

**Final Report**  
**EDUCATIONAL COPYRIGHT LICENCE**  
**CONDITIONS**

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# 1 Subject and Scope of this Report

- To collate and organise an overview of European and other (e.g. North American, Australian) use cases and current practice regarding educational copyright licensing conditions and associated business processes obtained from major suppliers and users and other actors.
- To determine through surveys and consultation with relevant experts how use cases, best practice and associated business processes may change to take account of relevant technical developments.
- To establish what provision exists or is envisaged, either technically or in terms of business processes, to extend current copyright licensing schemes and best practice to handle new media and new uses.
- To examine the relevance of open source licensing models for the educational community.
- To examine the degree to which European educational licence conditions might be harmonised.
- To recommend how WS-LT may monitor and/or participate in the development of standardised educational licensing practice.

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## **2 Placing education in the wider rights environment and the impact of technological developments**

The report takes the widest possible interpretation of education to cover both formal and informal learning, institutional and individual activities. The creation and use of electronic educational materials, either by an individual creator or user or by institutional producers and students, will result either in the creation of work protected by copyright or in the use of work protected by copyright. In fact, the most likely scenario is that it will result in both the creation and use of copyright. Educational creators and users are involved in creating and protecting and licensing their materials and also in using the works of others under licence.

Understanding the impact of technology upon the creation, use and licensing of educational course materials begins with an analysis of what makes digital different? The answer is that whether used to teach at a distance or in a physical classroom, users of digital technology cannot avoid performing at least some of the acts restricted under copyright: making copies, distributing copies and storing a work in an electronic medium. So we begin from a point that directly involves educational course developers with the practicalities of rights management.

This is exacerbated by inadequate or uneven access to content under European educational fair use or exceptions to copyright. Educational provisions often depend upon use in a classroom setting and so exclude digital teaching.

This is likely to become more difficult if Digital Rights Management systems are introduced widely by commercial content owners. DRM systems are afforded a degree of protection under the EC Directive on Copyright in the Information Age that makes it an offence to hold or use a means of circumventing technological protection or security systems (DRMs). It is unclear how this might apply to accessing DRM-protected content for the purposes of exercising an educational fair use exception. Some commentators take the view that content protected by DRM systems may, in effect, not be accessible under fair use provision.

So accessing digital content may be complex. Educational fair use provisions may not apply or may be difficult to operate. Content must be accessed under licence and licences may be expensive, or time consuming or difficult to negotiate and understand.

And these complex rights management issues apply in an electronic environment in which Virtual Learning Environments and other digital formats allow for higher storage of content, and its manipulation and re-use.

The digital media present challenges to rights management throughout the media industries. All industries creating and delivering content on-line are grappling with the challenge of how to manage content and rights information in high volume, to contract, license and trade on-line and to maintain secure delivery in a vulnerable environment.

Any educational material or e-learning activity making use of digital media in its creation or delivery shares general rights management concerns with other media industries.

The ability to create, access and deliver materials using robust rights management systems is essential to successful e-learning.

However, while the concerns of educational sector are broadly similar to those of other industries, making it difficult to identify concerns unique to the sector, some factors are emphasised by the circumstances applying to e-learning.

## 2.1 Collaborative authorship

Education has a tradition of collaboration – in research and publication, between individual authors and between institutions – that is considerably more ingrained than in other sectors.

Ownership of copyright is attached to authorship, so collaboration raises legal questions of ownership that are affected by differing national legislation and organisational employment practices and policies affecting exploitation.

The issue is a live issue for many representative and collaborative organisations. The SURF Foundation in the Netherlands is addressing the topic of copyright ownership in Universities by hosting workshops between academic staff, universities and publishers. The issue was also raised by the Baltic States Universities Alliance in bidding for EC funding to address the issue of licensing course developments produced collaboratively by members of the Alliance.

## 2.2 Learning object aggregation

Learning object aggregation refers to the creation of courses by means of the aggregation of a large number of learning objects, sourced from a number of sources, probably under differing licensing rules and restrictions. Two rights management issues need to be addressed in this model of course development: the identification of rights associated with each component and its author and the standardisation of easily recognisable and applicable contracts and licences.

The IEEE Digital Rights expression Language Working Group is working to address these issues and several of the course content brokerage initiatives deal with them also, for example, AEShareNet, though with less emphasis upon developing standards.

## 2.3 Learning environments as walled gardens

Digital learning resources are often used within specific cultural environments separate from the general, public environments exploited by the commercial media industries. Corporate training may take place behind corporate firewalls under conditions of commercial security; wider public education may be predicated upon resources being shared freely and disseminated openly. There may be widespread interaction between different environments. For example, educational models dependent upon the free dissemination of content may collaborate with commercial publishers to license-in content or to create new content, or with corporate trainers who will place a premium upon the protection of intellectual property rights behind corporate security systems.

Attempts to create a purely educational zone in which digital content may be swapped and disseminated freely within a non-commercial environment have met with difficulties. It is difficult to establish and then maintain a purely educational environment with no leakage between that zone and the external environment in which content may be traded commercially.

Work created with the intention of allowing free use for educational or non-commercial purposes may subsequently be licensed for commercial development. There are additional difficulties in determining if some forms of education, research or training may be non-commercial or not.

