



International Federation of
Library Associations and Institutions

Key Issues for E-Resource Collection Development: A Guide for Libraries

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Introduction

E-resources represent an increasingly important component of the collection-building activities of libraries. The guide concentrates mainly on academic and research library purposes, but nonetheless will be of high value to many types of libraries. “Electronic resources” refer to those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile device. They may either be accessed remotely via the Internet or locally. Some of the most frequently encountered types are:

- E-journals
- E-books
- Full-text (aggregated) databases
- Indexing and abstracting databases
- Reference databases (biographies, dictionaries, directories, encyclopaedias, etc.)
- Numeric and statistical databases
- E-images
- E-audio/visual resources

This *Guide* focuses exclusively on e-resources whether acquired via purchase or license, free from the web, born digital or multiple format materials (e.g., CD-ROM combined with a book). E-resources present a number of challenges not encountered with the selection and acquisition of traditional analogue materials and it is advisable for the library to develop clear policies and processes for the selection and management of such resources. These will provide clarity to staff and ensure that e-resources within the library are developed with due consideration of cost, technical feasibility, licensing, access and preservation requirements, and constraints.

Purpose

The purpose of this *Guide* is to help develop an awareness of the key issues that every library will need to consider and address in developing an e-portfolio. The *Guide* is not intended to be exhaustive, but is written to provide a reasonable and informed introduction to the wide range of issues presented by e-resources.

A guide that addresses an evolving subject area, such as e-resources, requires updates. Thus, updates to this *Guide* at appropriate intervals, as determined by the Standing Committee of the IFLA Acquisition and Collection Development Section, will replace the previous edition on The IFLA website. The current document is simply a snapshot of best practices at this point in time.

History

The Acquisition and Collection Development Section was established in 1996, with the name being changed from Acquisition and Exchanges Section after the Istanbul Conference in 1995. At the Standing Committee's Mid-Term meeting in Bologna, February 2005, the Committee acknowledged the need to develop a publication, originally envisioned as a handbook, on e-resources in libraries. Further discussions since the idea was originally raised have evolved into the notion of creating a more practically-oriented guide for librarians and administrators. This version of the *Guide* is the result of numerous meetings held and presentations made in recent years.

Scope

This document is intended for use by libraries around the world regardless of experience in dealing with e-resources and regardless of service orientation (e.g., academic, public).

This document is arranged in four broad sections, each focusing on a key aspect or critical sub-aspect of the e-resource process in libraries: collection development, selection and evaluation, licensing, and review/renewals. There is an appendix providing a definition of terms which appears within this document, as well as a list of resources.

This document does not cover acquisition, delivery and access management, promotion of resources, reading devices, or user training and support. As a next step the Standing Committee wishes to examine the possibility of producing and publishing a separate guide covering these aspects of e-resource management within libraries. Selection of content for digitisation from the library's own collection is also not considered within this document.

Authors

The authors of this guide are Ole Gunnar Evensen, Julia Gelfand, Sharon Johnson, Glenda Lammers, Lynn Sipe and Nadia Zilper, in consultation with IFLA's Acquisition and Collection Development Section, including Jérôme Fronty, Joseph Hafner, Judy Mansfield, Ann Okerson, Regine Schmolling and others on the committee. We thank Sharon Johnson for her editing of many drafts of the work in preparation for publishing. Thanks to Ann Okerson for compiling the comments of the IFLA Board, and thanks

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1.0 Collection policy statement (for internal use by staff)

While traditional collection development criteria, such as subject, level, and target audience apply to the selection of most e-resources, the management of the electronic format is more complex and, as such, it is good practice to develop a supplementary policy which addresses specific format related issues. Such a policy should be used in conjunction with the more traditional collection development policy and not in isolation.

The policy should provide guidance to assist selectors or acquisition librarians in establishing the library's expectations and preferences in relation to:

- **Technical feasibility** - including, but not limited to:
 - a) Availability, e.g., remote access, stand-alone access.
 - b) Authentication, e.g., IP [Internet Protocol] filtering or login password.
 - c) Hardware and software compatibility and capability.
 - d) Storage and maintenance, e.g., remote hosting v. local hosting.
 - e) Platforms which facilitate access to e-resources.
- **Functionality and reliability** – including but not limited to:
 - a) Search and retrieval functionality, e.g., truncation, browsing, search history, transliteration.
 - b) Exporting and downloading, e.g., printing, e-mail, downloading to a machine, and downloading to an electronic device.
 - c) Sorting and ranking abilities for database results. For example: author, title, date, relevancy, facets, etc.
 - d) Interface, e.g., system intuitiveness, navigation, help and tutorials.
 - e) Integration.
 - f) Reliability and availability, e.g., response times, 24/7 access.
- **Vendor support** – including but not limited to:
 - a) User training and support.
 - b) Trials and product demonstrations.
 - c) Technical support and system notification process.
 - d) Statistical reporting.
 - e) Customization, e.g., branding.
 - f) Provision of bibliographic data, e.g., MARC records.
 - g) Data security and archiving policies.
- **Supply** – including but not limited to:
 - a) Purchase model, e.g., purchase, subscribe, pay per view, rental.

- b) Pricing models, e.g., selective v. big deal.
 - c) Access options, i.e. single user, multiple users.
 - d) Archiving and post termination rights.
 - e) Maintenance fees.
 - f) Cancellation rights.
- **Licensing** – including but not limited to:
 - a) Model/Standard license.
 - b) Governing laws.
 - c) Liability for unauthorized use.
 - d) Definition of authorized users.
 - e) Definition of authorized sites.
 - f) Fair Dealing (or “Fair Use”) Provision.
 - g) Termination.
 - h) Refunds.
 - i) Period of agreement.
 - j) Compliance with the governing laws of the library’s or consortium’s legal jurisdiction (province, state, country).
 - k) Language of the license.

These issues are explored in greater detail in Section 2 – *Selection and evaluation of e-resources* and Section 3 – *Licensing considerations for e-resources*

The policy should also provide guidance to assist selectors on format preference when faced with the choice of content available in both print and electronic formats. Considerations relating to format preference, including decisions on de-duplication (i.e. where titles are already acquired in multiple formats), may include, but is not limited to, the following:

- **Currency** – e-resources with print equivalents should not lag behind their print counterparts.
- **Value for money** – the e-resource should provide sufficient added value over the print equivalent or other analog formats (e.g., increased functionality, increased accessibility).
- **Accuracy and completeness** – the e-resource should reflect the identical or increased content as compared with the print equivalent.
- **Duplication** – duplication of e-resources with equivalent analog formats may be considered if the electronic publication is not archived and retention is expected; if the cost of duplication is minimal, and multiple formats best meet the needs of different users in terms of access and convenience.

