This issue is devoted to the International Workshop "E-Serials in Libraries", a regional meeting held at the National and University Library, Zagreb, Croatia, in April 2001. All the presentations and most of the country reports on national developments and practices are included here in a shortened, summarized form. The order of the contributions does not follow the succession of presentations delivered at the event – general topics are followed in this issue by a panorama of several national experiences on handling e-resources. Corresponding slides can be consulted on the Workshop’s web site at http://www.nsk.hr/dogadjanja/skupovi/eserials.html.

Find also information on the programs organised by the Section on Serial Publications at the forthcoming 67th IFLA Council and General Conference in Boston.

Contents:

- "Electronic Serials in Libraries" International Workshop, National and University Library, Zagreb, Croatia, 19-20 April 2001
  - Alois Andrović: Introduction
  - Marina Mihalić: Trends and developments of e-serials: how they influence the changing role of national libraries
  - Helmut Hartmann: E-serials collection in the University Library: management issues of a new field of librarianship
  - Marco Köttstorfer: A short summary of the DIEPER, alo and Meta-e projects from the view of the Austrian development partners
  - Paul Cunnea: Managing access to e-journals: challenges from a cataloguer
  - Françoise Pellé: Serials identification and the electronic environment
  - Petra Pênková: E-serials processing methodology
  - Sinimarja Ojonen: Finnish online serials and the National Library of Finland: current practices and future plans
  - Jasenka Zajec, Sonja Pigac: Processing of electronic serial resources in the Croatian National and University Library
  - Dijana Bilos, Dzenana Tuzlak: E-serials in libraries – national developments and practice: Bosnia and Herzegovina
  - Nataša Kodrič: Questionnaire & country report synopsis: ISSN Centre Slovenia
  - Denis Rakusa, Romana Muhvíc: Activities of the Institute of Information Science (IZUM), Slovenia
  - Elizabeth Gazdag: Identification of continuing resources issued in electronic media in Hungary
  - Eva Jerabková: E-serials in libraries – country report: Czech Republic
  - Beata Katrincová: Electronic serials in Slovakia
  - Danute Petraskiene: E-serials in Martynas Mazvydas National Library of Lithuania

Programs of the IFLA Section on Serial Publications in 2001, Boston
"Electronic Serials in Libraries" International Workshop
National and University Library, Zagreb, Croatia, 19-20 April 2001

Introduction
Alojz Androvič
Deputy General Director, Director of Division for Automation and Integration
University Library Bratislava (Slovak Republic)
androvic@ulib.sk

An international workshop on e-serials identification, processing and handling in libraries was held on April 19th-20th, at the National and University Library, Zagreb, Croatia. The workshop was designed and organised by the University library in Bratislava (Slovakia) together with the National and University Library in Zagreb (Croatia) and granted through the Commission for Informatics at the Austrian South and Eastern Europe Institute in Vienna (Austria). The Commission, founded in 1997 by the Austrian Federal Ministry for Science and Traffic, aims to support the international co-operation and know-how transfer between the EU and CEE (Central and Eastern European) countries.

According to this mission, the workshop programme covered recent methodological issues on e-serials, such as definition, identification, standardisation and harmonisation, basic organisational problems like acquisition, selection, consortia and licensing and some practical questions of presentation, archiving and services. The workshop topics have been presented by invited experts from Austria, Croatia, Czech republic, France, Finland and the UK. The participants from CEE countries recruited from the departments responsible for e-serials identification and/or bibliographic processing, as well as any other library service or special unit (acquisition, information, archival, automation, publishing...) dealing with this medium and document type. All of them presented a brief report on local situation of e-serials management and of own practical experience and took active part in the workshop discussions.

The workshop was opened on behalf of the hosting organisation by Mrs. Marina Mihalić, deputy director (National and University Library, Zagreb) and on behalf of the Commission by Mr. Alois Androvič (University Library, Bratislava). Mr. Androvič introduced briefly the background and goals of the workshop, pointed on "missing links" in the e-serials chain and highlighted the global efforts and initiatives of the ISSN network.

The workshop programme was splitted in blocks according to the discussed topics and was framed by active participants’ discussion. After the expert lectures the representatives of participating countries, Austria, Bosnia & Herzegovina, Croatia, Czech Republic, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia presented structured reports on National developments and practice. The reports illustrated the actual situation in legislation covering the e-serials chain, registration, identification and bibliographic processing, acquisition, selection and licensing of e-serials as well as archiving of e-serials, user services and library practice.

The workshop was concluded by a round table discussion, chaired by Mrs. Jasenka Zajec and Mr. Helmut Hartmann. The overall discussion confirmed the usefulness of this type of professional meetings and could be broken only under a promise, that it will continue next year. Excellent organisation and interesting social program had been provided by the enthusiastic premises of the new building of the National and University Library of Croatia.
Trends and developments of e-serials: how they influence the changing role of national libraries

Marina Mihalić, M.Inf.Sc.
Acting Dep. Director, National and University Library Zagreb (Croatia)
mihalic@nsk.hr

In a networked environment, the world of serials is undergoing major changes which are accelerating their development. The first journals appeared some 200 hundred years after the invention of the print, in 1665, and journals in electronic format appeared in early eighties. There are questions and doubts as "what do we know about the e-journals" and "why do the national libraries worry so much about the electronic journals" have to be answered. Are they so fundamentally different from the printed editions and in what way are they different? According to some random beliefs about the e-journals, "the materials on the web lack integrity, they cost less, while the web and the HTML cannot support maths and complex symbols". None of these beliefs are correct. Frequently, in the environment of e-serials we are using the word "approximately", because counting the e-journals is not easy, the titles are being bought, sold, merged, split and according to statistics, the number of continuing resources is increasing as a result of new titles and multiple versions.