The work of the SURF Foundation, IEEE DREL Working Group, AEShareNet and ODRL addresses the concept of educational use as a walled garden but also crosses several other boundaries. The work of these groups is looked at in more detail in sections 5.2.1 (IEEE DREL Working Group), 5.2.2 (ODRL), 6.1 (AEShareNet) and 7.3 (Surf)

## 2.4 Open Source Models

The rise of the Internet has triggered the emergence of open source software models aimed at promoting a distributed development process for software (primarily) and other on-line material. It reflects its origins as a licensing system for software in a number of ways, not all of which are easily adaptable to text:

- The licence allows for free use, distribution and modification of the source code.
- The software is based on industry standards and protocols rather than proprietary systems.
- It may be available for all operating systems.
- Support for development and troubleshooting is provided via informal, peer-focused web sites and discussion groups.

An increasing amount of educational content is being developed under the open source approach. Such content may run via a browser, allowing users to access via a variety of platforms. Gperiodic, a periodic table application built collaboratively using the Linux open source code, allows users to browse a periodic table of the elements and view detailed information on each. The build is continuous and has, for example, led to multiple language versions as well as improved technical quality.

### 2.4.1 Creative Commons

Creative Commons was founded with the support of the Center for the Public Domain and is now housed at Stanford Law School. Its first project was the release of a set of copyright licences free for public use and the group has subsequently developed a web application to assist the dedication of works into the public domain. Unlike some free application licences of this type, the Creative Commons licences are not designed for software but for other kinds of creative works such as scholarly works, educational courseware and web sites.

In addition to a set of licences, the Creative Commons has developed metadata to associate works with their licensing conditions in a machine-readable way.

The intention of Creative Commons is to build a repository of works representing a spread of media that can be used freely under the public-use ethos fostered by the initiative.

Creative Commons licensing templates allow users to mix and match optional clauses from a group of eleven standard licences in four broad categories; each allowing for copying, distribution, display and performance:

- Attribution – the author must be credited
- Non-commercial – use is restricted to non-commercial purposes only
- Non derivative works – only verbatim copies may be used , not derivative works
- Share Alike – derivative works may be distributed but only under an equivalent licence.

Licences are expressed in three formats: a plain language text that is easy for licensors and licensees alike to read and understand, a fine-print, legally-expressed draft for courtroom use and a machine-readable version for use by search engines. Licensing terms are expressed by use of a “Some Rights Reserved” button that links the user to Commons licensing terms (the “Commons Deed”).

The use of metadata means that users may search for content under criteria based on ‘availability’ or ‘fit for purpose’ in addition to searching according to content type. Creative Commons use RDF to carry its metadata. For some users RDF may cause problems as it does not have a schema and is not supported by the Open Archive Initiative and other groups

choosing to use XML. Such groups may choose to circumvent the problem by generating ODRL XML versions of the Creative Commons licences.

The use of standard symbols representing the type of licence under which the content is made available standardises the experience for users, making it easy for them to read a licence once and then use it many times.

To be in full compliance with the European legal context, particularly in respect of the Moral Rights protection granted in many European jurisdictions, European versions of the Creative Commons licences are required.

## 2.4.2 Open Source Initiative (OSI)

Open Source Initiative is a non-profit corporation promoting and managing the Open Source Definition through its certification programme.

OSI has an announcement list by which members may approve licences and position papers, etc, and to review and endorse licences conforming to the standard.

The list of approved licences includes those concerned primarily with text and other materials as well as software applications.

## 2.4.3 GNU Free Documentation Licence (GFDL)

The GNU free documentation licence has been developed to handle text and other non-software applications. It includes two optional features that address text, as opposed to software: *invariant sections* and *cover texts*. Both may be applied usefully to educational content.

Invariant sections give users a way to express non-technical personal opinions about a topic. These sections may be marked as invariant, meaning that they must not be varied, adapted or removed from the accompanying text. Using invariant sections, educational authors could protect sections of work against amendment or adaptation. These sections could be matters of fact that cannot be changed if the pedagogic value of the work is to be protected, sections of personal expression dealt with under moral rights, citation, and so on.

Cover texts are short pieces of text that the licensor insists be always printed on the cover of the publication. While designed to hold information on the availability of free manuals, the facility could be used more widely than that by educational developers.

## 2.4.4 OpenContent

Opencontent.org contains a range of *Open Content* (OPL) and *Open Publication* licences. OpenContent promotes 'the prolific creation of freely available, high quality, well maintained Content'. Content is defined as anything that isn't executable.

OpenContent is freely available for modification; use and redistribution under licences similar to those used in licensing open source software. Licensors make no warranty as to the content made available under OpenContent licences (which may be a difficulty for educational users) but permission to use allows for modification and redistribution providing that the original author is credited and that any modified materials are made available under OpenContent as well. Modifications must be clearly marked as differing from the original work.

Of the two standard licences, Open Publication is the more sophisticated and addresses the need for standard licences to take account of differing national legislation. In this case, the approach adopted is to have a standard provision allowing users to ignore those clauses that are incompatible with their national legislation while retaining the rest of the licence. Without this, any clauses conflicting with national legislation could be sufficient cause for the entire licence to be declared invalid.

## 2.4.5 OpenCourseWare (MIT)

The MIT initiative to make its courseware available online follows the open source licensing model closely. Content is made available for a limited number of uses under a standard licence. Third party content is identified explicitly and is subject to agreements between MIT and third party rights providers, for example the picture archive Getty Images. Copyright that is owned by MIT is licensed under the terms of the general licence. Third party copyright material is restricted. Users requiring access to third party content must negotiate a licence with the rights owner directly.