Finally the policy should also provide clear guidance on cycles of review and de-selection policies for e-resources, where additional criteria related specifically to format, such as obsolescence, platform reliability, etc., may apply.

The formulation of an e-resources collection development policy should help ensure consistency of approach; that e-resources acquired are appropriate; and that due consideration is given to the full cost (immediate and ongoing).

2.0 Selection and evaluation of e-resources

For analog library materials, the selector or acquisition librarian makes the decision to acquire an item with only limited consultation with other departments following established policies and guidelines. E-resources present a number of hurdles not encountered with traditional library materials. In addition to the criteria that apply to analog materials, electronic publications raise complex issues around licensing, access, networking, pricing, ownership, and rapidly changing technology and standards. The selector cannot make a decision to acquire an e-resource in isolation and must liaise closely with other departments in the library and beyond to evaluate the suitability of a resource prior to the decision to acquire. Typically this will involve consultation with staff responsible for technical systems and services, acquisitions, resource discovery (cataloguing and access), contracts and licensing, and service delivery.

To ensure consistency of approach, it is good practice to establish clear guidelines and processes for the selection of e-resources. These might include developing a checklist for selection and evaluation; establishing clear roles and lines of responsibility and consultation; and the establishment of an e-resource evaluation panel, which could be composed of a group of e-resource stakeholders from various departments within the institution.

To involve users in collection development the library may consider ways in which to receive their input. This could include feedback on potential new resources, as well as feedback on existing resources. The library should also inform users about new e-resource purchases and the improvement of current e-resources.

To establish if an e-resource is appropriate for the library's collection and to help determine the true and hidden cost implications of acquisition, storage, maintenance, preservation and other issues, detailed information regarding the item is required. This information needs to be reviewed against the library's e-resource collection development policy (see Section 1). The type of information the library will find useful to collect and consider is detailed in Sections 2.1-2.5 below. In some instances, libraries may find it helpful to develop an e-resource selection and evaluation checklist with a detailed set of questions the selector must answer as part of the selection and evaluation process. Such a checklist might include specific rules regarding prioritisation of platforms or providers to provide additional guidance for selectors for e resources which might be available on multiple platforms via different providers.

2.1 Content

Initially e-resources need to be reviewed and evaluated for selection from a content perspective against the same policies, guidelines and criteria that apply to print resources. Typically such criteria might state that the resource should:

- Support the main research aims and goals of the organization.
- Complement or add depth or breadth to the existing collection supported by subject profiles.
- Be of a certain quality, e.g., peer reviewed, or have a reputable producer.
- Support the requirements of the/a key audience.
- Generate an acceptable level of use.

Once the main selection criteria have been met, then a number of additional content criteria, unique to e-resources, need to be considered. These criteria are particularly important in helping to determine the preferred format in which to acquire an item where there is both a print and electronic equivalent. These include the consistency of the electronic publication with any print equivalent, the currency of the online content and frequency of updates, the availability of back issues, archiving, and the added value of the e-resource over other formats, and pricing.

2.2 Technical requirements

E-resources also present a number of technical issues that need to be considered to ensure resources are compatible with existing library hardware and software and that the library has the capability to provide and effectively maintain access to resources on an ongoing and cost effective basis. Evaluation should be in consultation with the appropriate technical staff and should include consideration of the following:

- **Method of Access** – What methods of access are available (e.g., stand-alone, remote via Web, local Web mount or hosting)? Access to remote hosts via Web is often preferable because it provides additional benefits such as faster updating, optimum access, reduced burden in terms of storage, preservation and maintenance.
- **Authentication** – What methods of authentication are available (e.g., IP filtering, login and password)? Access via IP filtering is often preferable because it typically provides simultaneous access for multiple users. IP-address recognition can also provide access to users via a proxy server, allowing authorized library users to access content from outside the physical confines of the library is an important feature. In such circumstances, a commercial database “sees” and recognizes the library IP address, not the user’s home or any other IP addresses,

and grants this user access. It should, however, be noted that access via proxy server sometimes is negotiated in the license agreement (see Section 3.1).

Access via login and password may be less preferred, as it presents a number of challenges around dissemination and control of passwords, particularly when a library serves a large user base. If a vendor insists on password-based access, a disclaimer in the license agreement must be made about limitations of the library's ability to control distribution of this password to non-affiliates.

Compatibility – The resource should be compatible across a range of platforms and, where local installation and maintenance are required, should be compatible with existing hardware and software supported by the library. The selector should also determine if the e-resource requires any special hardware, software, multimedia, and/or audio capabilities. Where this is the case, consideration needs to be given to the additional cost of acquiring, installing and supporting the appropriate software or multimedia components. Consultation with staff responsible for reference services may be needed to determine if software or add-on components are required for all or only some of the public PCs before making a selection decision.

Browsers: The issue of web browsers is very important. Some e-resources only work with certain web browsers or certain versions of web browsers. Occasionally, libraries might have older versions of browsers installed on public PCs, while the databases are designed for the newer versions. Once more, the selector has to negotiate with the technical systems/IT people. Some of the databases (particularly those with text in non-Roman script) are designed to work only with the latest browser version. UNICODE compliance by browsers and local systems is crucial for adding electronic materials in non-Roman script to the library collection. However, if a selector's institution does not support a particular browser, and is not UNICODE compliant and the selector makes the decision to acquire it, the product will be useless. The selector has to make sure that all the requirements are met before making the acquisition decision. The required browser version, and additional keyboard drivers (if necessary) must be installed on terminals in the public service areas. The library must inform its users about browser requirements, all other requirements, and location of access points.

