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TOPIC

LICENSING OF
DIGITAL CONTENT

REFLECTIONS ON LIBRARY LICENSING

LINKED CONTENT COALITION
FRAMEWORK FOR RIGHTS
MANAGEMENT

ONIX FOR PUBLICATIONS LICENSES

THE SHARED ELECTRONIC RESOURCE
UNDERSTANDING (SERU)

NISO
How the information world
CONNECTS

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[SPOTLIGHT]

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ONIX for Publications Licenses

ONIX for Publications Licenses (ONIX-PL) is a standard for encoding the content of a license agreement for electronic resources, usually an agreement between a publisher and an academic library or library consortium. An ONIX-PL expression is a structured XML document that can be processed and interpreted by a library management system, enabling it to compare licenses and to answer queries such as, "Does this license allow scholarly sharing with researchers who are not authorized users?" or "Can I incorporate selected items of licensed material into a course pack or an electronic course reserve?"

ONIX-PL is maintained and supported by EDItEUR, the international group that coordinates the development of standards for electronic commerce and communication in the book, e-book, and serials sectors. Like other EDItEUR standards, ONIX-PL is free to use. Full details including specifications, examples, and other downloads are available from the EDItEUR website.

ONIX-PL builds on the work of the Digital Library Federation's Electronic Resource Management Initiative (ERMI) and joint EDItEUR/NISO work, first on ONIX for Serials and later on ONIX-PL itself. The development of the format standard and of the related OPLE (ONIX-PL Editor) software benefited from funding contributions from the UK Publishers Licensing Society and from Jisc (formerly the Joint Information Systems Committee of the UK Higher Education Funding Council).

What ONIX-PL does

Library license agreements are more than just licenses. They include terms and conditions of supply and the general obligations of supplier and customer, as well as the permissions and prohibitions which constitute the license itself.

For obvious reasons, the license permissions and prohibitions (usage terms) are by far the most important part of the encoding. ONIX-PL encodes usage terms in a fully structured way, using a controlled vocabulary. Other sections of the license agreement are also covered in an ONIX-PL expression, but in a less structured way, except to the extent that they include data elements that might need to be extracted and stored in a library management system, for example, start and end dates, or notice periods.

Most license agreements are based on a model text of some kind—a publisher's standard license, a library consortium's standard license, or a public domain model license. ONIX-PL similarly distinguishes between model licenses, or *templates,* and individual license instances. Ideally, an ONIX

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expression of a standard license will be created once only, as a template. Expressions of individual licenses, or of any recurring variants of the model, can be derived by editing the template expression. EDItEUR provides—as freely available open source software—an editing tool (OPLE) that can be used both to create new templates and to copy and edit them for individual use.

The XML expression which emerges from this process can then be loaded into a library management system that has the necessary capability to interpret the ONIX-PL format. This requires the development of a mapping between ONIX-PL and the form in which the target system stores and manipulates license information. Such mappings have been or are being developed by system providers.

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How ONIX-PL works

Unsurprisingly, the structure of an ONIX-PL expression looks rather like that of a typical license agreement, albeit one which is more tightly disciplined than in real life. Its major sections are:

- » Definitions
- » Usage terms
- » Supply terms
- » Continuing (post-cancellation) access terms
- » Payment terms
- » General terms

The full text of the license can be stored as part of the expression in a form that enables elements in the XML encoding to be linked to the clauses from which they are derived. This is not mandatory, but, to the best of EDItEUR's knowledge, all implementations so far have chosen to follow this approach. It means that when a structured summary of a license encoding is displayed as an HTML page, it is possible to drill down instantly to the relevant wording.