As national librarians we are frequently doubtful of what and where is the original version. E-serials exhibit the characteristic of seriality: issuance in parts at intervals, chronological or numerical designation and the intention of continuing indefinitely. What makes the e-serial different is that it is usually "acquired" through access via network address. Its accessibility is limited by "subscription" which can permit local downloading and although many e-serials are still free, their content is debatable for library collections.

Let me focus on some trends which originate from the electronic environment, and have fundamental implications to national libraries. In a networked environment the number of unique continuing resources will continue to increase as a result of new titles and multiple versions. The consequence of parallel publications in various media, including print and electronic increases the pressure on libraries and the system of national legal deposit. The major challenge of "changability of the information" is digital archiving and preservation, intellectual property rights in order to provide the equal access to use digital information.

Everyday advertisements intend to convince us that "everything is on the web", suggesting users to search the web with no idea how to find the information. It is for them even more difficult to determine what continuing resources are available on the web unless they have been identified, or located, organized and made available by libraries.

Questions that have to be agreed upon between publishers and libraries are electronic archiving, licensing issues and financial/copyright problems. The collaborations and partnerships are increasingly necessary for libraries to remain major participants in the evolution of storage and retrieval technologies. The declining purchasing power by libraries is resulting in a renewed focus on interlibrary loan and document delivery systems as alternatives to purchasing. Many national libraries today are facing the problems of identification, selection, archiving and organising access to networked electronic publications but there is no sufficient concern of continuing accessibility after the data gets old and needs to be stored and preserved. Many of the electronic information of the past cannot be used today, because it cannot be retrieved, and this fact should make us think very hard about the future of accessibility of digital documents.

Dr. Michael Gorman Dean of the Library at California State University, Fresno, believes that the only effective way today to ensure that digital information receives permanent storage is if a library prints this information out on acid free paper and then catalogues and preserves it on the shelves. Dr. Gorman continues that if we don’t preserve the electronic materials and the technologies that can read them, future generations will not find the information or they will not find it in a usable format. By simply acquiring the right to point the link to an electronic publication stored at the publisher’s site is not sufficient to ensure the long term accessibility and preservation of electronic publications.

Another trend in libraries is the pressure to change, which is directly affecting the functions and missions of the library. This means to reformulate bibliographic control in such an environment, or to find the more efficient ways to accomplish current activities in order to reallocate staff to meet these needs. It is probable that using additional formats to MARC, Dublin Core Metadata, various formats for images, flat files for
full-text data, relational database formats will solve some problems of bibliographic control. The ability of multimedia formats that can be retrieved and delivered to workstation over the Internet also provides challenges to librarians about how to work with new formats and their retrieval into cataloguing systems. The inability to control what is on the Internet at any given moment, significantly changes the approaches that must be used to organize information on it as compared to the more controlled environment of the online public access catalogue which describes items actually owned and controlled by the library.

The information revolution has created the need for a new kind of professional, who is skilled in locating, organizing, manipulating, filtering and presenting the information. Knowing how to find information and get the right information has become a more pressing need now than ever before. This leads us to the importance of developing the standards for controlling Internet resources, which are needed for identifying and referencing electronic resources.

Recently, the pressure for "doing more with less" has the consequence of contracting out increasing numbers of technical services and partnering with publishers to automate the acquisition to a higher degree, so that the book comes shelf-ready from point of order. The same context of "doing more with less" is utilizing resources in ways that are directed to users. In this concept the attention is given to continuous quality improvement and TQM, trying to find other methods to do some of the work currently performed by librarians and by shifting human resources to other areas that have direct user demand. Librarians must become aware of the fact that there will never be one right way of doing anything ever again.

In the national publisher vs. national deposit library relation it still has to be defined what is the "national" publisher in a network environment? In the electronic environment every individual with access to Internet can be a publisher. For national libraries, fulfilling the heritage mandate in the electronic environment means that only the lasting and cultural research value should be included in the selection policies, and that it is not necessary to collect every version/edition of the networked electronic publication. National libraries by their missions recognize the access to ideas across time and across cultures as fundamental to society and to the civilisation, and those core obligations to the community are fostering intellectual inquiry, communication in myriad of formats and forms, ensuring the access.

Changability of information in a networked environment is influencing changes in libraries regarding the digital archiving and preservation, intellectual property rights, organising access to information and keep with the technology advances.

References:
Introduction

Dealing with a topical and fast changing subject like this, it might first be useful to pay at least some attention to the process which led to the present condition. Second, principle questions of collection development and acquisition will be discussed, well aware of the fact that these issues are closely related to the never ending struggle for licences. Then, in a more practical approach, some aspects of processing will be considered, before, finally, the importance of usage analysis and customer-oriented services is shown. As to the relevance of this paper, it should be evident from the author’s background that it is based on the specific experience of Austrian university libraries, even though much of it will certainly apply to most libraries in other countries as well.