MIT grants users the right to use, copy, distribute, translate and modify course materials solely for non-commercial educational purposes, providing that the modified materials are made freely available to other users under the same terms.

All use and re-use and distribution of both original and derivative work must carry an attribution to MIT and to the original authors.

The development plan for the Open Courseware initiative projects is that all course materials will be made available by 2005.

## 2.4.6 The American Physical Society (APS)

The conflicting positions between the publishers of academic journals on the one hand, wishing to own copyright in the papers they publish, and academics and academic institutions (including funding bodies) on the other, wishing to retain copyright in the work they author or fund, is addressed by the APS policy on copyright transfer. The policy switches the emphasis from copyright ownership to rights licensing. APS chooses to hold copyright in articles it publishes and grants a reverse licence to authors allowing them to publish elsewhere but in different formats. APS has also drafted an alternative for authors to consider, in which authors retain copyright but grant the APS the same rights that a copyright holder would have. The APS preference for copyright ownership is based on the fact that some two thirds of its articles are submitted from outside the US. The APS is not convinced that the broad range of rights it needs to control, including presentation and distribution in media not yet invented, can be guaranteed in territories outside the US. A further consideration has been that only the owner of copyright can take action for unauthorised and undesirable use of the article. APS considers that by holding copyright they remove the burden of enforcement from authors.

The APS also differs from some other publishers in not requesting that authors indemnify the publisher against legal action. By taking this stance the APS assumes the burden of payment of legal expenses. The APS licence was adopted as a recommended model by the SURF conference on Copyright in Universities, Zwolle, December 2002.

## 2.5 Incompatible Rights Legislation

National legislation as well as cultural differences affects the rights policies affecting the clearance and licensing of content. It is a feature of digital content that it will be distributed or disseminated across national, cultural and sectoral boundaries. This creates difficulties both for educational creators and licensees. Legislation in one territory may allow for the free use of content for educational purposes but use of that same content, in similar contexts in other territories may constitute copyright infringement. Although European harmonisation of copyright legislation has developed a standard minimum level of protection for copyright work, member states are free to vary the exceptions to copyright. Contract and employment law may also apply and are equally subject to national and cultural variation.

The adoption by European Member States of the Directive on Copyright in the Information Society (EU Directive 2001/29/EC) seems unlikely to address the inconsistencies between national educational copyright provisions. For example, while proposed German legislation is intended to give universities and research institutions considerable leeway in distributing digitally copyright materials to students and scholars without additional charges being levied, the approach adopted by other Member States is much more limited.

This inconsistency emphasises the need for creators to maintain records of content and the rights clearance attached to individual pieces of content so as to warrant clearance levels to licensees across national boundaries. Materials adopted freely under copyright exceptions for educational use in one territory may be subject to national copyright restrictions when licensed for use by another educational establishment in a neighbouring territory.

### **2.5.1 The Universitat Oberta de Catalunya IN3 (Internet Disciplinary Institute)**

The Universitat Oberta de Catalunya IN3 group is conducting a comparative law study on the use of work protected by copyright for the purposes of teaching and research with special reference to digital distance education.

The study pays particular regard to variations in national legislation affecting the application of those exceptions to copyright covering educational use.

## **2.6 Attribution, Citation and Validation, Protecting the Integrity of the Work**

Although the cost of rights clearance is often cited as a restriction on use, it is at least open to negotiation. Academic authors and institutions often place attribution and integrity more highly than commercial reward.

This approach impacts upon trading systems based upon open and free exchange of content, such as those based on the Open Source model. While free exchange may be accepted relatively easily as a concept and fits the academic culture of freely exchanged ideas, the practice is more complex. How can the author be assured that the integrity of expression will be maintained in the work? How might changes be tracked so as to identify errors of fact and changes of opinion that may differ from the author's original intent? These issues are also relevant to an examination of the author's moral rights or *droit moral*.

### **2.6.1 Open Source Licences**

Many open source licensing models make provision for marking content as not open to amendment ("Invariant sections" in the GNU Free Documentation Licence). Any open source licence or bank of licences developed specifically for use in an educational context must address how to maintain the integrity of the work and the continuing accreditation of the author without losing the flexibility and simplicity offered by the open source concept.

### **2.6.2 Moral Rights**

Moral rights are held by the author of the work separately from copyright. Although copyright may be sold or traded and licensed, moral rights are inalienable from the author. They protect the author's continuing interest in how the work may be treated, and by default the author's reputation. Authors may act to prevent the use of their work in ways that damage the reputation and integrity of the author. In a digital learning environment where work may be manipulated easily, moral rights as distinct from copyright may act to prevent unlicensed manipulation. Many states recognise and protect moral rights rigorously, while other national legislation allows moral rights to be waived or forfeited.

Rights management systems taking account of moral rights and the academic weight placed upon maintaining the integrity of the work must ensure that works cannot be altered.

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## 3 Cycle of use

In its creation and use, works move, typically, through a cyclical process of creation, incorporation and licensing:

### 3.1 Creation

The work is first created. Newly created works may be authored by a staff author working under the terms of an employment contract or by individuals working alone or as freelance contractors.