The underlying structure of an ONIX-PL expression is defined in XML Schema language. The schema is supported by a Dictionary, a controlled vocabulary which is updated as required by the addition of new values. Some elements in the ONIX schema require controlled values. Others, which refer to entities that are necessarily specific to an individual license, require a link to a definition that is itself part of the expression. Some elements allow either a controlled value or a locally defined value to be used. For example, the definition of an Authorized User, which is an essential part of any library license encoding, may be made up of a combination of Dictionary terms and specifically defined user types. A simple example is shown in Figure 1. This fragment of XML shows **AuthorizedUser** being defined as either a **LicenseeAffiliatedPerson**, which must itself have been defined elsewhere in the encoding, or a **WalkInUser,** which is an ONIX Dictionary value. The prefix **onixPL**: identifies values taken from the Dictionary. The encoded definition is linked to the relevant license clause by a **LicenseTextLink**, which is a unique pseudo-random identifier, generated automatically when the expression is created.

The intention when ONIX-PL was designed was that the schema should be kept as general as possible, and that the standard should be capable of meeting new requirements simply by adding to the controlled vocabulary. This approach has proved itself in practice;

```
<AgentDefinition>
    <AgentLabel>AuthorizedUser</AgentLabel>
    <AgentType>onixPL:Person</AgentType>
    <LicenseTextLink href="d1e163920081105T224812.72Z"/>
    <AgentRelatedAgent>
        <AgentAgentRelator>onixPL:IsAnyOf</AgentAgentRelator>
        <RelatedAgent>LicenseeAffiliatedPerson</RelatedAgent>
        <RelatedAgent>onixPL:WalkInUser</RelatedAgent>
    </AgentRelatedAgent>
</AgentDefinition>
```

Figure 1: A typical AuthorizedUser definition

the schema remains robust and has been unaltered since it was first published. EDItEUR recently released Issue 5 of the Dictionary, which added, inter alia, better coverage of post-cancellation access options and new features to handle open access content delivered alongside proprietary content.

OPLE

OPLE—the **O**NIX-**PL E**ditor—is a combination of purpose-written software and scripts and established open source software, which enables a standard web browser to be used to create and manage ONIX-PL license expressions.

With OPLE a user can create or edit a license template or an individual license expression, maintain a database of templates and license expressions, display a license expression as an HTML page in a readable format, validate and export an ONIX expression, and import a valid ONIX expression from an external source.

A particular feature of OPLE is that it can display an HTML summary view of an encoded license, which provides a convenient means of demonstrating what the ONIX expression says and checking that it adequately reflects the license terms. At the same time, it allows the user to go deeper by clicking on an element and bringing up an extract from the license text on which the ONIX expression is based.

OPLE is freely available for download from the EDItEUR website.

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ADOPTION BY JISC COLLECTIONS

Jisc Collections is the body which is responsible for supporting the provision of digital resources to the UK academic and research community. For brevity, it is referred to here simply as Jisc.

Using its own model licenses, Jisc has negotiated agreements with major publishers of online resources on behalf of its participating institutions. Jisc licensing specialists have used OPLE to encode these agreements into ONIX-PL. An experimental web-based facility (ELCAT – Electronic Licence Comparison & Analysis Tool) was developed in 2011 to demonstrate how ONIX data could be used to enable librarians to access license details, to compare different but related licenses, and to highlight where they diverged.

Based on this experience, Jisc has recently loaded ONIX expressions of around 100 licenses (out of some 200 already encoded) into KB+, its knowledge base for the UK academic community, which provides a centrally-maintained resource of publication, subscription, license, and management information. It is hoped that it may be possible in due course to extend this to include an even wider range of publisher licenses.

Jisc has made its license encodings available to a number of library management system suppliers, including ProQuest, OCLC, and Ex Libris. The KB+ team is also working with the Kuali OLE partners to support the development of GOKb, which, it is hoped, will in due course be able to include Jisc's ONIX-PL encodings as part of its online knowledge base.

Chicken or egg?

It is characteristic of standards for communication between different parties in a business relationship that they suffer initially from a classic chicken-or-egg problem. If I am a potential source, I want to know that there are enough willing receivers to make it worth my while to adopt the standard. If I am a potential receiver, I want to know that there will be enough standardized sources which I can use.

EDItEUR experienced this in the early years of the development of ONIX for Books—now a hugely successful standard that has been adopted by the book industry across the world from North America through Western Europe to the Far East and Australia.