When the conquest began

In the mid-1990s university librarians all over the world found themselves in a very unpleasant situation: something completely new was about to conquer one of their major strongholds, the traditional scientific journal, well kept in endless rows of shelves and neatly processed according to the rules of traditional librarianship. But now, together with the incredibly fast growth of the World-Wide Web, an ever increasing number of electronic editions of scientific journals began to literally flood the screens with hardly any rules there which might have offered some tools for maintaining some order. In addition, in those early days almost everything was for free, so why shouldn’t librarians take what they could get, without considering a lot any principles of collection development – to put it in a nutshell, it was chaos for free.

Collection development

However, in the late 1990s things began to change. More and more publishers cancelled free online access, in most cases it was only granted on condition a library subscribed to the print edition, and in the worst case, in addition a considerable amount of money had to be spent on an online licence. So it was little wonder that university libraries started to set up selection policy guidelines for their collection development, which were focussed on:

(a) budget saving by cancelling duplicates and introducing cheaper online only subscriptions;
(b) balancing "lasting value"-subscriptions vs. "pay-per-view"-licences;
(c) exploitation, i.e. achieving a maximum of value for a maximum of users by gathering usage data.

In this context an important question to be dealt with is the decision in favour of or against online-only licences. Generally, from the archiving point of view librarians will certainly prefer combined print-and-online subscriptions if they want to be on the safe side. Regarding the durability of paper and the possibility of device-free access, combined print-and-online issues should always be taken into account, although, unfortunately, in many cases it will be rather difficult to raise the money for the combined subscription, which, very often, is quite expensive.

Acquisition

Prior to the actual process of acquisition the following preliminary questions have to be decided:

(a) online or on site solutions;
(b) access through publisher and/or aggregator;
(c) legal and financial conditions of licence.

Particular attention should be paid to the value-added services offered by subscription agents/aggregators, as these can save a considerable amount of work which else has to be done by library staff.

Licensing

There is a large variety of models and methods used by publishers. Very often librarians might be at a complete loss to achieve the model that suits the needs of their library best, as it is reluctantly only that publishers adjust their standard licences to the specific situation of a library. The models offered differ in their degree of restriction:

(a) single workstation;
(b) single concurrent user;
(c) limited number of concurrent users;
(d) licence fee varying in relation to number of potential users;
(e) cross access licence in consortia.

Fortunately enough, in the issue of access control, automatic authentication by IP-address has been
widely accepted nowadays, so that user name/password solutions, which seem to be rather awkward, do not occur too frequently any more.

Processing

As a particularly user-friendly feature, e-journals should be processed in OPACs in a way that links seamlessly from the catalogue to the full text. In most European countries as well as in the United States this standard has been established either by means of individual solutions or union catalogues. In addition, there may be special catalogue-like link collections, which can either be searched independently of the OPAC or – based on the ISSN – be used as multi-functional platforms for various purposes, e.g. OPACs and data bases. An especially fine example of such a platform can be seen in the Regensburg-based EZB (Elektronische Zeitschriftenbibliothek), which covers the electronic holdings of more than 140 academic libraries in Austria, Germany, Switzerland and South Tyrol. (See at http://www.bibliothek.uni-regensburg.de/ezeit/.)

Usage analysis

Principally, data for usage analysis can be gained in three different ways:
(a) from a publisher;
(b) from an aggregator;
(c) from a library (authentication) server or the server of a link collection platform as described in the previous paragraph.

From the author’s experience, comparison of the different data must be recommended, as it is the only way to achieve full and sufficient proof of usage. Relying on publishers’ data only might not be objective enough, whereas platform servers cannot count access through bookmarks. Differentiating by subjects will certainly show the predominance of the STM-sector. Nevertheless the arts and humanities field should not be disregarded entirely, as even there the percentage of increase in usage is quite high.

Customer-oriented services

The whole field of traditional user support must be offered by the virtual library as well. In addition the following services should be offered:
(a) user trainings;
(b) concise information sheets or leaflets;
(c) online help through help-files or e-mail;
(d) individual support on the phone;
(e) alerting of user groups and individual users;
(f) remote access through authentication servers.

References:

A short summary of the DIEPER; alo and Meta-e projects from the view of the Austrian development partners
Marco Köttstorfer
Department "Computer Science for Blind Students", Institute for Applied Computer Science, University of Linz (Austria)
marco@aitb.uni-linz.ac.at

About 3 years ago nobody was talking, even thinking about digitisation in Austria. Since then 3 very promising projects – one national and 2 European – were started and their results tell their own tails. This report will give a short overview of these projects and of the results.

DIEPER: Digitised European PERiodicals
(http://gdz.sub.uni-goettingen.de/dieper/)

The first project, which started in 1998, was DIEPER. The project was funded by the European Commission with partners from ten European countries and its goal was to build a virtual network and a central access point to make accessible periodicals that have been retrospectively digitised in Europe or anywhere else in the world. Technical progress made digitising of printed documents an option for most modern libraries. Digitising is going on at a rapid pace already. In most cases the selection of documents, the technical standards applied, and the options for access by the user follow the individual decision of the library. In spite of the costs involved this results in considerable duplication of effort (even the same items digitised at different places) and above all, no clear strategy can be offered to the user, which may help him to find...
out, whether the document he needs is available as
digital full text. This is a particular disadvantage
regarding back issues of important research
periodicals, where users are looking for fast access
to relatively short documents (articles).