In the case of staff authors, the wide degree of variance between the terms and practices of academic institutions in different national territories or with differing cultural approaches to staff ownership and reward complicates collaboration between institutes and the licensing of institutionally owned works for wider dissemination beyond the student body.

In the case of freelance contractors, there is equally wide variation between the contracts under which they are contracted. Some require full copyright ownership to vest in the contracting body while others acquire a limited rights licence, with copyright remaining with the author. This variation may be due to policy choices and reflect differing cultural attitudes within academic institutions, or, just as likely, it may reflect a lack of experience or awareness of copyright and contracting practices within the contracting body.

In the case of authors working independently and in complete control of the work and its exploitation, individual authors approach the licensing of their works in enormously different ways. This is even though copyright ownership is applied consistently, being vested in the author as the creator. The variation in licensing terms has proved to be a problem for users of open source licensing in the software industry, where the proliferation of variations of 'free-use' licensing terms makes it difficult for licensors and licensees alike to understand fully the terms by which works are made available.

### 3.2 Incorporation

The creative act may not be limited to creating new work; it may involve the incorporation of work(s) taken from other existing sources or be limited to compiling content from a variety of existing works (such as a collection of academic readings). In such cases, the compiled work may be protected either by copyright or under a database right, or both.

Third party work may already exist (extracts from textbooks, figures and photographs, recorded music, and so on) or may be commissioned from a third party (a reader for an audio recording, a designer or work commissioned from another author) or may be submitted by a co-author in a collaborative production. In any event, the work will be protected by copyright and will be incorporated under licence.

In surveys with those engaged in creating educational courseware, difficulties in clearing rights to use existing third party content, particularly content from the commercial media industries, was cited repeatedly as a difficulty.

Several initiatives involving both commercial and educational providers have sought to develop the concept of a 'one-stop-shop' acting collectively on behalf of a range of content providers across national boundaries.

Several of the projects funded under the EC INFO 2000 programme addressed how representative rights organisations (or collecting societies) across Europe might combine to offer a single one-stop-shop for multimedia producers clearing rights in works spanning media genres; moving image, music, text and so on. The issue remains a strand in current EC initiatives.

## 3.3 Licensing

The created work may then be used by the creator to reach their own core audience or licensed for use by a third party.

### 3.3.1 Students

The recruitment of students to an on-line learning environment is a rights licensing transaction. Students are licensed to access relevant parts of the environment according to payment, level of attainment, stage of course and so on. While a licensing fee may be paid to enter the institution, further non-financial 'payments' may be required in order to access particular parts of the curriculum. For example, answers may be revealed only on completion of a test. Some areas will be encrypted and revealed to students on a very restricted basis, for example, tests and some sensitive content such as medical content.

Students may also be given preview access to course materials they are considering for future study.

Students are also licensed to access external electronic resources (for example, on-line journals) under general licences agreed by their host institution.

There is some difficulty in identifying students. Students may be registered with several institutions simultaneously or may be a member of staff at one and a student with another, for example, in staff training and development.

Licensees might not be registered at all. They might be engaged in informal learning or, in the case of younger students at primary or secondary level, be parents or guardians wishing to view materials in order to support study at home or to approve content.

### 3.3.2 Licensing to a third party

Licensing to a third party may be to an individual, to a registered student or to an institution. The use may be commercial or non-commercial. The licence may allow for adaptation (in copyright terms translation as well as the lay understanding of re-versioning).

There is wide variation in the scope of licences offered. It remains the case that many resources, particularly non-commercial or non-institutional web resources, are offered without a formal licence being attached to the content or to the site. The absence of any formal, explicit licence makes it possible that the material has been offered under an implied licence.

An implied licence is one created through the circumstances in which the rights owner presents or makes the content available to users. For example, a reader submitting a letter for publication to a newspaper's letters page may be deemed to have granted publication rights under an implied licence to the newspaper. Although using content offered under implied licences seems simple and informal, users find them difficult to use because they are difficult to define and interpret and may be revoked.

The difficulties of interpretation apply also to those licences that are made explicit; including those expressed in lay rather than legal language. These can vary widely in the scope and formality of their drafting. Life is made unnecessarily complicated as a result for users seeking access to educational content.

There is scope for the introduction of a limited range of standardised licences covering the most common educational uses. This would benefit creators lacking formal drafting skills or institutional contracting resources. It would further benefit users by making explicit the terms on which content is offered and by imposing some consistency between the licences of multiple content providers.

These issues are being addressed by:

**AeShareNet**

### 3.3.3 Reversioning, re-incorporation, updating

In the final stage of the cycle the work may be reversioned or used as raw content for the creation of new work, updated and incorporated into new versions of the course or across a range of educational presentations, both by the owner and under licence to third parties. This reintroduces the work to the 'creation' phase of the cycle as new work is created out of, or incorporates, the original.

This analysis of the cycle of use uses as its guide the model established in the EC-funded Imprimatur Project (Esprit Project 20676) in which work (or "stuff") was identified as being made, being used and being licensed. ("People make stuff. People use stuff. People do deals about stuff.") It has in turn informed the work on rights metadata and a rights dictionary being developed by the consultancy firm Rightscom for its work under MPEG 21.

## 3.4 Rights Management in the phases of the cycle

Managing rights in the digital media depends upon managing the interaction between three information areas: information relating to content, information relating to the rights attached to each piece of content and information relating to use. The three are governed or enclosed within access-protection or security devices that ensure consistency and fidelity.

