis Armstrong, Benny Goodman, Glenn Miller or Django Reinhardt. Competition will probably increase when recordings by Elvis Presley and the wealth of recordings from the 50s and 60s which are still heard on the radio, gradually enter the public domain in Europe.

For more casual buyers, competition is via prices, but there is in addition the aspect of sound quality which also plays a role in the preservation of the heritage of sound recordings. This preservation work is being done almost exclusively on private initiative. Sound restoration work is protected by intellectual property rights as "minimally creative work". This has been acknowledged in a recent court decision. What follows obviously also applies to films which have been restored for reissue on DVDs.

## The issue

While the average consumer might want to buy historical recordings to play as a novelty at parties, because a certain type of music is currently fashionable, like swing a couple of years back, or because curiosity has been piqued by such films as "The Aviator", there have always been collectors of vintage recordings.

There have always been concerns about the durability of early recordings which were made of breakable material in the first place so that it is surprising that so many have survived until the present. There are sometimes only single known copies of recordings. In addition, there are recordings in circulation which were never widely issued or intended for issue, such as test pressings, private re-

cordings, recordings made for publicity purposes, all of which are of interest to some collectors or historians. Preservation is of particular interest for so-called vernacular music, meaning music outside the well-documented elite cultures. Examples are performances of jazz and blues, tango and other ethnic music, which would largely be lost without recordings. There is also interest in performances by legendary performers in the classical realm, such as the previously mentioned Caruso.

While there are collectors who jealously guard their treasures and allow no-one else to hear them, the domain is characterised largely by willingness to share and preserve for posterity. Some actors in this field state that they do not own the records, but are simply their custodians during lifetime with the duty to hand them down to future generations.

Since the major companies have little interest in the field due to limited return on investment, this is an area where small independent companies are very active. In the past, there was a very thin line separating reissue activities from piracy and one early company actually called itself "Jolly Roger" after the pirate flag with the skull and crossbones. However, gradually many recordings considered worthy of reissue have entered the public domain, at least outside the US and are thus legal. Even so, it is strictly speaking illegal to sell certain European reissues in the US. There is reluctance to take legal action against competitors due to prevailing ethos and also due to the costs of taking lawyers. Many companies are run by producers with day jobs outside the music business and these prefer to invest any money they make out of reissues on new productions rather than in legal action.

Reissue policies vary a great deal. Some obviously only want to take the money and run. They do not care about such things as audio quality or presentation and will use virtually any source. Even in the days of long-playing records, it was common practice to simply copy individual tracks or entire albums from other LPs. Other labels have ambitious programs wishing to reissue every-

thing irrespective of sound quality and source (original recording, LP or cassette). Still others regard themselves as preservationists and take great pride in quality and presentation, sometimes going to great lengths to track down rare items and doing, or commissioning, impressive research work to unearth information about rather obscure artists by today's standards.

Audio restoration and production of accompanying material result in substantial costs. To some extent, the values in this field have changed. Instead of on "noise suppression", there is a premium on preserving the sounds originally contained in the grooves. This means that there is still demand for "new" restoration work. Although digital equipment for audio restoration is readily available, its use requires considerable skill. The best audio engineers in these fields have reputations among collectors and their name on a product is regarded as a hallmark of quality, just as certain labels have good reputations.

Probably as much for financial reasons as for any other, reissues of historical material have generally not been protected against copying in any way, so that it is easy to infringe on any intellectual property rights which might exist in the field.

### The "Bear Family" court decision – acknowledgement of IPR protection for restoration work

Readers of the "Indicare" Newsletter will no doubt remember the "Jib Jab" incident in the recent US presidential election (cf. Böhle 2004). In this, the current copyright owners of Woody Guthrie's "This Land is Your Land" took action against the owners of the JibJab website for unauthorised use of the work in a parody on the US election. One of the ironies of the case was that the melody of the Guthrie song was itself not an original composition but the reuse of a song of undetermined origin which had been copyrighted by A.P. Carter of the Carter Family recording artists in the early 1930s. Many references were made in the discussion of JibJab to currently available recordings by the Carter Family, most frequently to a box set produced by a company called JSP located in London.