DIEPER addresses the need for a central access
point where all digitised periodicals shall be
recorded. Records of the register are linked to
reliable and comprehensive archives of periodical
literature working at different sites throughout
Europe. Those archives are of course equally
accessible from other points, e.g. WWW pages and
bibliographic databases, but the register is the only
place, where it is attempted to file all the relevant
records. In addition, a search machine accessible
from the register allows to do a fulltext search of
the articles in digitised periodicals or at least a
fulltext search of the tables of contents.

In establishing this infrastructure a uniform
strategy for retrodigitising throughout Europe was
developed. The strategy is based on a minimum
standard for access and retrieval. While
dramatically improving access to older periodical
literature, offering it to users in digitised form is a
direct contribution to protecting the original items
and preserving the printed information in another
format. Availability of periodicals through
DIEPER will increase use – continuous use will
make the online hosts aware of the need to keep
their digitised periodicals accessible.

DIEPER helps to fill the gaps in existing library
collections and may in the long-term contribute to
reduce operating costs of libraries. Just as
important as this is its role in providing a point of
global information for those who want to
contribute to build the virtual electronic library
without risk of duplicating effort.

alo: austrian literature online
(http://www.literature.at)

The second project was started in 1999 on a
national level. The partners, who fit perfectly
together, are the University Library, Graz, the
Institute for German Literature, Innsbruck and
Computer Science for the Blind, Linz. The aim of
this project was to evaluate a workflow, the time
and cost of digitising materials. The outcome was
an open source software package, that other
libraries could also use, for showing digitised
material and on the long run to build a virtual
library of the most famous Austrian literature.
(Information about the project, the prototype for
downloading and the scanned books can be viewed
at the project website.)

Since alo only produced a prototype, that was
conceived for experts and therefore not always
easy to use, a new project will be started mid 2001
to produce a software easy to use for librarians.
The feasibility study of alo lead to writing of a
proposal for the third project, Meta-e.

Meta-e: Metadata Engine
(http://meta-e.uibk.ac.at)

By developing the above projects 4 major
problems were encountered:
1. There are no OCR programs that can recognise
Gothic letters. Since almost 85% of all books
beyond 1942 were printed with Gothic letters
this is a major problem. Fulltext can only be
done by handtyping the books.
2. Metadata are used for "digital preservation" and
for electronic publishing of books, but the
generation of metadata is not easy and
expensive. Also experts have to do this job.
3. Web presentation and search engines are not
very comfortable and convincing.
4. "Design for all" are just words.

To overcome these problems Meta-e was
started in autumn 2000 and the following 4 steps
are going to be done:

1. A special OCR program for recognising Fraktur
and other rare Fonts of the 19th century will be
developed by Mitcom, a partner of Abby, which
already developed the FineReader OCR Engine
(a demo of the actual version of Finereader –
without Fraktur recognition – can be found at
http://www.mitcom.de). In addition, historical
dictionaries in five languages for supporting the
OCR Engine will be produced.

2. Generation of metadata will be done
automatically by a program manly written by
CCS (the CCS-homepage is located at
http://www.ccs-gmbh.de). This program will do a
layout analyses and a document classification to
find articles, titles and a bunch of other
metadata. How this works was already shown
by the Laurin project which can do this analyse
for newspapers (a demo of the Laurin engine
can be downloaded at the site in Innsbruck at
http://laurin.uibk.ac.at).

3. The presentation of digitised books and
periodicals for the Web will be enhanced with
an XML enabled search engine, which is able to
handle structured fulltext in big masses.
4. Experts for "Design-for-all" will help to develop the software from the beginning, so that the software and the web presentation of the books will be accessible also for blind and visual handicapped people.

First prototypes of the software should be ready in the first half of 2002. It is hoped that after this project the costs of digitising with creation of fulltext will dramatically decrease and the amount of digitised material will increase.

Managing access to e-journals: challenges from a cataloguer

Paul Cunnea
Bibliographic Services Manager, Learning Information Services
Napier University, Edinburgh (Scotland)
P.Cunnea@napier.ac.uk

The following issues and practicalities are based on practical experience of managing e-journals at Napier University. The focus is on bibliographic control of e-journals, using AACR2 (complemented by ISBD(ER)) and MARC.

First a look at differences in cataloguing theory between traditional and electronic serials. We catalogue print titles to provide accurate descriptions that can be used to search, discover, locate and access the physical item. E-titles are similarly catalogued to provide accurate descriptions that can be used to search and discover the e-title.

The main difference between results of the cataloguing process is that Discovery = Access; in a dynamic Web environment once the record is discovered the searcher has seamless access to the resource described. Providing access in this fashion leads to the realisation of the Hybrid or Virtual Library & the integrated collection. So, although the cataloguing principles and practice are the same, the effect is quite different.

New definitions are developing and being adopted by the main bibliographic standards – ISBD, AACR2, ISSN & MARC. The new distinction is between monographic and continuing resources (CR), i.e. publications that are added to with no predetermined conclusion. Within CR there are what we would regard as "serial publications", a publication that continues with the addition of discrete parts. In addition there is now a new definition for "integrating publications", i.e. a publication which is continually or periodically updated as a whole, but without discrete, identifiable parts. This covers the majority of Web sites and other Web resources, e.g. databases, but can also be applied to traditional publications, such as loose-leaf updating services, so is not limited to the e-environment. Bear in mind that any definition is challenged by the realities of the published material.