### 3.4.1 Content

Content is created by authors. These may be individuals or, in the case of works created by employees, institutions. The management of rights commences with the identification and tracking of authors (including both staff and institutions).

This must be linked to the process of identifying and tracking of content. Sometimes looked upon solely in terms of managing production, tracking content is an essential ingredient in constructing effective rights management systems. By rights management, here one refers to the process of managing the licensing of content and the management of contract information attached to licensed content (either licensing-in or licensing-out) rather than protecting from unauthorised use.

Finally, managing or licensing changes to content is one of the greatest challenges posed by the digital media. The split between ownership of copyright and copyright licensing and moral rights, means that copyright ownership is no guarantee that content may be manipulated and used freely. The problem of managing the identification and tracking of changes to content is central within the academic context where one is managing content that expresses academic credentials and beliefs attached very strongly to the academic author's sense of self.

### 3.4.2 Copyright or Rights?

It is essential for any licensing to address both the ownership of copyright in a work and the sub-licensing of rights deriving from copyright. This commences with the copyright conditions under which the contract was created, including employment contracts and terms of registration for students. The balance between copyright ownership and control will vary between individuals and institutions (employees, students, and parents/guardians of younger students and publishers) according to contract, differing national copyright legislation and the application of employment and moral rights laws.

### 3.4.3 Use and Licensing

Licences for electronic use are difficult to define. Stripping away the physical object – the book – means that the product being licensed is defined only in terms of the licence. Physical works are subject to the doctrine of first sale, by which the owner's rights in the object (as distinct from the copyright 'work') are exhausted. For librarians, for example, this means that subscribing to a printed journal is radically different from subscribing to the same journal on-

line. Continuing access to past copies after the expiry of the subscription is guaranteed in the case of printed journals, but is only possible if complying with the negotiated licence in the case of on-line products.

In the same way, educational textbooks or printed journal subscriptions may be shared while access to digital products may be limited under licence.

Moral rights/droits moral give authors the right to prevent their works being used in ways that are derogatory to the integrity of the work or to the reputation of the author, and to insist upon being credited as author. These rights are held separately from copyright. So owners of copyright (institutions or publishers) and re-users of existing copyright works may be restricted in their manipulation of the work even though they may be licensed to do so under copyright. This has an effect upon reversioning/adaptation and upon the ability of institutional owners (universities, schools, colleges) to license works created by their staff.

Standardised licensing models are central to effective copyright transactions, whether machine to machine or person to person. However, the diversity of context and purpose is such that developing a small number of standard models to cater for every eventuality is not possible. Standard licensing models may be at their most effective when developed by particular sectors or industries, fitting the standard parameters of industry practice, or by an individual or an individual institution subscribing to a consistent approach to rights licensing. They are weak when applied across a range of differing approaches and business models. They are weak when applied to products containing packets of existing content licensed from third party sources. In such cases the licence obtained allowing for use of the imbedded content may, by default, limit the extent to which the entire product may be licensed. This may work effectively in a walled garden, where all rights owners agree to operate under the same standard licensing models (for example, the various open source licensing initiatives) but breaks down when applied to a mix of institutional and private, commercial and non-commercial content.

This mix of licensing standards and models means that creators of educational course content must keep records of the licences they have obtained, the content to which they are attached and the conditions for use that apply. This is not only for their own records but also so that sub-licensees may be given warranties relating to rights ownership or control and the extent of clearance for subsequent re-use or versioning.

#### 3.4.4 Consistencies

Two threads operate consistently across all phases and cycles of authoring, production and use in an automated system for educational copyright management: Learning Objects and Persistent Identifiers. These identify the granularity at which the work is managed and provide a means whereby rights management information may be attached. In this model of electronic course materials, the materials become much like a compilation of individual Learning Objects used in combination in or across 'courses'. Database rights, as well as copyright, are likely to apply. The rights granted under database rights, such as the right to object to unauthorised abstraction and a limited application of fair use exceptions, give database owners a greater degree of protection than under copyright.

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## **4 Digital Rights Management in the wider rights-trading environment**

Digital rights Management has many meanings and definitions ranging from the management of 'back-office' information on rights acquired or retained in content to the managed delivery of on-line content under licence. At its widest DRM may be held to be the process of recording information on digital rights assets, delivering both the assets and the licences under which they may be used to users and securing a protected delivery that protects the assets against unauthorised use. DRM depends upon both secure delivery to protect the integrity of the information and content and upon a standardised understanding of what is being licensed and of the terms under which it is licensed. Work in producing and delivering standardised DRM systems and the commercial rights-trading media and multimedia industries have led the standards to which they must operate.

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## **5 Existing Standardising Initiatives**

### **5.1 Content Metadata**

#### **5.1.1 Learning Object Metadata (LOM) (IEEE 1484.12.1-2002)**

Learning object metadata includes an element group for a description of the rights attaching to any learning object, including cost and any applicable restrictions on use. The LOM working group within the Learning Technology Standards Committee recommends that a standardised rights expression language should be imbedded in the LOM standard.

#### **5.1.2 Sharable Content Object Reference Model (SCORM)**

SCORM is a package of specifications and standards that includes one explicitly addressing learning object metadata. It seeks to describe each learning resource by using learning object metadata that includes a reference and description of rights attached to each object.