Content format: Determination of which formats database files use is important: HTML, SGML, XML, PDF, epub, etc and media formats such as JPEG, MPEG etc. Each of these formats has positive and negative features. HTML is fine for shorter documents, but if one has to deal with a long document (over 1,000 K), XML can be better for managing large and complex documents giving greater consistency and information integrity, improved precision around information retrieval, flexibility for information reuse, and increased longevity of information. SGML files, however, require Panorama or Multidoc Pro reader installations on every public terminal or every PC from which SGML files are accessed. XML is the most desirable format as it is capable of dealing with large documents and does not require a reader to be installed on a PC. If a serial, for example, has a

lot of pictorial material or if it is an art publication, one wants these pictures to be preserved. Some of these types of publications are in PDF format. With this format however, one loses global searching capabilities, it takes a long time to download large files, and a different method of navigation is required. In addition, users must have the Adobe Acrobat reader installed on their PCs. Databases of AV contents require different players or programs to be installed and should allow plug-ins and active controls as well.

2.3 Functionality and reliability

In assessing the suitability of a resource in terms of functionality and reliability issues, the library may find it useful to evaluate the following:

- **Interface** – The e-resource interface should be user-friendly, easy to navigate and intuitive. User-friendly resources often include such features as online tutorials, introductory screens, navigation aids and context-sensitive help and personalisation options such as subscribing to feeds/e-mail alerts, save search history etc. The screen design should be easy to read and follow and consideration should be given to the similarity of the resource interface to others already in use and with which users are already. Multi-lingual interfaces are desirable for libraries with a multi-lingual community.
- **Search and retrieval** – The resource should offer a powerful, flexible and user-friendly search engine. Common features might include keyword and Boolean searching, full-text searching, truncation, browsing (index and title), relevancy ranking, thesaurus and search history. Consideration needs to be given to how the search engine works and how issues such as transliteration and diacritics are managed. These are explored in more detail below.

Search strategies: Particular consideration should be given to how the search engine works. This knowledge will be helpful in determining appropriate search strategies-particularly important when texts are in languages requiring the use of cases, declensional endings, suffixes, and prefixes. It is important in such cases to understand whether searching is set up to retrieve exactly the set of characters the user has entered, or if it will also retrieve all words with the same root and whether options are available to limit or expand searching.

Transliteration: Sometimes texts in databases are in Roman script, inhibiting the searching capabilities for subject and resources from other countries that use non-Roman scripts. For example, an article that deals with a country that uses the Cyrillic alphabet may not be found based on a Roman script search query. The selector needs to know what transliteration system is used for articles written in English or any other Western European languages for personal, corporate,

and geographic names originating in languages that do not use Roman script. There is a big difference, for example, between the spelling of the name of the former Russian president - Yeltsin and El'tsin or Eltsin; each spelling could result in different search results.

Diacritics: Many languages use diacritics. The selector needs to check whether diacritical marks affect the outcome of searching. For example, to conduct searching in the Czech newspaper *Lidové noviny*, the user must have an add-on Czech keyboard driver installed on his or her computer. In the case of *Lidové noviny*, searching is impossible without diacritics.

- **Exporting and downloading** – A range of export options such as e-mail, printing, and downloading (to a machine or a Personal Digital Assistant) should be supported. Provision of citation downloads to citation management software (such as Endnote, Mendley, BibTex etc.) should be available. Consideration needs to be given to the ease of printing or downloading and to any restrictions or additional fees imposed.
- **Response, reliability and availability** – The system should be available at all hours of the day every day (e.g., 24 hours a day / 7 days a week). It should be stable with limited evidence of unscheduled downtime. The system should be technologically up-to-date and have the appropriate capacity and network infrastructure to support multiple users and optimum response times. Expectations around system availability, maintenance and support should be reflected within the licence agreement.
- **Integration** – The system should support integration with other resources via reference and full-text linking. The content should be indexed in discovery tools to facilitate effective discovery and delivery of local and remote resources.

2.4 Vendor support

Consideration needs to be given to how well established and reliable an e-resource vendor is and to the range of technical and user support services they are able to provide. It is useful to determine the range of vendor support services available, including:

- **Trial evaluation and product demonstration** – It is preferable for the resource to be available for trial and for the vendor to provide, if required, product demonstrations. Trials are particularly useful in supporting the evaluation process of a product in terms of technical issues and functionality and reliability.

- **User training and support** – If required, the vendor should be willing to provide initial and ongoing training, including the provision of documentation or online manuals, in the use of the product. This will help reduce the burden of training and development of documentation that might otherwise fall on library staff, and ensure that products are used effectively.
- **Technical/customer support and system notification processes** – The vendor should be willing to agree to service levels in terms of system availability and response times for resolution of technical issues. The vendor should also have an advance system notification process in place to effectively manage and communicate planned downtime, and content and platform changes. Support provided should be timely, professional, and effective.
- **Customization** – Consideration needs to be given to the options available from the vendor for customization and branding of the product. This is often helpful in giving products used within the library a similar look and feel.
- **Data archiving**– Consideration should be given to how frequently system data is backed up and what will happen to the resource and library patrons’ ability to access it if the provider declares bankruptcy, decides to liquidate, or otherwise ceases or transfers publication. If backup data is offered in CD-ROM or DVD format, consideration needs to be given to the library’s capacity to manage archiving and access in the proffered format and to the features that might be lost compared to the original resource.

It is important to understand the resource provider’s archiving policy. Unlike print publications, electronic publications may not be maintained on a permanent basis. Consideration should be given to whether the provider is LOCKSS compliant, or compatible with national key initiatives like LuKII (Germany), Portico or other similar types of archival products. Alternatively if the archiving solution is open-source, product compliant issues related to preservation should be investigated. Consideration should also be given to the reliability of any third party archival solution in place. It is important to understand the content and form of any archive and any associated fees and possible restrictions on copying and archiving of files. Provision for migrating files to new formats/platforms to keep up with technological advances is also worth considering. It is also important to understand the impact cancellation or termination will have on perpetual access to previously subscribed content.

- **Bibliographic data provision** –If required, the vendor should be able to provide permanent URLs and bibliographic data in the library’s preferred file format. These must adhere to appropriate quality standards, reducing the burden on the library in setting up links or creating catalogue records for access.