ONIX-PL has not yet fully emerged from this stage, although there has been encouraging progress in some parts of the academic library community.

Implementation progress

Most notably, ONIX-PL has been wholeheartedly adopted by Jisc Collections (see sidebar). The Kuali OLE development team have taken ONIX-PL as one of the inputs to the design of their licensing model, and along the way have contributed to recent extensions to the ONIX Dictionary. The developers of GOKb, also closely associated with Kuali OLE, are starting to add ONIX-PL encodings to the resources available in the GOKb knowledge base.

For understandable reasons, although several library management system suppliers have long indicated their readiness in principle to support ONIX-PL, it has needed the availability of a suitable corpus of encoding—now provided by Jisc Collections—for them to start making this a reality.

Meanwhile, during 2013 and 2014, with funding from the Mellon Foundation and in cooperation with EDItEUR, NISO has been pursuing an initiative to encode a number of license templates from US and international academic publishers. The aim is to create a corpus of ONIX-PL encodings that can be offered, primarily through the GOKb website and with the endorsement of the publishers concerned, as an openly available starter resource for downloading into library management systems.

The results to date have been only modest. One of the problems has been that—with notable exceptions—it has proved more difficult than expected to involve publishers in the kind of discussions that are needed to clarify license wording and to get buy-in for the finished ONIX expression. This is not to be seen as a criticism, but

it is something that is probably a fact of life. Licensing in most publishing companies is part of a busy sales environment, which may not be well suited to help with the analysis needed for license encoding.

Efforts are continuing, however, and NISO has begun to publish, through GOKb, the first of the encodings created as part of this initiative.

What next?

Experience to date shows very strongly that the drive to create and share license encodings and to put them to use in library management systems must come from the library side—logically enough, since it is the libraries that will be the main beneficiaries. Jisc Collections has been able to show the way for two important reasons: it has a large body of licenses that are substantially derived from its own model agreements, and it represents a community of academic institutions that carries weight with both publishers and library system providers. Perhaps library consortia in the US or elsewhere may be able to play a similar role in extending ONIX-PL usage.

The next two years will probably be crucial to determining whether, and how, ONIX-PL can become an accepted part of the standards infrastructure supporting the management and use of electronic resources in libraries. The problems of electronic resource management that were recognized when EDItEUR and NISO came together on this and other initiatives have not gone away. It is EDItEUR's hope and intention that ONIX-PL will become part of the solution.

For those interested in discovering more about ONIX-PL, the materials available on the EDItEUR website include not only technical documentation and OPLE software, but also some worked and annotated examples, including encodings of a Creative Commons license, NISO's SERU Shared Electronic Resource Understanding, and the May 2008 version of the LIBLICENSE Model Licensing Agreement. (At time of writing, the EDItEUR website was in the process of updating to reference the December 4, 2014 revision of the LIBLICENSE Model Agreement.)

EDItEUR welcomes enquiries about ONIX-PL, which can be addressed to info@editeur.org.

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Digital Library Federation's Electronic Resource Management Initiative (ERMI)
http://old.diglib.org/standards/dlf-erm02.htm

EDItEUR
http://www.editeur.org

GOKb
http://gokb.org/

Jisc Collections
http://www.jisc-collections.ac.uk/

Jisc ELCAT – Electronic Licence Comparison & Analysis Tool
http://www.jisc-collections.ac.uk/news/elcat-beta/

Kuali OLE
http://www.kuali.org/ole

KB+
http://www.kbplus.ac.uk/kbplus/

LIBLICENSE Model License Agreement
http://liblicense.crl.edu/licensing-information/model-license/

NISO/EDItEUR Joint Working Party for Serials
http://www.niso.org/workrooms/se

NISO ONIX-PL Encodings Project
http://www.niso.org/workrooms/onixpl-encoding/

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http://www.niso.org/workrooms/seru

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ONIX-PL Editor (OPLE) software
http://www.editeur.org/22/OPLE-Software/

RELEVANT
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