#### **5.1.3 Digital Object Identifier (DOI)**

DOI is a persistent identifier scheme for identifying digital objects. Developed by the American Association of Publishers, DOI has strong support in the traditional publishing industries and increasingly with libraries and other repositories of digital content. Rights metadata may be attached to the DOI.

The DOI system uses a system of registration agencies delivering DOI numbers into various digital sectors, including education.

#### **5.1.4 Educational Modelling Language (EML), Open University of the Netherlands**

The EML developed by the OUNL is an XML notational system based that allows for the codification of units of study such as programmes of study, suites of courses, whole courses and course components. EML describes course content and also the roles, relationships, interactions and activities of students and teachers. One of its key deliverables is the ability to develop course materials regardless of delivery mechanism, so future-proofing course materials against changes in the delivery technologies.

### **5.2 Digital Rights Expression Languages**

Digital rights expression languages specify the conditions under which users may make use of content supplied in digital format. They act as an expression of the relationships that exist between information and content security measures, licensing conditions imposed by rights owners, and other constraints such as national legislation and academic or cultural practices such as citation and validation.

#### **5.2.1 IEEE Learning Technology Standards Committee DREL Study Group**

The Learning Technology Standards Committee is chartered by IEEE to develop accredited technical standards, recommended practices and guides for learning technology.

Standards development is done by working groups. The DREL Study Group is studying the best approach to a digital rights expression language tailored to meet the demands of learning technology.

### 5.2.2 Open Digital Rights Language (ODRL)

ODRL is an Australian DREL developed by Renato Iannella and IPR Systems. There has been some take up in the commercial sector. ODRL is currently being used with a bank of SCORM digital learning objects in an attempt to create a course management model using digital rights management.

ODRL works by establishing relationships between digital objects (*assets*), rights licensors or licensees, either people or organisations (*parties*) and conditions of use (*rights*). The relationships between the three elements of the model are expressed as the offer and acceptance of terms of use. Both can be revoked or contextualised. No grant of rights is recognised unless explicitly granted.

### 5.2.3 XrML (Extensible Rights Mark-up Language)

XrML, a patented rights expression language developed by Content Guard, is currently being used both by MPEG-21 and by OASIS (Organisation for the Advancement of Structured Information Standards).

The language expresses *licences* granting rights to *principals* (people or organisations) to make use of digital content *resources* subject to licensing *conditions*.

XrML shares ODRL's assumption that rights are granted only if the licence is expressed explicitly. It is capable of being used with both analogue and digital media including web resources.

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## 6 Course Brokerage and Standardised Licensing Models

The complexity and cost of drafting bespoke rights licences is a difficulty for non-commercial developers and users of educational content lacking the benefit of in-house legal departments or easy, cost-effective access to specialist legal advice.

The lack of standardised licensing is unavoidable given the variability of contexts, both commercial and non-commercial, and the personalised nature of the business of granting and negotiating licences. However, some degree of standardisation would speed access to content across a range of basic, common applications and contexts within the educational sector.

The use of standardised licensing formats has been adopted strongly by a number of brokerage platforms providing access to an archive of course materials under common licensing conditions. Most of the content provided by such platforms is created and shared under licence by members of the platform group. Some platforms also provide access to third party content under broad, educational licences.

### 6.1 EducaNext

EducaNext is an outcome of the UNIVERSAL project, an e-learning project sponsored by the European Commission. It provides global services for the exchange of learning resources among higher education institutions using the UNIVERSAL Brokerage Platform (UBP). The UBP can be accessed by higher educational institutions, training institutions and companies and individual students not attached to institutions.

While anonymous users can read information posted on the site, only registered users can book, access and/or provide learning materials.

Content includes moving images as well as text and is offered in a number of languages.

There are plans to maintain and improve the UBP under the TEN-A project focusing on developing business models for exploiting the UBP.

The management of copyright and related rights is addressed by giving resource contributors the option of retaining content on their home server rather than presenting it on the UBP and by offering restricted versions of the standard licences available on the platform. Licences permit contributors to charge for use of their resources or to offer them freely. The UBP uses two standard licences, one more restrictive than the other. The wider licence grants a nonexclusive, transferable licence to use and network the learning resource using equipment owned by or under the control of the licensee. Use is permitted for the purposes of research, training and instruction. Content may be modified and used to create derivative works. The restrictive licence does not permit modification of content.

Neither licence permits users to remove proprietary marks, copyright notices and citations. Copyright remains with the provider.

The introduction of a new service structure for community-based EducaNext is currently being planned and developed. The intention is to make the offer policy for learning resources less restrictive by opening up the offer system (by which content is made available) to public-users without log-in and without usage restrictions. In such cases users are not asked to agree on any kind of licensing agreement when accessing content. Content will be categorised in two areas of the system. Unrestricted access will permit use by unregistered users. Restricted access will allow access only to registered members of the EducaNext community.