Statistical reporting – The availability of quality statistical data is important in understanding how well resources are used and how cost effective they are

compared to other products. This is particularly important in supporting renewal and de-selection decisions. The vendor should provide quality statistical reporting following recognized standards such as ICOLC (International Coalition of Library Consortia)'s *Guidelines for Statistical Measures of Usage of Web-Based Information Resources*, COUNTER (Counting Online Usage of Networked E-resources)'s *Code of Practice and/or SUSHI (Standard Usage Statistics Harvesting Initiative.)*

2.5 Supply

As there is with print materials, there is no standard model for the packaging and pricing of electronic publications. It is important to consider the range of purchase/pricing models available and determine which one best meets the needs of the library in terms of access, archival rights, and value for money.

- **Purchase models and pricing** – Selectors should carefully review the pricing models available for the resource under consideration as there is no standard pricing model for e-resources. Pricing models are often based on a number of criteria and variables such as the size of the user population and the number of simultaneous users. One important pricing model for subscription- based electronic journals, packages of e-books, databases, and, other similar resources is based on FTE (full-time equivalent).

It is recommended that where print copies are available, libraries should compare the cost of the electronic copy against that of the print version. If the price of the electronic version is higher than that of the print version, then the library should consider the additional benefits the electronic copy would bring over the print e.g, savings in physical storage, increased availability, improved access or functionality. The selectors should ensure that such benefits are worth any additional costs incurred over purchase of the print version. Purchase/pricing models may include, but are not limited to:

- Separate pricing for content and access. It is preferable in the case of the subscription fee for content that this includes permanent rights to use the information that has been paid for, should the resource be cancelled in the future. Having separate fees provides clarity to ongoing annual costs to continue to access content for which the library has previously paid. The anticipated annual price increase of any access/hosting fee should be determined.
- Combined model – A one-off archive fee and an annual access fee for more current content.
- Pay-per-use pricing.

- Rental models.
 - Consortia pricing.
 - Print plus electronic – Where the publisher requires the purchase of both formats. Where possible the choice to acquire in both formats should be that of the purchasing library and not a condition of purchase.
 - Packaged pricing - Requiring purchase of a specific group of titles (usually subject based).
 - Big deal – Where all of a given publisher's content is made available for a price and not just the content the library has actively selected.
 - Introductory pricing - Where an introductory price is offered consideration needs to be given to future affordability if the price increases substantially after the introductory period
 - Multi-year deals with fixed price caps.
 - Patron-Driven Acquisition pricing models e.g., purchase based on usage triggers, including number of views or length of use of the items.
- **Number of users and sites** – The number of users and sites is likely to have an impact on pricing. The number of users required in a multi-user licence should be based on anticipated demand. Numbers based on FTE should be based on the size on the actual user group and not the total user population. This is particularly important in selecting specialised resources with a specific and limited target audience.
 - **Backfiles, archiving and post termination rights** - The purchasing or leasing of electronic data should include provision for perpetual access to those data. Following any termination of the license agreement, the institution's perpetual electronic access to the previously subscribed content should be guaranteed. In such cases, the library needs to gather information about likely ongoing access and maintenance costs of content acquired and archived to date.
 - **Cancellation rights** – Consideration needs to be given to the terms and conditions around cancellation. This might be cancelling a bundled deal and moving to selected content or moving to outright cancellation or cancellation of linked print products. Models that impose 'no print cancellation' clauses or impose limits on the number of titles or financial penalties should be avoided.
 - **Invoicing** – Separate invoicing for individual members should be available where purchase is as part of a consortium. Pricing should be transparent, with content and access fees clearly indicated as separate costs.
 - **Renewals** – The vendor should notify the library at least 2 months in advance prior to the subscription renewal date. Where the renewal is as part of a consortium subscription, the consortium should seek confirmation from the individual library prior to renewal.

Regardless of the pricing model, consideration needs to be given to the handling of backfiles, the duration of the agreement or subscription, the size and type of institution and the number of simultaneous user and authorised sites, as each of these are likely to have an impact on the price of the resource. Selectors should be prepared to negotiate with suppliers on pricing. Where a number of resources are acquired from the same vendor, this should be used as leverage to secure improved rates.

3.0 Licensing considerations for e-resources

Unlike print publications, e-resources are not purchased outright and usually require a license agreement to be in place. Prior to purchase, the license must be reviewed and negotiated to inform and support the evaluation process, and to ensure that it reflects the selector's expectation. It is preferable to obtain, where possible, a standard model license agreement that describes the rights of the library in easy-to-understand and explicit language. In some countries such the United States, new approaches (e.g., SERU – A Shared E-resource Understanding, which relies on existing U.S. copyright Law and a mutual agreement between resource provider and library to operate within a framework of shared understanding and good faith) are emerging as an alternative to a license agreement.

3.1 Access concerns

It is recommended practice that the following points governing access by a library's patrons must be included in any licensing agreement which a library, its governing institution, or its consortium signs.

- **Authorized Users and Sites** - 'Authorized Users' and 'Authorized Sites' should be defined as broadly as possible.

'Authorized users' are all persons with a current, authenticated affiliation with the subscribing institution(s). This could include full- and part-time students and employees (faculty, staff, affiliated and visiting researchers and independent contractors). Visitors who have permission to use the institution's publicly available computers should have access to the licensed resource. This is commonly known as 'walk-in use'.

'Authorized sites' should include all sites including satellite facilities in different geographic locations. Authorized users should also have access to the licensed resource from home offices or any other remote location, through the use of a proxy server or other IP-authenticated protocol as

provided by the subscribing institution. This is commonly referred to as 'remote use'.

- **Method of access** - Access should be permitted via IP authentication for the entire institution(s), including simultaneous access for multiple users, in different geographic locations, and sites. Such access should be provided without requiring the use of a password or other code.
- **Archiving policy and perpetual access** - The resource provider should present a clearly articulated archiving policy for the information being licensed. The resource provider should have an arrangement with LOCKSS, Portico, or other similar types of archival products, or with an open source compliant archiving system.

The provider should grant access to the licensed content of the resource for the mutually agreed time period. The purchasing or leasing of electronic data should include provision for perpetual access to that data. Following any termination of the license agreement, the institution's perpetual electronic access to the previously subscribed content should be guaranteed.

- **Institutional archives/self-archiving** –The resource provider should allow an individual institution or author to upload work to their Institutional Repository either in pre- or post-print format. Preferably, the resource provider should permit and provide the post-print version of the work which appears in the resource provider's publications.