Cataloguing practicalities – familiar bibliographic details

The standards don’t change; we use the same cataloguing standards as for traditional material, even whilst the standards are developing. The global arena of Web-based publications make use of internationally recognised and stable standards even more important for the accurate exchange and retrieval of information. However some guidance on Web-based resources is helpful. Start with home page, look at title bar, source pages, "about"-pages, accompanying material, and record alternative and uniform titles if appropriate. Statements of responsibility (SORs) are often difficult to determine, often no clear SOR – be wary of Web master statements.

Cataloguing practicalities – e-specific bibliographic content

Type and Extent of Resource: description of
resource taken from ISBD (ER) e.g. Electronic journal, Electronic online service. This is equivalent to physical description.

Program note can be used to record software and hardware requirements of the resource.

Electronic location and access records the URL, URN, public notes, etc, and forms the basis of the dynamic link from the record to the resource. What URL to record, and how many, can be an issue.

There is potential for the use of general and specific notes to record various aspects of the e-serial; granularity, relationships, eligibility, restrictions on access, etc., in a standard format. However secure information, such as passwords and license information is likely to be administered separately.

Dynamic links may be useful in providing access to this information in detail, such as additional 856 tags (and 859 "local" URLs). A truly virtual learning landscape!

**Control number confusion**

There is great potential for the use, and misuse, of ISSNs and other control numbers in identifying accurately and uniquely e-publications. There is significant confusion in the publishing and library world with regards to e-publications. An ISSN uniquely identifies a resource, and as such e-series should be assigned individual ISSNs. ISSN Centres are also to start assigning ISSN to other continuing resources, i.e. integrating resources, which is a major development and challenge. How much e-publishers are aware of this varies dramatically, bearing in mind the explosion of non-traditional publishers. Promotion of the value of ISSN, communication and co-ordination is vital in this area.

For cataloguing it is important to distinguish between the print and e-ISSN where there are related publications. Although the unique ISSN for the publication should be recorded as such, there is scope for usefully recording and indexing associated ISSNs. How, why, and where will dramatically affect retrieval in a number of areas, z39.50 cross-searching, document supply, and cross-linking being but a few.

**Further cataloguing practicalities**

Other bibliographic areas of the e-serial that can cause some cataloguing confusion are: publication dates; designation and numbering; "first" issue; and frequency. These elements can be problematic where the e-title has a print equivalent. Clarify the data that you are recording. A further feature of e-series is their ability to expand "backwards", i.e. previous issues added where it is a retro-e-serial. This poses issues of record maintenance, as well as interpretation.

Copy summary and item level information (not strictly necessary) can be also be usefully recorded, providing both user information and a means of e-collection identification and manipulation via the library system.

**Print vs. e**

The issue of how the print collection relates to the electronic collection is primarily one of collection development, but also relates to bibliographic control. Similar questions can be asked of multiple versions in the same medium. Are they the same or individual publications? Do you create single records for each version, or create links to related titles from a single record?

Full bibliographic control dictates separate records with related links and notes, but libraries face limited budgets – can you afford to provide comprehensive access? Can you afford not to!

**Restrictions on access**

Although seamless access is a principle of the e-environment commercial reasons dictate barriers to access. These normally take the form of IP recognition, passwords, or authentication services or systems. Some methods are inappropriate for the remote user. Licences further restrict some of the options, but negotiation and consortia can help in this area. The cataloguer’s responsibility is to clearly and accurately record access restrictions, although access administration is likely to be a separate function.

**Selection and identification**

Some e-specific collection development and cataloguing considerations: software/hardware requirements; performance; comparisons; overlap with existing services; customer support; usage statistics; license options; remote users; multiple sites; multiple geography, multiple access methods; limits on use; ownership of publication; access-only. "Free" e-serials have further considerations: stability; persistence; quality; content; remain free; would you pay for it?
New procedures will need to be devised to incorporate registration of access rights with e-supplier-publisher, license negotiation and recording, access management and password administration, authentication liaison, and new subscription models. Different elements need to be identified and assigned, and responsibilities and relationships have to be clarified.

**Issues of catalogue maintenance**

Accuracy of record content needs to be maintained – this will involve both manual, regular quality control, and semi-automatic validity checking of URLs. Does efficient management require a devoted post or posts – the e-serial librarian, e-resource manager, the virtual librarian? Definitely, but how will depend on individual library circumstances and its commitment to the vision of the hybrid-integrated-virtual-digital-electronic library.

**The present and the future**

Traditional models of serials will remain, if a little altered by the possibilities of the medium. But new models and new definitions will emerge.

We need to see the whole Web as a potential source of valuable information, both free and acquired, but also to be aware of how we relate to the information. Access only? Creators? Publishers?

The existing standards are strong and flexible, although new standards are emerging (XML, DC, RDF, etc. – complement-compete-merge-emerge). Effective bibliographic control is not only possible, but essential, to provide accurate discovery mechanisms of quality information resources and beyond. It just requires the standards to be put to work.