Precisely this box set and second box of recordings by the Carter Family were the subject of a court ruling by the Hamburg district court (Landgericht Hamburg, 3 February 2004, cf. Byworth 2004). This was the result of action taken by the German specialist label, Bear Family, against the unauthorised use, by the London-based company, of recordings originating from a 12 CD box set "In the Shadow of Clinch Mountain", which contains the complete works by the Carter Family with audio restoration work commissioned and paid for by Bear Family. Such work is protected as intellectual property even if the recordings themselves have passed into the public domain and can theoretically be reissued by anyone. Such intellectual property rights on restoration work are indicated by the (p) sign, which can also apply to a compilation.

The court decision was taken in the absence of the defendant, the owner of JSP, who had previously been ordered to refrain from the manufacturing of the box sets containing copied recordings. The conviction was for improper business practices and the court instructed the British company to provide Bear Family with all information relating to production and sales of the box sets and to provide compensation for damages resulting from production and sales.

The decision was based on testimony by an expert witness, but the decisive factor was the inclusion in both sets of a unique recording which had been tracked down by Bear Family.

While both companies' countries are members of the European Union, the Hamburg court decision had to be registered at a British court to take effect, which again required the services of a lawyer, another cost which most producers would not be willing to take on even temporarily. Even so, the court decision, which Bear Family's lawyer, Ulrich Poser, describes as "path breaking for the branch" (cf. Anon 2004) has actually resulted in the payment of substantial damages and has encouraged at least two more producers to take action against another German company which is notorious for its piracy practices.

A collector, who also writes for a web-based publication on film music (Schlegel 2004), describes how this German company pirated copies of film soundtracks. Among other things, he attempted to invoke assistance by the German collecting society, GEMA, which was initially very reluctant to take any action. When it finally did, it emerged that a license for intellectual property on the soundtracks had been registered in the Czech Republic, preventing action from any lawful owners.

As readers who have come this far will have guessed, piracy of audio restoration work is far from exceptional. Bear Family has thus taken the consequence of adding a water mark to its own productions. According to Bear Family director Hermann Knuelle, such watermarks are tamper resistant, while allowing "legal" copying, for example for use on devices such as MP3 players belonging to the owner of a copy of the recording. The watermark remains perceptible even after extreme compression, independent of recording technology for copying (microphones, radio, connecting CDs to sound cards) and presumably following further audio processing by any third party. It can be "individualised" to the extent that a copy is traceable to a particular copy of a series. Of course it is inaudible (for details you may see: http://www.ipsi.fraunhofer.de/merit/media_security/).

### Actor interests

Only a small fraction of all sound recordings ever made has actually been reissued. A private initiative, "Project Gramophone", which aims at making every recording ever made publicly available via the internet, has encountered unexpected problems due to a "cobweb of laws" in the United States (Noring 2003). The ultimate impact of this situation is that most recordings from before 1972, when a Federal law on intellectual property took effect, are effectively locked away until February 15, 2067. As a result, the project is considering relocation to Canada where other laws prevail, but the entire initiative is still private. Public organisations, such as museums, usually lack the resources

to engage in large-scale audio (or video) restoration and preservation work.

As a result, the bulk of restoration work is being done by small private companies not usually run to earn a livelihood but to invest in further "preservation work". Satisfaction for producers is largely in non-material terms, such as acknowledgement by their fellows and interactions with like-minded people. Understandably, they are not amused when others simply re-use work they have paid for without as much as acknowledgement: in the case of the Carter Family, JSP actually advertised their set as far cheaper than the more expensive Bear Family box (personal communication by Hermann Knuelle, 8 March 2005).