3.2 Use of the electronic information resource

The license should permit fair use (fair dealing, etc.) of all information for educational, instructional non-commercial and research purposes. The following considerations regarding fair use, user statistics and liability for unauthorised use should be addressed in any licensing agreement which a library, its governing institution, or its consortium signs:

- **Interlibrary loan (ILL)** - Interlibrary loan should always be permitted. At a minimum, FAX or postal dispatch of photocopies of printed electronic articles should be allowed. Use of secure ILL document transmission systems, such as Ariel or other similar protocols, for lending to other libraries should be allowed.
- **Pay-per-view** – Service to access articles which are not available in the library's print or online collections. It should be possible for the library to

purchase the article and send it to the patron via email. Pay-per-view is not a replacement for ILL.

- **Viewing, downloading and printing** - Authorized users should be allowed to view and print copies and to download electronic copies of single articles from the e-resource for private use, in line with 'fair use' (fair dealing, etc.) provision in the applicable governing copyright law.
- **Course packages** - Use of the information content from the e-resource should be permitted in course packs and other material of an educational nature, as compiled for a restricted set of authorized users.
- **Course reserves** - Electronic copies of articles or a discrete portion of the information content from the e-resource should be permitted to be included in a library's course reserves (print or digital), as requested by an instructor for a restricted set of authorized users in conjunction with specific courses.
- **User statistics** - The information provider should provide statistics for each library's use directly to the library participating individually or as a member of a consortium. In the case of a consortium, aggregated statistics for the consortium should be delivered to the consortium's administration.
- **Liability for unauthorized use** – The license should reflect realistic expectations regarding the library's ability to monitor and trace unauthorized use.
- **Privacy and Confidentiality of User information** – The license should ensure the privacy and confidentiality of the users' information when accessing the e-resource, including information that is collected from users to create a personal account on the resource.

3.3 Vendor support and technical considerations

The following vendor support and technical considerations should be addressed in any licensing agreement which a library, its governing institution, or its consortium signs:

- **Linking service** - The resource provider should inform the library if the content in the resource is available via a link server or link resolver. Information should also be provided on how the standard Open URL is supported. This applies to both linking to the content in the resource via the Open URL and linking from the resource content to a link server.

The following considerations apply to resources not covered by linking services or when this approach is preferred by the library:

- **Content consistency** - The resource provider should be obliged to disclose if the information content of the offer in question differs from what is available via the linking service.
- **Bibliographic data** - The resource provider should provide an electronic file with bibliographic information for input to the library's OPAC. This file shall describe the content of the resource (cataloguing data) and shall be delivered in a correct format. The library defines the demanded data quality of the bibliographic description and the required file format.
- **Commencement date** - The license period should not commence before the resource provider has provided catalogue data, as specified by the library, in correct format. Unacceptable data quality may entitle the library to a reduced price for the information content.
- **System integration** - The resource provider should inform the library as to what extent it is possible to link to holdings information and ordering functionality in the library's online information system.
- **Technical support** - The resource provider should provide contact information which the library can use for technical support.
- **Notifications process** - The resource provider should routinely inform the library of significant changes in content of the resource. Significant content changes include notification of new, ceased or changed titles or changes in the number of volumes available. Such information can be submitted via SFX updates (or via similar linking services) or by means of online mailings. If such information is not available via SFX or a similar linking service, changes in resource content should be reported in an electronic file in a format specified by the library.
- **Customer support** - The resource provider should provide sufficient customer support (in accordance with the institution's or consortium's specification) to the library or to each participating member library, if in a consortial agreement.
- **Web browser accessibility** - The information resource should be accessible via use of a standard web browser (e.g., Chrome, Internet Explorer, Netscape, Mozilla, Opera, Safari, etc.) and with capabilities for standard document formats such as HTML or PDF. It is recommended that the resource be readily accessible and usable by individuals with disabilities and comply with relevant disability legislation.

- **Documentation** - The resource provider should provide online help screens and/or online user documentation manuals.
- **Guaranteed up time** - The information provider should guarantee up time of more than 99% to the resource during the term of the license agreement. Significant interruptions to access that can be documented by the library or consortium should entitle the licensing agency to reduced licensing fees or to an extension of the license agreement commensurate to the amount of excessive down time.
- **Compatibility with library systems** - The information resource should be able to be indexed or catalogued in library online systems, including discovery tools and other finding tools.
- **Linking to the e-resources** - The resource provider should provide stable links to the information in the resource. Methods can include a permanent direct link to a specific resource, and one common example is using DOI (Digital Object Identifier).

3.4 Flexibility and enhancements

The following considerations should be addressed in any licensing agreement which a library, its governing institution, or its consortium signs:

- **Cancellations** – The selector needs to ensure that there is no non-cancellation clause and must be clear about the period of notice that must be given to cancel or terminate a subscription or agreement and any restrictions around how many payments must be made before cancellation or termination can be undertaken.

The following apply where print and electronic versions are available:

- **Cancellations** - The information provider should allow cancellation of a library's or a consortium's existing print subscriptions to facilitate migration to e-only versions of journals or other information resources.
- **Value for money** – The price of the electronic version should be the same or less than the print equivalent. Any increase in price should be reflected in an increase in functionality and accessibility.
- **Consistency with print equivalent** - The electronic version of an information resource should have the same or better visual quality as the print original, including graphs, charts and illustrations.

- **Availability** - The electronic version of a serial e-resource should be available no later than the printed version.
- **Drop-out clause** – It should be explicitly acknowledged that withdrawal from the license agreement is possible at the start of each calendar year or of the library's or consortium's fiscal year. The library or consortium should provide sufficient advance notice, as defined in the license agreement, of any intended withdrawal or cancellation.

3.5 Legal Issues

The following legal issues should be addressed in any licensing agreement which a library, its governing institution, or its consortium signs. It is generally advisable that the library or consortium consult with its legal counsel before any major license agreements are signed, if such review is not already legally or procedurally mandated at the institutional level.