EducaNext aligns its licensing structures with the workflow proposed by the Creative Commons model. Users can select from a suite of six licences. These are:

- Free distribution
- Free distribution for academic purposes (modification allowed)
- Free distribution for academic purposes (modification not allowed)
- Customised licence
- Educational free distribution (recording and distribution allowed)
- Educational free distribution for academic purposes (recording and distribution allowed for academic use, modifications not allowed)

## 6.2 Licensing Principles for Electronic Archives

The library community is experienced in standardising approaches to licensing content from commercial publishers providing content for electronic libraries. Dutch academic libraries and German libraries co-operated in 1998 to produce a series of licensing principles that other educational developers might usefully take as a starting point for the construction of guidelines for licensing courseware. Principles included the protection of 'fair use' exceptions, provision for inter-library loan, access for off-site users, archiving, integration with local systems, no non-cancellation clauses and a percentage payment for electronic licensing that was lower than standard print subscription costs.

## 6.3 Open Archives Initiative

The Open Archives Initiative develops and promotes interoperability standards easing the dissemination of content and increasing the availability of scholarly works. OAI takes the approach that the technological framework is independent both of types of content and the commercial models by which content is made available. Project Romeo (Rights Metadata for Open Archiving) hosted by the University of Loughborough is investigating the rights issues surrounding the self-archiving of research in the UK academic community under the OAI's initiative protocol for metadata harvesting. The project's survey of UK academics indicates that most academics are willing to offer liberal usage rights in excess of those offered by journals. Self-archiving provides a means of achieving this goal. The project is making use of Creative Commons licences expressed in metadata translated into XML.

## 6.4 CHEST

CHEST negotiates agreements on behalf of the educational sector in the UK covering software, data sets, training information and other IT related products. All CHEST agreements allow for use under the licence by members of staff, students and other persons authorised by the licensee for the purposes of the licensee's normal business, whether on-campus or not. This handles the problem of how to take account of informal, non-registered or cross-institution users.

## 6.5 Ministry of Education, Finland

The Ministry of Education, Finland, has developed a set of standard copyright agreements for use with web-based learning materials. The agreement templates, with explanations on their use, are provided as part of the provision of resources for web-based learning in virtual schools, vocational training and university level study.

## 6.6 Baltic State Universities Alliance

The Tempus programme funded by DG Education and Culture of the European Commission encourages co-operation between higher education institutions in EU Member States and partner countries through consortia implementing joint projects. Universities in the Baltic States have collaborated on joint development and presentation of course materials under Tempus funding. One of the outcomes was an awareness of the need to develop standard agreements covering collaboration on educational course development and standardised templates or models covering both first presentation to students represented by universities within the alliance and for subsequent exploitation outside the alliance.

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## **7 The Development of Good Practice**

A number of representative organisations provide guides to good practice, licensing principles, explanations of copyright and its practical effects upon particular sectors of the educational community from school level to university, both formal and informal learning. It is not possible to provide a single guide to good practice; so much is it affected by context and culture, and by local national legislation. The following European sites are particularly relevant to the work of the Group.

### **7.1 European Bureau of Library, Information and Documentation Associations (EBLIDA)**

EBLIDA is an independent umbrella association representing the interests of national European library, information and documentation associations. It develops policy and lobbies on behalf of its members and has a particular emphasis upon copyright and rights in the digital environment. It promotes unhindered access to information in the digital age and so has a strong interest in standardised licensing principles allowing access to information in the widest educational settings.

### **7.2 European Copyright User Platform (ECUP)**

ECUP has strong links with EBLIDA but concentrates entirely upon copyright and related rights, with a particular emphasis upon the library sector. It is a one-stop shop for information on digital copyright and rights issues and is a useful source of advice and developing practice for all European educational users.

### **7.3 SURF**

The Dutch SURF Foundation is a representative organisation in the field of network services and information and communication technology for institutions of higher education and research. SURF has developed policies and principles relating to copyright ownership in higher education, university policy on copyright and licensing arrangements between universities authors and publishers. Its web site, 'Copyright Management for Scholarship' offers digital copyright guidelines and policies, agreements and models and underlying principles.

After a first conference on Universities and Copyright, held in 2001, a working group was appointed to work on detailed proposals. A second conference, December 2002, discussed and ratified a set of principles and developed guidelines for university copyright policy and for agreements with publishers.

### **7.4 European Schoolnet**

European Schoolnet is an international partnership of more than twenty European Ministries of education developing learning for schools, teachers and students. It provides resources, practice examples and brokers opportunities for collaboration. The Schoolnet web site contains examples of standard educational licences for the use of digital resources and guidelines to good practice in accessing digital resources and using web-based materials.

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## 8 Conclusions

The development of standards for educational digital rights management is both too important for WS-LT to ignore and too complex for it to solve alone. The most effective approach for WS-LT is to keep abreast of developments worldwide and to make an input to those groups identified in the report as making substantial contributions to the development of robust DRM models in both the commercial rights industries and educational transactional models.

### 8.1 Standardised educational licences

A number of easily accessible and understandable standard licensing templates are already in place. Although they differ in their drafting and use of language, they share fundamental assumptions about the use of content in an educational context. Most operate by sharing resources between users who share a copyright ethos or who are members of a closed membership grouping (even though joining the group may be easy and at nil cost). It is recommended, therefore, that the Workshop should not invest in drafting its own standard licence(s). To do so would duplicate those already in existence without adding to their value. Instead, the Workshop should assist in dissemination of existing standard licensing schemes and/or their adaptation to the European context (e.g. European versions of the Creative Commons licences).