To be fair, the British company originally earned a reputation in its field for high quality reissues using restoration work by well-known engineers that it had paid for and was certainly pirated itself. It is only recently, that it has started ripping off others' work for issue in "value for money" boxes. Its current business model (cf. Levine 2003) probably would not function if the label had to pay for all of its restoration work. Worse still from the viewpoint of preservation, there are other labels which do not invest any money at all on original work but regularly get good reviews in periodicals and on the internet as "value for money".

Collecting societies and enforcement agencies for intellectual property rights are not interested sufficiently to take action of their own accord, presumably because there is no pressure from the major record companies. Newspapers and periodicals also see no need to concern themselves with the topic even if they are not dependent on advertising revenue from the pirates, which sometimes is the case.

Most dealers are unaware of any problems in this field and quite readily sell pirated material along with legitimate productions. Amazon, for example, shifts responsibility for infringements on intellectual property rights to its suppliers.

Consumers are obviously faced with a dilemma – the wish to buy first-class music at a low price versus the danger that supplies will dry up when producers refrain from new work for fear of being pirated or because they no longer recoup their investments. Again, the first problem is that most consumers are blissfully unaware of anything evil afoot in this field. When confronted with the facts, reactions differ from "stealing is stealing and no two ways about it", to "I'm on a restricted budget and would dearly like to buy xx if I could afford it. If I can get it at a better price on yy, why not and to hell with morals".

Producers doing restoration work would probably tolerate re-use of the work they own if they were to benefit from it, e.g.

► Through receiving credits for the work if only individual tracks are used. This might attract new customers to their productions;

► License money for re-use in other products. Again, an important condition would be acknowledgement of credit for original work.

In this way it would be possible for the specialist companies to continue their preservation work. In view of existing experience, this would not be possible without protective measures such as digital watermarks.

### Bottom Line

In view of the conflicts between actor interests, a non-intrusive watermark might be the ideal solution as it does not infringe on consumer rights and enables the detection of "pirated" work produced at a grander scale, be it in the shape of physical products such as CDs or DVDs, be it in the shape of files distributed over networks. Decisions on prosecution would then be at the discretion of the victim if he wishes to prosecute genuine file sharing among friends or only practices aimed at commercial gain.

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**About the author:** Michael Rader studied sociology, psychology, political science and economics. He joined ITAS' forerunner AFAS in 1979 and has since worked mainly on the impacts of information and communication technologies. He has led several ITAS projects and is currently involved as workpackage leader in FISTERA (Foresight on Information Society Technologies in the European Research Area). In INDICARE, he mainly plays the role of an unobtrusive copy-editor. He has accumulated his own record collection over almost 40 years. This includes items from the beginning of the 20th century up to the present. Information on more recent DRM developments stems mainly from observation of CDs bought by his daughter.

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# DRM and developing countries
## Comments on the INDICARE state of the art report

By: Manon Ress, Consumer Project on Technology (CPTech), Washington DC, United States

**Abstract:** CPTech endorses the findings of the State of the Art Report. It, however, criticizes that the report focuses on Europe only, and points out that DRM is a global issue that should receive more consideration in international fora, such as WIPO.

**Keywords:** review, INDICARE, competition, copyright law, developing countries, fair use, privacy, transparency

### The Consumer Project on Technology

The Consumer Project on Technology (CPTech) is one of the organisations that deal with DRM issues globally. CPTech, a Washington-based non-profit organisation, focuses among others on issues such as intellectual property rights, electronic commerce and competition policy. CPTech operates globally. Accredited at WIPO, the Consumer Project on Technology is actively involved in IP legislatory processes at the international level, including the negotiations about the WIPO Broadcaster Treaty and the establishment of a Development Agenda for WIPO.

CPTech is also a driving force behind the Transatlantic Consumer Dialogue (TACD).

### CPTech's comments on the INDICARE State of the Art Report (SOAR)

Consumer concerns in Europe have been adequately highlighted in the SOAR and CPTech supports the conclusion of Chapter 3 on consumer comcerns (cf. Helberger et al. 2004, pp. 19-43). The INDICARE report demonstrates that interests and concerns of consumers are insufficiently considered in the context of DRM-protected digital content. We would like to see, however, more

considerations for consumer concerns internationally and more specifically for the weakest consumers such as consumers in developing countries. Also, an overview of international aspects of DRM and the potential impact of DRMs technologies on developing countries would be useful.