- **Terms of payment** - The library's or the consortium's payment liability should commence from the date that the access is agreed upon by the library and the resource provider and the provider has actually provided access to the information resource content in the specified format.
- **Grace period** - The resource provider shall maintain access to the library or consortium for a grace period of at least one month at the start of each license year, if the renewal payment has not been received.
- **Governing laws** - The license agreement between the resource provider and the library or consortium should not restrict any legal rights of the library or consortium according to the governing laws of the library's or consortium's legal jurisdiction (province, state, country). Disputes arising from a license agreement should be arbitrated in the library's or the consortium's legal jurisdiction (province, state, country).
- **Resource providers authority to provide access** - The licensor should guarantee that it has all necessary rights to license the resource for the purposes outlined in the agreement.
- **Language of license agreements** - The licensor should know that many international companies produce their agreements in English. If you do not have expertise in English for legal documents at your library, you should consider requesting the agreement in another language.

4.0 Review and renewal process

Given the rapidly changing nature of technology, the emergence of new offerings from information providers in terms of the pricing and packaging of content, and continued pressure on library budgets, it is essential that libraries regularly review their e-resources to ensure they continue to be relevant and provide demonstrable value for money.

Workloads in managing and co-ordinating the annual renewals process for continuing e-resources (i.e. those resources to which the library has a subscription or lease arrangement, as opposed to those it has purchased outright) should not be underestimated. Like other continuing resources, e-resources will not always have a uniform renewal date, as subscriptions or leases may run for one or more years from any particular date on the calendar. The library should ensure that as part of the license agreement, the vendor is required to provide sufficient advance notification in relation to renewals to allow for sufficient lead time to undertake an effective review of the resource. This is particularly important if the library has a large number of significant renewals due on or around the same time.

4.1 Review of usage data

Before re-evaluating resources for renewal against the selection and evaluation criteria outlined in Section 2, the library should review available usage statistics to help determine if the use of the resource, when considered alongside the associated costs, justifies retention and renewal of the resource. Usage statistics should be helpful in determining:

- a) If the resource continues to be relevant to library users.
- b) Usage trends in specific areas – Is usage increasing or decreasing as compared to previous years or in comparison to other products in a similar area.
- c) How the resource compares to other resources in terms of cost per use.
- d) If the resource continues to represent value for money.
- e) If other options for access might be more cost effective (e.g., pay per view, selected content vs. package deal).
- f) If the number of simultaneous users is set at the appropriate level.
- g) The relevance and usage of current content vs. backfile content.

However in looking at usage statistics one also needs to consider known issues which might have an impact on the reliability of the data such as:

- a) How effectively has the resource been promoted within the library?
- b) Has training and/or documentation been provided to users to support effective use of the resource?

- c) How reliable has access to the resource been over the period covered by the usage data?
- d) Are the statistics from a reliable source following recognized standards such as ICOLC (International Coalition of Library Consortia)'s *Guidelines for Statistical Measures of Usage of Web-Based Information Resources* and/or COUNTER (Counting Online Usage of Networked Electronic Resources)'s *Code of Practice*?

As important as e-resource usage statistics are, they alone are insufficient in all instances for making significant selection decisions. Coordination and interpretation of the usage data should always be done within the broader context of the library's collection development policy and practices.

4.2 Other renewal considerations

If, based on the usage and value for money considerations outlined in Section 4.1, the e-resource is worth considering for renewal, it needs to be re-evaluated against the selection and evaluation criteria outlined in Section 2 to ensure none of the criteria for selection have changed. In reviewing any continuing e-resource, consideration should be given to issues including, but not limited to:

- Changes to information provider.
- Changes in operating platform.
- Changes in access provision.
- Changes to pricing.
- Changes in access to backfiles.
- Changes to the license.
- Changes to packaging/content available.

By following established guidelines for ongoing evaluation and review against the library's e-resource collection development policy, the library should be able to ensure that library budgets continue to be spent on resources that support the mission and objectives of the institution and remain relevant and cost effective.

Appendices

GLOSSARY

Access - Applied to delivery, instructions, methods; with e-resources, ensuring the proper technological software, hardware, and internet connections, as well as providing user instructions on how to use effectively these materials, are a key part in the role of access to e-resources. D-resources can arrive in a variety of formats, such as HTML or PDF documents, as well as through various download or ILL means. Methods of access vary from in-library connections, proxy servers, link servers, and virtual access to materials.

Acquisition(s) - The collective process by which new library material is researched, approved, funded, and screened.

Annual renewals - The contract period for e-resources is typically for a one-year period, requiring renewals each year.

Archiving (related to policy) - Library-specific rules governing the retaining and storage of material, as well as subsequent requests for access to the same.

ARL - Association of Research Libraries. The ARL is an organization of the leading research libraries in North America.

ATOM - The name Atom applies to a pair of related standards. The Atom Syndication Format is an XML language used for web feeds, while the Atom Publishing Protocol (AtomPub or APP) is a simple HTTP-based protocol for creating and updating web resources

Authorized users - Any person or entity designated in a licensing agreement who has permission to access or otherwise use the digital resource that is the subject matter of a licensing agreement. May also be referred to as "Permitted User."

Backfiles - The past issues of journals; backfiles are often included as part of an e-resource's package. They may no longer be available upon termination of the current subscription to a journal. Some backfiles are purchased from different vendors than those supplying the current issues.

Bundled - Single items sold as part of a package; this is a common purchase option for e-journals or e-books from a publisher or provider.

CD-ROM - An e-resource format that contains up to 650-900MB of information on a single-sided, single-layer optical disc.

Codes of practice - A set of written rules describing how to evaluate e-resources and usage statistics; ICOLC, ARL, NISO, and JISC are some of the common standards available for evaluation.

Collection development - Term for the selection, acquisition, and analysis of materials in relation to an institution's materials needs or mission.

Collection development policy - A policy developed by a library to determine the subject areas and materials a library actively collects as resources; the policy may include details on the mission of the library and the processes of selection and de-accession.

Completeness of content - Assurance that online content represents complete, faithful, and timely replications of previous formats and if not, the Licensor will cooperate with Licensee to correct errors, omissions and remedy the situation.

Compliance with users with disabilities - A requirement that the Licensor shall make reasonable efforts to comply with legislation so that visually or hearing impaired or physically challenged users can obtain access to information content in e-resource collections; encourages ergonomic best practices.

Consortium – Any local, regional, or national cooperative association of libraries that provides for the systematic and effective coordination of their resources, in order to improve access and services to users.

Consortia – the plural form of "consortium"

Continuing - continuing access is common upon renewal of e-resource subscription.