The Workshop should consider undertaking the creation of a standardised licensing model adapted for European conditions – both cultural and legislative. From the range of standard licensing models currently available the Creative Commons appears at present to have most momentum and acceptability among the broader educational communities. It would be worth considering the Creative Commons model as the basis for working towards a specifically European licence. Such a licence could combine the most useful and attractive elements of licences such as the Creative Commons and, in a European context, might address the following issues:

- Transparency and simplicity – for example through the use of clearly written, simple licences in user-friendly language and the use of easily recognisable symbols,
- Usability and consistency – for example by containing only a small range of standard licences,
- Searchability and interoperability – for example the expression of the licence metadata in machine-readable formats.
- Continuity – for example, by way of a supporting web site giving advice and developing a community of users and promoting the use of open licensing concepts
- Legality – taking account of common and disparate elements in European member states' applicable legislation.
- Moral Rights – taking account of the separation between copyright and rights (which can be traded or waived) and authors' continuing moral rights in some European jurisdictions.

### 8.2 Disparate legislation

Legislative differences in the provision of educational fair use of copyright works for teaching purposes make it difficult to share course content across national boundaries and create an uneven playing field for educational institutions in the member states. The work being undertaken by The Universitat Oberta de Catalunya IN3 (Internet Disciplinary Institute) is likely to confirm this belief. The Workshop should support moves to apply educational fair use provision consistently across all member states with the application of particular provisions for e-learning. Provision should be harmonised at the highest level possible.

There is conflict between the aim of creating a healthy e-learning society and the uneven application of fair use exceptions in the e-learning context.

### **8.3 Digital Rights Management systems**

DRMs are to be welcomed and supported. They offer rights owners, creators and users a viable means of accessing, managing and controlling content. However, they also present limitations to the functioning of educational provisions for fair use of copyright works by preventing unlicensed access to secure content. The Workshop already has input into developing DRM standards and should seek to promote DRM standards that protect the rights of users to access content using provisions for educational fair use.

### **8.4 Digital Rights Expression Languages**

The workshop should continue to make an input to the work of the IEEE Learning Technology Standards Committee DREL Study Group.

### **8.5 The Learning Technology Standards Observatory**

As outlined above, the conditions are not yet right for the introduction of standard licensing conditions for educational content. For the moment, the Workshop should continue to monitor and contribute to worldwide developments affecting the creation of standards in expression languages, content and rights management and learning objects. Much of this work will continue to impact upon rights licensing and copyright ownership. The Observatory should have as a key function responsibility for continuing to monitor developments in standardised licensing models and for any emerging differences between the educational and commercial sectors. The Observatory should brief the Workshop should any developments change the environment sufficiently for the Workshop to act in the area of standardised licensing conditions in future.

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## 9 Bibliography and web resources

### 9.1 Standardized licences

EducaNext/UNIVERSAL Brokerage Platform: <http://www.educanext.org>

AEShareNet: <http://www.aesharenet.com.au/>

Curriculum On Line: [www.curriculumonline.gov.uk](http://www.curriculumonline.gov.uk)

EBLIDA Licensing principles: <http://www.eblida.org/>

CHEST: <http://www.chest.ac.uk/>

Ministry of Education, Finland:

[http://www.minedu.fi/opm/hankkeet/koul\\_ja\\_tutk\\_tietostrategia/10verkko\\_opetus/sopimusmallit.html](http://www.minedu.fi/opm/hankkeet/koul_ja_tutk_tietostrategia/10verkko_opetus/sopimusmallit.html)

Creative Commons: <http://creativecommons.org/>

The American Physical Society: <http://publish.aps.org/infoauth.html>

(also: Martin Blume "Who Should own Scientific Papers:  
<http://www.surf.nl/copyright/zwolle/2002dec/Blume%20OnWhoShouldOwn.pdf>)

Open Source Initiative: <http://www.opensource.org/>

GNU Free Documentation Licence: <http://www.gnu.org/licenses/fdl.html>

Open Content: <http://www.opencontent.org/>

Open Courseware (MIT): <http://ocw.mit.edu/index.html>

### 9.2 Incompatible rights legislation

Universitat Oberta de Catalunya IN3:

[http://tojde.anadolu.edu.tr/tojde6/journals\\_and\\_Institutions/in3.htm](http://tojde.anadolu.edu.tr/tojde6/journals_and_Institutions/in3.htm)

### 9.3 Existing standards initiatives

Learning Object Metadata: <http://ltsc.ieee.org/wg12/>

Sharable Content Object Reference Model (SCORM):  
<http://www.adlnet.org/index.cfm?flashplugin=1&fuseaction=home>

Digital Object Identifier Foundation: <http://www.doi.org/>

Educational Modelling Language, OUNL: <http://eml.ou.nl/eml-ou-nl.htm>

IEEE DREL Study Group: <http://ltsc.ieee.org/sg1/>

Open Digital Rights Language: <http://odrl.net/>

XrML: <http://www.xrml.org/>

Open Archives Initiative: <http://www.openarchives.org>

Project RoMEO:  
<http://www.lboro.ac.uk/departments/dis/disresearch/romeo/index.html>

## 9.4 Developing Good Practice

European Bureau of Library, Information and Documentation Associations (EBLIDA): <http://www.eblida.org/>

European Copyright Users Platform: <http://www.eblida.org/ecup/>

SURF Foundation: <http://www.surf.nl/copyright/>

European Schoolnet: <http://www.eun.org/portal/index-en.cfm>