The following paragraphs will pinpoint some pressing issues in this context, paying particular attention to the matter of DRM and developing countries, but also jurisdiction issues and the role of governments and international organisations.

### CPTech's opinion on pressing issues

*DRM – an international discussion*

DRM is being discussed in various international fora from industry led "dialogues" to intergovernmental bodies. Examples are WIPO, but also the American National Standards Institute (ANSI) the International Telecommunications Union, ITU-R Working Party 6M. Some organisations active in this field are, apart from CPTech, the Electronic Frontier Foundation (www.eff.org), the Union for the Public Domain (www.public-domain.org), the Open Knowledge Forum (www. okfn.org), IP Justice (www. ipjustice. org), Alternative Law Forum (Bangalore) (www.altlawforum.org) and the Canadian Internet Policy & Public Interest Clinic. European and US-based consumer groups such as the members of the TransAtlantic Consumer Dialogue (TACD.org) are also discussing DRMs and putting forward their concerns.

*DRM – uncertainties and concerns of consumers at the international level*

Consumers have expectations about how they are able to access and use content whether the content is local or global. Consumer expectations are based on practices, on how they acquire content with or without authorization (such as what has been possible so far on the Internet). Consumers sometimes feel entitled to make personal copies but often concede that some form of payment must be made. While these expectations are often shaped by the legal framework in which consumers reside, increasingly DRM technologies are limiting or excluding consumers' rights where there is no legal re-

quirement to do so. Technologies that restrict access and use are not welcomed by consumers locally and internationally. Since many internet transactions of information goods are cross-border, it is necessary to 1) clarify existing rules and 2) examine their impact on the dissemination of information goods and innovation.

Public domain materials are a good example of documents that for most consumers are available without requiring any authorization (at least in some jurisdictions like the US). Consumers/users are not certain about the legal status of DRMs that might be used to deliver public domain materials. In some jurisdictions, it is lawful to circumvent DRMs that lock content not subject to copyright and since there are no uniform positions by rights holders or DRM providers on this issue, it creates uncertainty for consumers.

Another example is the issue of exceptions and limitations to anti-circumvention provisions: there is no harmonization among the exceptions or limitations. Consumers in different countries have different legal abilities to access and use content. Therefore a large class of users (consumers, educators, librarians, visually impaired people etc) have to accept "uncertainty" and in some cases confusing and contradictory rules to accommodate the requirements of right holders or DRM providers. If DRMs are applied indiscriminately at the international level or in a future broadcasting treaty, consumers will not only lose some of the current freedoms of access and use of content they currently enjoy, but will also experience further restrictions on the scope of limitations and exceptions. Furthermore, in the case of abuse of DRM technologies, consumers do not have access to international legal mechanisms for recourse.

The use of DRMs also raises privacy issues that seem difficult to solve at the national level. The technologies that facilitate the gathering of consumers' personal information by rights holders and DRM providers are difficult to monitor outside of one's own jurisdiction. In some jurisdictions but not others, consumers are permitted to circum-

vent technologies to prevent collection or dissemination of personal data.

*DRM and developing countries*

Regarding specific threats to developing country consumers, the Canadian Internet Policy and Public Interest Clinic (CIPPIC) paper on TPMs and developing countries says it best: "It is no secret that DRM and anti-circumvention laws have proved dangerous to the developed world. These harms are well-documented in Canada, the United States and elsewhere" (CIPPIC 2005). DRM is dangerous to developing nations for these same reasons.

However, there are also reasons why DRM is even more dangerous to developing nations. By releasing content using DRM, foreign rights-holders may attempt to trump local copyright law and exceptions through unfair contract terms. In other words, because DRM permits consumers to access and play content pursuant to automatically-enforced license terms, contract law governs the relationship, not copyright law. Foreign rights-holders thereby bypass developing nations' copyright laws. By locking-up content in DRM, foreign rights-holders will prevent people in developing nations from accessing and using copyright works in ways that those nations' laws may allow, even for free. DRM may also prevent legal re-sale of copyright protected goods, particularly through the use of region-coding which has never proved positive for developing regions.