Contract terms - The rules and restrictions governing the access and use of an e-resource; items included in the contract terms may include topics such as IP address activation, remote access, and other customization issues.

Cost per use - The cost of each use of a given e-resource; generally calculated by dividing the number of uses into the price paid for the resource. For example, this can be particularly useful in comparison of purchasing a resource as part of a contract versus the cost of individual interlibrary loan requests for specific patrons. Where the usage frequency is high, the cost per use of a licensed item decreases. Infrequent usage may merit the cost of individual ILL requests that are lower than a yearly subscription. Cost per use is also an important technique for comparing the utility of similar databases and deciding which are most worth licensing or retaining.

COUNTER compliant usage statistics (Counting Online Usage of Networked Electronic Resources) – This is a protocol that enables publishers and vendors to present ongoing usage data clearly and consistently across products and suppliers. Library-publisher contracts generally include the requirement to provide COUNTER

statistics in Microsoft Excel or as a file that can be imported into Excel spreadsheets to allow diagram and graphic creation along with the statistics.

Course packages or packs - A package of material assembled to support a particular course; materials may include handouts, slides, websites, or other materials necessary for students learning in a specific course. A fee is generally charged for course packs.

Course reserves - Electronic copies of book chapters, articles, or other library materials assembled electronically for use by students enrolled in a particular course. Students generally access or borrow materials on reserve.

Databases - A collection of data stored on a computer or server for easy access and retrieval.

Delivery (applied to models, access, resources) - The process of providing access to a resource; in libraries, delivery of materials may be done via proxy servers, link servers, ILL, or the internet in general.

Digital materials - Materials available in a digital or electronic format; examples include CD-ROM, DVD, e-journals, and websites.

Documentation - Instructions on how to use information products or the help files and other user-based information.

Download - To move an e-resource from one storage device to another, generally by the user.

Drop-out clause - The clause in a license agreement that allows the library to withdraw or cancel a subscription, typically at the beginning of the license's renewal term.

Dublin Core - The **Dublin Core** set of metadata elements provides a small and fundamental group of text elements through which most resources can be described and catalogued.

E-book - Electronic book - A book provided in a digital format for checkout or use via an Internet browser, a computer, or another electronic device like an e-book Reader.

E-journal - Electronic journal - A journal provided in a digital format for access via an Internet browser, a computer or other electronic device.

E-mail - Electronic Mail - Messages, usually text, sent from one person to another via computer; these can be sent to a large number of addresses simultaneously.

Fiscal year - The 12-month financial period in which the library manages expenses; the fiscal year can differ from the calendar year.

Full-text - The format option that will provide the full-text of a document instead of just a citation or abstract; full-text documents from electronic databases are typically available in PDF (Portable document format) or HTML (Hypertext Markup Language).

Governing institution - The institution responsible for major decisions regarding e-resources; for example, the university is the governing institution for an academic library; the consortium, for its group, is the governing institution to handle the financial and legal issues related to e-resource acquisition and access.

Governing law - The laws in the province, state, and country of an institution.

Grace period - A period of time that allows access despite the immediate receipt of payment; a one-month grace period is typical between renewal date and receipt of renewal payment.

Holdings - Materials in a library's collection.

HTML (Hypertext markup language) - This is the basic language used to create web pages.

HTTP - Hypertext Transfer Protocol – HTTP is a networking protocol for distributed, collaborative, hypermedia information systems. HTTP is the foundation of data communication for the World Wide Web.

ICOLC - International Coalition of Library Consortia - An informal organization of library consortia; the group focuses on consortia related to higher education.

ICOLC Guidelines - A set of continuously evolving guidelines produced by the International Coalition of Library Consortia. For example, these have aimed to define the content and form of statistical data regarding usage of e-resources as follows: In 1998, ICOLC prepared the document titled *Guidelines for Statistical Measures of Usage of Web-Based Indexed, Abstracted, and Full Text Resources*; and in 2006, the *Guidelines* were revised and re-issued under the title *Guidelines for Statistical Measures of Usage of Web-Based Information Resources*. The ICOLC has produced other guidelines and documents related to licensing of e-resources.

IFLA - International Federation of Library Associations and Institutions - An international library organization representing the interests of library and information services and their users.

IFLA Acquisition and Collection Development Section - The section in IFLA dedicated to discussion on the methodologies of acquiring print and e-resources.

ILL - Interlibrary Loan - The method of resource sharing by placing resource requests at another library to enable access for one's own library patron. Some license agreements and some countries allow for emailing of information to users in forms like a

PDF, for example. Other times, based on the license agreement and/or copyright laws, the information must go through processes where the document is sent to the library (for example, ARIEL or other means), but then the document is then printed before passing it along to the person who requested the document.

Information/resource provider - The general term for an individual, company or group providing an information resource; vendors are one example of an information provider.

Information resource(s) - The general term for a resource containing information; websites, raw statistical datasets, and e-books are examples of information resources.

Institutional archives – An electronic archive of materials created and hosted by the home institution.

Interface - The point where a user meets a resource; for information resources, an interface ought to be fully-functional and accessible for patrons in order to provide access to a resource.

Internet - The worldwide communication network originally developed by the U.S. Department of Defense and extended by the National Science Foundation to be a distributed system with no single point of failure.

IP- Internet Protocol - The **IP** is the principal protocol used for relaying datagrams (packets) across a telecommunications network. Responsible for routing packets across network boundaries, it is the primary protocol that establishes the Internet.

IP authentication - The method e-resource providers use to verify the access credentials of a user and confirm a library's subscription to a resource based upon the IP address of the user.

JISC - Joint Information Systems Committee – A UK Committee that supports higher education and research by providing leadership in the use of information and communications technology, as well as e-resources licensing.

Lease - A short-term contract to rent or borrow access to a resource.

Legal Counsel – A legal officer providing support and advice about Intellectual Property & other legal issues.

Legal jurisdiction - The legal governance region with the right and power to interpret and apply the law, as in "courts having jurisdiction in this district."

License or Licensing agreement - A legal agreement between parties authorizing the use of and defining the business terms for an item provided by one party and utilized by the other, which can include the cost, period of access and other issues.

License term - The defined period of time in which the license agreement remains active and enforceable.

Licensing - The act of developing and contracting a license agreement.