---

**Serials identification and the electronic environment**

Françoise Pellé  
Director, ISSN International Centre, Paris (France)  
pelle@issn.org

The ISSN system, which was established in the ‘70s for the identification of printed serial publications, is also a powerful system for the identification of electronic resources, thanks to a number of changes which reflect new publishing practices, and especially the fact that, for electronic serials, the dominant model today is to run a web site that is continually (or at least regularly) updated with new content. Content is overwritten or revised, not only cumulated as a series of immutable units.

Those changes in publishing practices raise a number of questions, regarding especially the definition of "seriality". This new concept and a new set of definitions, which rely on the form of issuance, were discussed and adopted: continuing resources (resources which are issued over time with no predetermined conclusion) encompasses both serials (successively issued resources) and integrating resources (resources which are continuously updated with new content, and which are ignoring the need for issues). According to this new set of definitions, the scope for ISSN assignment has been broadened to all continuing resources.

Given the enormous amount of resources which fall under the new set of definitions, the best possible use of existing human resources becomes crucial, and the best possible re-use of records a key question. The harmonisation of cataloguing rules between the AACR, ISBD and ISSN communities is a pre-requisite for saving resources, and progress was made towards this goal, especially through the harmonisation of the definitions and rules for title changes and title transcription. Those changes are taken into account into the revision of the ISSN Manual.

Finally, another important question is the use of existing identifiers in the electronic environment. Particular attention has to be paid to the use of the ISSN as a persistent identifier on the Internet, through the implementation of resolution systems using the URN framework. In this respect, the resolution of SICIs looks especially promising and should interest a broad range of users as it facilitates the access to articles through the use of
What is an electronic serial?

One of the main aspects of the processing of e-serials is the definition of the term and that of its characteristics. There are several definitions, which differ from each other. The difference is based on the view of special objects that are typical for various types of systems that processed serials. I mean not only electronic library catalogues but also other systems that treat e-serials, above all serials in Internet environment. These quite new systems are sometimes called Internet catalogue, digital library, or subject gateway.

For this forum, the main interest concerns library catalogues and cataloguing rules that are used for the treatment of bibliographic resources. The Anglo-American community, their rules and standards AACR (Anglo-American Cataloguing Rules) as well as international descriptive standard ISBD (International Standard Bibliographic Description) are very strong in the question of cataloguing.

However, new trends are foremost connected with new views on issues related to seriality, which change traditional ways of classification of publications and which influence cataloguing rules as well. The characteristic called seriality "refers to the fact that certain types of bibliographic resources are issued over time, regardless of whether they are intended to be complete or have no predetermined conclusion and thus, the bibliographic data can change over time". (Citation from http://www.nlc-bnc.ca/jsc/ser-rep2.html.) The influence of seriality presence is seen on the picture at http://www.nlc-bnc.ca/jsc/ser-rep2.html#bib. The picture shows the extent of bibliographic universe in connection with the development of electronic publishing. Electronically based resources are mostly classified as integrating resources, i.e. databases and web sites. Electronic journals are not presented in this scheme. They are problematic, because they may be issued in successive or integrating forms.

The electronic environment, for example the Internet one, enables to change, update, or remove pieces of content from existing resources continuously. This is the main point, which causes a lot of problems in usage of classical cataloguing rules that were created foremost for printed publications or publications on physical carriers; therefore there are efforts to incorporate these new properties into the structure of the rules.

An initiative of harmonization of AACR2, ISBD, and ISSN (International Standard Serial Number) has also appeared. In the framework of this initiative, experts are trying to harmonise future practice in processing of continuing resources. This term has been created to cover a broad group of resources, which show seriality.

The Revision of AACR2, focused on Chapter 12 Serials, was published in February 2000. The whole chapter was renamed to Continuing resources and it was divided into two main categories: serials and integrating resources. The first category contains the resources, which exist in discrete parts, while the second category contains the resources whose updating parts are integrated into the whole resource (item) and do not remain discrete.

These main properties refer to the changes, which are contained in the suggestion for revision. For example, it concerns the basis of description, which is different for both types. Serials should be described based on the first or earliest available issue and integrating resources according to the
latest iteration. Minor and major changes in descriptive information and subsequent creation of new records are connected with it.

**Experiences with cataloguing**

All this long enumeration of facts, which are probably known, was mentioned here as a preliminary to my main point of interest. In the middle of this April I wrote up my student thesis called *Metamorphosis of serial publications in the environment of electronic information communication and problems of their treatment in information systems*. After a theoretical part, which was based on contributions from Anglo-American sphere above all, succeeded the practical part. There I made a short analysis of those Internet resources that show seriality. I chose several types of these resources and the concrete titles in Internet environment and I created records for these titles according to the present form of the standard ISBD and also AACR2 cataloguing rules in UNIMARC structure. My aim is to show the problems and issues encountered.

Based on the analysis, I identified seven types of continuing Internet resources: *electronic version of printed serial, electronic serial, electronic newspapers, database* (here: a bibliographic database available through Internet), *electronic discussion group, web site* and *digital library*. I compared the records made by myself according to the mentioned rules with the records I found in the ISSN Register provided the titles had been registered there. I compared them also with some Internet catalogues.

As an example of Internet catalogue or subject gateway I chose the British catalogue oriented on social sciences called SOSIG (*http://www.sosig.org*) (Social Science Information Gateway), which should be presented as another initiative to treat electronic resources. SOSIG is interesting from the librarian’s point of view for its cataloguing practice. On its web pages, it presents an interactive form to fill data about appropriate resources and provides a table of types of resources (*http://www.sosig.ac.uk/help/search.html#type*). The list of resource-types contains twenty-five separate categories. Besides books and book-equivalents, these cover bibliographic databases and bibliographies as well as other types of resources as discussion groups, reference guides, or software. Journals are also represented: both journals with contents and abstracts – and journals with full text.