Further, to the extent that, like Canada and unlike the United States, developing nations are net importers of cultural products protected by copyright, DRM and anti-circumvention laws will aggravate the cultural deficit that may already exist in those countries. DRM and stronger copyright laws will have a net negative cultural and economic impact in developing nations because royalty payments to foreign rights-holders, particularly those in the United States, may increase as a result.

Finally, DRM and anti-circumvention laws could have a significant negative effect on the innovation agendas of developing nations. Developing nations depend on a technological and legal environment that fosters innovation. The American experience with DRM has shown that copyright owners inappropriately use DRM technology and anti-circumvention laws to stifle competition and create artificial monopolies. These inappropriate uses of technology and law favor bigger, established market players and artificially increase the market risk faced by smaller companies and new entrants to the markets.

*Jurisdiction issues cross-border*

DRMs are used to protect and deliver content on a cross-border basis. There are many legal questions that have not been answered and that need to be answered before DRMs become the international norm for protecting content.

For example: which jurisdiction and what law applies to the protection of the DRM and the content in the context of a cross-border dispute? Which country's anti-circumvention law applies to the protection or the circumvention of the DRM? The country of origin or destination? Which law applies to the use of the content protected by the DRM? Which national law would apply to the agreement regarding the delivery of the content via the DRM?

The country's law and jurisdiction may apply for acts of circumvention and for distribution (but personal jurisdiction is difficult to get if it's a foreign distributor). For online access and use, international principles are still evolving (see the Hague Project).

The question of jurisdiction is also raised in contracts. To date, there is no international agreement on which law should apply if there is no agreement between the parties of the contract. In the EU, (the Ecommerce directive) it's a "country of origin rule". In the US, each State has a choice of law principles that vary.

Again, consumers/users have no clear indication of where they stand legally which depends on where they are, where the content they want to access or use is... and how it is delivered.

In the US, we have seen some of the impact of this lack of clarity on makers and distributors of circumvention tools. For instance, non

US cryptographers and security researchers have refused to post details of vulnerabilities they've found in security technologies out of fear that they would be breaking the law in the US, and might be arrested if they visited. For example, although Dmitry Sklyarov's computer program was legal in Russia, where he wrote it, according to the US Government, it was an illegal circumvention tool under US law.

*Role of governments and international organizations*

Right holders and DRM providers strongly believe that governments should not be involved in setting standards (for interoperability for example). However, they ask governments to ensure compliance with their private solutions and especially international solutions (the WIPO internet treaties for example were created to help industries threatened by piracy). Governments should also consider how they could cooperate at WIPO or any other international body such as UNESCO or ITU to protect "content and technologies" and "access and use".

DRM and anti-circumvention technologies have had negative impacts such as chilling academic research, stifling of innovation and increased anti-competitive and monopolistic practices. Moreover, libraries and educational institutions have found it more and more difficult to provide their services. Consumers have less choice, face increased costs for consumer goods and have expressed concerns for their personal use rights as well as privacy protection.

Today WIPO and other international bodies are examining DRMs and providing issue papers or requesting comments. For WIPO's credibility as a United Nations' agency, it is important to promote an implementation of the internet treaties that would be consistent with the development agenda goals. DRMs are controversial in the developed world and are seen as a threat to development for many developing countries. The rights holders from the North can disregard local copyright law exceptions and limitations using unfair contract terms. They can limit access or curb second hand sale or legal re-sale of copyrighted goods (which is important for devel-

oping countries). In addition, since many developing countries are mostly importers of cultural and educational goods, the increase cost will slow development efforts to increase access to cultural and educational materials. The innovation agendas of many developing countries are threatened by the negative effects of abusive DRM technologies.