Licensing agent - The information provider and copyright holder for an e-resource

Link resolver - A software pointer that brings together information about a cited resource and the library's subscriptions to assist users in finding full-text copies of articles without conducting new searches in other resources; libraries often use OpenURL standard for creating link resolvers; libraries often provide a "Find Full-Text" button next to a citation as an example of a link resolver.

LOCKSS ("Lots of Copies Keeps Stuff Safe") - A storage method that focuses on redundancy in information backup by providing multiple storage servers. **The LOCKSS Program, based at Stanford University Libraries, provides libraries and publishers with award-winning, low-cost, open source digital preservation tools to preserve and provide access to persistent and authoritative digital content.**

METS - Metadata Encoding and Transmission Standard - a metadata standard for encoding descriptive, administrative, and structural metadata regarding objects within a digital library, expressed using the XML schema language of the World Wide Web Consortium. The standard is maintained in the Network Development and MARC Standards Office of the Library of Congress, and is being developed as an initiative of the Digital Library Federation.

Multimedia - The combination of several different communications techniques such as sound, text, still images, film, etc.

NISO – National Information Standards Organization – The NISO is a United States non-profit standards organization that develops, maintains and publishes technical standards related to publishing, bibliographic and library applications.

On-going (Continual or perpetual) - refers to the access period for an e-resource.

Open URL - A URL that contains metadata information to help connect users with citation or indexed information to target information, such as a full-text article.

Package - A bundle or selection of multiple titles either by subject grouping or individual titles from a publisher or provider.

Password A confidential string of characters that allows a defined user group access to a computer, interface, or system.

Patron-Driven acquisition - A plan where users can select from an inventory of e-books loaded into a public catalogue based on predefined types of materials selected

by the library. A library acquires the selected items for its permanent holdings, after an agreed upon number of accesses, a certain length of time something is used or other agreed upon methods.

Pay-per-view - The per-transaction method of purchasing access to material at the moment of usage, instead of part of a prepaid subscription.

PDF - Portable document format; this file format requires a PDF reader such as Adobe Acrobat, Adobe Reader, and Preview.

Perpetual access - The concept of maintaining enduring access to a resource, even if the library has canceled its subscription or the producer has ceased to maintain it.

Portico – A growing digital preservation and electronic archiving service of the not-for-profit entity Ithaka.

Post-print - A copy of the final electronic draft of a research article, as published.

Pre-print - A draft of an electronic research article prior to official publication in a journal.

Private use - The use of a publication by an individual for the purpose of personal research.

Proxy server - A server that acts as a filter for client information requests, in which access data are stored on a separate server. Proxy servers are often used to authenticate off-site users prior to granting access to licensed e-resources.

Publisher(s) - An individual or company that publishes a resource.

Purchase – The act of buying or subscribing to an item.

RDF - The Resource Description Framework is a family of World Wide Web Consortium specifications originally designed as a metadata data model. It has come to be used as a general method for conceptual description or modeling of information that is implemented in web resources, using a variety of syntax formats.

Remote access - The access and use of library databases outside of the physical library via Proxy servers or other web-based authentication.

Renewal - The agreement to continue or extend a contract.

RSS - originally RDF Site Summary, often dubbed Really Simple Syndication – A family of web feed formats used to publish frequently updated works such as blog entries, news headlines etc. in a standardized format. An RSS document includes full or summarized text, plus metadata such as publishing dates and authorship.

Self-archiving - The web posting or repository depositing of an author's work into the author's own home institution's repository; for example, a professor depositing a copy of his or her published article into the university's repository.

Selection - The act of choosing; for e-resources, review of collection development policies, institutional standards, and patrons needs are some of the elements that affect e-resource selection.

Selector(s) - The term used to describe the individual or individuals responsible for selecting materials for a library or consortium's collection.

Server - A computer with a large amount of storage space and linked to other computers either through an internal computer network or the Internet.

SFX - An OpenURL link resolver common in libraries.

SGML - Standard Generalized Markup Language - A system for defining markup languages by defining the possible characters, the syntax, and the document type.

Stable access - Access to a resource without network outages or failures.

Stand alone - A resource that is independent and self-contained.

Subscribing institution – As differentiated from an individual owner or subscriber. When an organization or library subscribes to content, the terms will be different, especially for methods and terms of access.

Subscription - Payment made to gain access to a resource or a service.

SUSHI - Standard Usage Statistics Harvesting Initiative.

Third party - A party not directly involved in a transaction, For example, a subscription agent may be a third party to arrangements between information providers and libraries.

Training and support - Refers to additional software to support installation of content; can be made available via e-Mail, phone or fax during regular business hours and involves problem-solving and troubleshooting; can also include "train the trainer" sessions for library staff via in-person or webinars, etc..

Unauthorized use - Any person or entity designated in the licensing agreement who does not have permission to access or otherwise use the digital information that is the subject matter of the agreement. Also, an Unauthorized User is any user that the license agreement does not explicitly define as an Authorized User.

UNICODE (as in compliance) - A standard set of characters and symbols shared across multiple languages to ensure consistent representation in binary form; UNICODE compliance is important to prevent information loss and to enable accurate recall.

Up-time - The period of time that a resource is available and up on the network or Internet.

URL - Uniform Resource Locator - The address of a digital document on the Internet.

Use, user, usage statistics - The frequency of resource access made by patrons. The total numbers of times each resource is accessed is often used by libraries for evaluation purposes.

User training or instruction - Library instruction or bibliographic instruction for users about how to navigate a source, find and search for information, or increase information literacy.

Vendor - An individual or institution selling or leasing a resource.

Walk-in user - Visitors who have permission to use the institution's publicly available computers and thereby have access to the licensed resource.

Web browser - A computer program that retrieves sites or information from a network, such as the Internet.

XML - Extensible Markup Language - A markup language similar to SGML but simpler in structure due to greater rules; XML serves as the language used for creating metadata for library collections via standards such as Dublin Core and METS (Metadata Encoding Transmission Standard) and Internet resources via RSS and ATOM feeds.

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SERU The Shared Electronic Resources Understanding Recommended Practice offers a mechanism that can be used as an alternative to a license agreement.
<http://www.niso.org/workrooms/seru>

LIBLICENSE: The LIBLICENSE Web site provides extensive resources (including model license language and detailed discussion of licensing terms) through a detailed series of links and menus. <http://liblicense.crl.edu>