In comparison with the above-mentioned cataloguing rules there is a problem of identification of resources in position of General Material Designation. In the case of mixing serial (or continuing) and electronic characteristics there is a problem which attributes should be preferred. Another problem is which categories are to be applied. Especially the new electronic forms are sometimes very difficult to identify and denominate.

Another problem was found in identification of publishers for many resources. Their role has been slightly changed in case of electronic publishing and sometimes it is not possible to identify who is responsible for the resource. On the other hand, SOSIG as an example of Internet catalogue does not describe these data in its records. This information should appear in verbal description if it is known and important.

It is necessary to remind that the question of cataloguing should be: not to adapt descriptions to rules but to adapt rules to describe resources appropriately to be searchable. This sentence is important mainly in this time of arising of so many electronic forms. The information needed for their description focuses on their content above all. There I mean especially the resources on Internet or other nets, which have no tangible form.

**Metadata**

What other tools are available to process electronic serials besides the cataloguing rules? There is a new alternative in form of new types of *metadata*, i.e. data about data, for example, the well-known initiative called Dublin Core. (Also the above-mentioned information used in the SOSIG records can be marked as metadata.) In the beginning, the DC format was intended for authors of web resources, but libraries and other organizations greet it as well. In the Czech Republic, a Czech translation of this format exists now and there are also projects to involve Dublin Core deeper into processing of electronic resources.

**Automated description**

All the mentioned types of treatment of resources were connected with human intervention. However, the technological development of computer nets offers another types of registration and searching of those electronic resources, which are mainly available on Internet. There are arising new technological engines, which search and index appropriate resources. The development is very
fast in this area and also the possibilities of these new methods are more and more efficient.

Finnish online serials and the National Library of Finland: current practices and future plans

Sinimarja Ojonen
Director, Finnish National ISSN Centre
Helsinki University Library (Finland)
sinimarja.ojonen@helsinki.fi

The Finnish ISSN work with online serials

The Finnish National ISSN Centre started to work with online serials early: already in the mid 1990s the Centre assigned the first ISSNs to domestic online journals. The very first title of this kind (Web.doc = ISSN 1237-7341) was registered into the Finnish National Bibliography and into the ISSN database in 1994. Not surprisingly the publisher, the Department of Geography in Helsinki University, came from the academic world. In addition to the universities and other academic corporations, numerous students’ associations and many kinds of ideological associations were among the first Internet online journal publishers in Finland.

From the very beginning, the Finnish publishers have readily accepted the ISSNs as identifiers for their electronic publications – even in cases in which the one and the same journal is published both in printed and online versions and thus needs two separate ISSNs.

Up to date about 150 Finnish online serials – mostly journals – have received an ISSN. They all have been catalogued into the National Bibliography at some level – at least as preliminary records. So far the Finnish Centre has been able to assign an ISSN in all cases when the publisher himself has contacted us and asked for an identifier for an electronic serial. In daily ISSN service work the staff of the Centre informs and encourages publishers to use ISSN in online serials. An efficient channel to inform publishers is through the Library home pages. The pages of Helsinki University Library (http://www.lib.helsinki.fi) offer a lot of information concerning the use of identifiers suitable for online resources. They also encourage and direct the visitor to an independent and active use of the new tools developed and aimed to improve the accessibility of online publications. These tools include for instance the URN-generator sharing URN (Uniform Resource Names)-codes based on the Finnish National Bibliography numbers (URN:NBN:fi-fe...; see: http://www.lib.helsinki.fi/cgi-bin/urn.pl) and the Dublin Core Metadata Template format (http://www.lib.helsinki.fi/cgi-bin/dc.pl). The DC Template is equipped with easy instructions for its embedding into an electronic document. The DC Template is one of the products developed by the Nordic Metadata Project (www.lib.helsinki.fi/meta).

Renewing the Finnish Legal Deposit Law

As the National Library of Finland, Helsinki University Library collects the legal deposit copies of Finnish publications and archives them. Despite of the growing interest in Internet-publishing in our country, the overall amount of printed material received by the Library has not diminished according to the legal deposit statistics.

In near future, the National Library will meet new demands and challenges. The present Finnish Legal Deposit Act, covering printed and audiovisual material dates from 1980. Since 1984 also the deposit of motion pictures, films and videos has been legally regulated. Since 1997 the revising of the Legal Deposit Act has been in progress supervised by the Ministry of Education. One of the central aims of the renewal is to extend the legal deposit system to cover all types of electronic materials, including both hand-held and on-line publications. The proposed Act covers both static and dynamic online publications. Two different methods for collecting domestic networked publications are proposed:

Freely accessible documents would be collected automatically, at regular intervals, with the help of a harvester application. Such a harvester has already been developed in NEDLIB-project (Networked European Deposit Library; http://www.kb.nl/nedlib). The harvester is able to gather a remarkable amount of online material, but a complete coverage is beyond its capacity. For instance, it cannot harvest dynamic documents or documents behind pass-words. Actually, the Finnish Web space has already been once – in late 1998 – experimentally harvested and it proved to
be surprisingly small: only ca. 200 gigabytes. A second harvesting of domestic Web resources will be done in 2001. It is estimated that the result will be between 500 gigabytes and a terabyte.