WIPO can and should play an important role in ensuring that DRMs are deployed in a way that is consistent with the promotion of the arts and sciences, taking into account the rights holders and users. A fundamental task for WIPO is to make available to the member states the different choices available for implementation of treaties and their effects and potential effects.

Another important task is to deal with the disparities among exceptions and limitations at the international level. An examination of the crisis created by DRM technologies for consumers, libraries, educators, visually impaired and rights holders is necessary before new treaties containing such provisions are drafted. The impact of DRM technologies on local production of informational, cultural and educational goods for developing countries should also be examined closely.

Finally, as it is the case in the US and the EU, where there is a periodical review of implementing legislation for the so-called Internet treaties, an international body such as WIPO and/or UNESCO must collect data and review the extent to which DRMs are used cross-border and their effects on legitimate uses of information goods and innovation worldwide.

## Summing up

CPTech strongly endorses the comment in the INDICARE report "currently costs seem to outweigh the benefits of DRM from a consumer point of view. Many arguments in favour of DRM either do not bear a closer examination or need time and further development until they become valid" (p. 101).

International bodies such as WIPO and its member states must 1) look for global solutions that will not harm developed and developing country consumers/users of digital

goods and services and 2) set preconditions of minimum rights for consumers before granting legal protection to DRMs. To this end, CPTech would like to see more attention being paid – in an international context – to the following issues:

1. The ensuring of access to and use of content.
2. Respecting privacy rights.
3. Interoperability.
4. Transparency.
5. Security, and that DRM software should not hamper the normal functioning of consumers computing equipment.
6. Measures against anti-competitive behaviour.
7. Clearly defined and enforceable rights for consumers, such as the right to private copy, the right to fair commercial practices, the right to be informed and refunded for faulty products, the right to

privacy and data protection and the right to free speech or the local equivalent.

An appropriate framework for dealing with these issues could be the Development Agenda, which was proposed by Argentina and Brazil and on which establishment the WIPO General Assembly agreed on October 4, 2004. The Agenda calls on WIPO to focus more on the needs of developing countries.

### Bottom line

It is timely and necessary for WIPO and its member states to take concrete steps to ensure that DRM technologies do not trump national sovereignty and countries' social and economic goals.

### Acknowledgements

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**About the author:** Dr. Manon Ress is Director Information Society Projects at CPTech. Contact: manon.ress@cptech.org

# All in one! Volume 1 of the INDICARE Monitor for download

By: Knud Böhle, ITAS, Karlsruhe, Germany

**Abstract:** One of the deliverables of project INDICARE is a compilation of all INDICARE Monitor issues of the first year 2004/2005 in one volume. This article draws attention to the added value of this publication, shares the results of our self-assessment of the INDICARE Monitor, presents future directions, acknowledges the support by external experts, and finally asks for your support for the second year.

**Keywords:** announcement – INDICARE

## About the INDICARE Monitor 2004/2005

The first volume of the INDICARE Monitor 2004/2005 announced here contains the nine issues which were published during the first year of INDICARE operation. It contains 62 articles written either by members of the project team or external experts. For this edition all articles have been checked again in order to diminish typos, to apply the layout rules more consistently, and to attribute keywords more carefully.

This publication has been optimized in view of its printed version. To add value we have included a *keyword index* and a *name index*. While the keyword index helps to find articles by *article-type* (editorial, interview, review, legal analysis, policy analysis, technical analysis, announcement, hands-on-experience), *subject matter* and *regional focus*, the name index references names of persons mentioned in the articles – not including deliberately names of authors. For some citing and quoting of articles might have become more convenient with page numbers. For those using the electronic version, of course searching or following active links to hundreds of sources may be more convenient than before when dealing with single issues or articles.

Note: As the present publication is basically a compilation of INDICARE Monitor issues, content has not been changed, validity of links has not been checked again, and information about the authors has not been updated.

## Looking back

The main purpose of the INDICARE Monitor is to inform on consumer and user issues of DRM solutions in Europe and to stimulate public debate. Debate means two things here: first, the online-journal itself is scheduled as a platform for debate where different opinions and views can be expressed, and secondly articles posted on the INDICARE website can be discussed online straight away.

Some articles reached an audience of almost 1000 readers at our website within a month. As articles can also be obtained by RSS feed and by downloading the whole monthly issue as pdf-file, the effective readership is always larger than the counter of visits indicates. A more qualitative measure for the success and the quality of articles is the fact that articles of the INDICARE Monitor are not seldom referenced, commented or syndicated by other web resources, e.g. PaidContent by *Rafat Ali*, QuickLinks by *Richard Swetenham*, *Urs Gasser*'s blog at Berkman Center for Internet & Society Berkman Center, *Stefan Bechtold*'s blog at the Center for Internet and Society (CIS) at Stanford Law School, or at BillboardPostPlay (cf. sources).

In our view the INDICARE Monitor turned out to be among others a place,

► where empirical *consumer research* is reviewed and presented,

► where *young researchers* working on DRM can present original ideas and research,

► where interesting *interviews* with key persons in the field take place,

► where *European and US* debate meet,

► where different approaches of *value-centred DRM systems design* are presented and scrutinized, and

► where you can find information about *DRM events* which are not covered elsewhere (e.g. workshop and conference reports).

The keyword index gives an impression which topics ranked especially high. Conforming to the scope and the focus of INDICARE it is most naturally that the issue of consumer expectations, copyright law, DRMS design, business models, as well as standards and interoperability have been dealt with most often. In terms of application field, developments of online music markets were hottest.

## Looking forward

For the future we want to increase the number of articles from industry stakeholders, the number of cases studies, hands-on-experiences, and critical descriptions of DRM systems. We also want to give more attention to institutional customers as consumers and users of DRM solutions, especially in the public research sector (including higher education and libraries). We also envisage broadening the European coverage of experts writing for the INDICARE Monitor, and of course we aim to make the INDICARE Monitor known more widely, and to increase our subscriber base. We would be pleased if you could be part of the solution helping us to achieve our goals.

## Acknowledgments

## Bottom line

We invite you to get involved and to help us make the second Volume (2005/2006) of the INDICARE Monitor at least as interesting as the first one.

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**About the author:** Knud Böhle is researcher at the Institute for Technology Assessment and Systems Analysis (ITAS) at Research Centre Karlsruhe since 1986. Between October 2000 and April 2002 he was visiting scientist at the European Commission's Joint Research Centre in Seville (IPTS). He is specialised in Technology Assessment and Foresight of ICT and has led various projects. Currently he is the editor of the INDICARE Monitor. Contact: + 49 7247 822989, knud.boehle@itas.fzk.de

**URL:** http://www.indicare.org/tiki-read_article.php?articleId=96

# Masthead

The INDICARE Monitor is an electronic periodical of the EU-funded project INDICARE being published every last Friday of a month. Articles having passed an internal review process are immediately posted at the INDICARE homepage for public debate. Authors are encouraged to revise their articles in the light of previous discussion before publication in the monthly issue.

▶ You can use the *RSS-feed* to get articles as soon as they are posted.

▶ You can *subscribe* to the INDICARE Monitor, and receive an *e-mail notification* containing the contents page (title, author, abstract, and URLs) and a link to the pdf-version (this service replaces the bi-weekly INDICARE newsletter). Just type in your e-mail address at the INDICARE Website and Go!, or send an empty e-mail to: indicare-monitor-subscribe@indicare.org

▶ The *INDICARE Monitor Archive* offering all issues in HTM and PDF is available at http://www.indicare.org/tiki-page.php?pageName=IndicareMonitor

▶ The *INDICARE Homepage*: http://www.indicare.org/

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**Contact**
Knud Böhle (Editor)
Institute for Technology Assessment and Systems Analysis (ITAS)
Phone: +49 (0)7247/82-2989 (-2501)
Fax : +49 (0)7247/82-4806
E-Mail: knud.boehle@itas.fzk.de