Net-publishers producing documents with restricted access are required to submit one copy of these to the Helsinki University Library. This requires co-operation with the publishers. Legal deposit activity – collecting and archiving Web-documents into the National Library – will not compete with the commercial interests of Internet publishers. The electronic documents of the Finnish Web-archive will be available on workstations dedicated to legal deposit usage only. Accordingly, copying and printing of documents can be easily controlled. We hope to have a new Legal Deposit Law in force in the year 2002.

The Finnish National Bibliography and online serials

The questions touching on the national cataloguing policy concerning Internet resources are of great immediate interest for Helsinki University Library. Besides the archiving of web resources, the Library is planning to catalogue manually (in MARC-format) web documents to some degree into the National Bibliography.

Undoubtedly, some part of the traditional cataloguing now done manually will be replaced in the future by automated cataloguing methods, such as benefiting from the metadata information embedded in the electronic document itself and generating it into MARC records. Experimental work in this field has been done by the Finnish EVA-project (Acquisition and Archiving of Electronic Network Publications – more about EVA: http://www.lib.helsinki.fi/eva/english.html).

Presently the Finnish National Bibliography, Fennica, contains about 54 000 domestic serial records. The number of bibliographic records of online serials is so far only ca 300. A half of these result from ISSN activities and a half from a pilot-project recently carried out within the framework of the EVA-project. The pilot-project focused on domestic ongoing publications in the Web and it aimed to answer following questions:

1) What kind of serials and other ongoing publications ought to be catalogued into the Finnish National Bibliography with an ISSN or using a NSN (National Serial Number)?

2) What kind of domestic serials there are now in the Internet; is it possible to distinguish different types?

The test material contained 540 domestic online serial-like titles of a very heterogeneous nature. Of these 155 bibliographic records (in FINMARC format) were created into the National Bibliography. The selecting was based on the following criteria: 1) the serial must include full-text articles, 2) the articles must have some value as information and the editing of the serial should be a professional activity in some degree and 3) the serial archives its articles (not absolutely demanded).

When one and the same serial was published both in a printed and an online version, the general rule followed in cataloguing into the National Bibliography was to create two separate bibliographic records each carrying an ISSN or a NSN of its own.

General perceptions on Finnish online serials and on their cataloguing

Finnish online serials are mostly journals; also newsletters and bulletins of various kinds of associations (political, religious groups) as well as commercial publishers are frequent. Most often these are prepared in HTML-form. There are newspapers in the web, too; most of the larger Finnish newspapers have a web-site. Some on these offer full electronic equivalents of printed newspapers, some offer only material supplementing the printed newspapers and some are only advertisements.

The number of series in the Internet is presently not very high, but it is growing rapidly: many governmental agencies and other public institutions (e.g. Bank of Finland, KELA – the Social Insurance Institution of Finland) have already begun to publish their series via Internet or are planning to do so in the near future. Most of these series are PDF versions of printed monographic series or printed statistical serial publications. About three-fourths of the online serials were published both in printed and online versions and one-fourth in electronic form only.

There were two basic types of Finnish serial publications in the web:

1) Successive with discrete parts (the traditional type)

2) Integrating (an integrated cumulative ongoing entity, not divided into separate issues, as are traditional serials). Within the integrated type sub-types were to be found:
   - Cumulative databases
   - Web-sites, under one title, composed of
different parts. Usually subject-oriented, maintained by one or more issuing bodies. In this type of "integrated" web-resources the title (and perhaps also the publisher) seems to be the most stable element of the resource, while all other components of the resource are continually changing.

Not surprisingly, the result of the mapping of Finnish online serials accords with the fresh definitions given for "continuing resource" in the drafts of the ISSN Manual and ISBD/CR (Description for Serials and Other Continuing Resources). Obviously these types are found world-wide in the Internet.

In cataloguing online resources – especially of the "integrated" type – the emphasis should be, in my view, absolutely on access instead of description. The description should be as light as possible. An ongoing electronic resource tends to change all the time and this makes the maintaining of a detailed description impractical and even useless. In my experience the most important elements in a description of an ongoing web-document are: unique identifier, key title/title proper, variant titles, publisher, mode of access, URL-address and linking fields. Furthermore, it is of utmost importance to enrich the record both by subject index terms (descriptors) and by authorised name-forms of persons and issuing bodies. Besides, if the record is aimed to serve the needs of electronic archiving, information indicating the system requirements and other practicalities is also needed.

Processing of electronic serial resources in the Croatian National and University Library

Jasenka Zajec
Head, ISSN Centre for Croatia
Sonja Pigac
Cataloguer, Serials Department
National and University Library, Zagreb (Croatia)
jzajec@nsk.hr, spigac@nsk.hr

The novelties brought about by the electronic age affected the traditional roles of the national library (i.e. collection, organisation, storing, preserving and making available the national heritage). Electronic resources do not fit into classical patterns and definitions. The reluctance to catalogue electronic serial resources can be justified by the difficulties librarians encounter in their processing. E-serials have opened a whole new range of challenges and given their nature it is difficult to systematically apply the existing rules and because of that the processing of e-resources is not yet fully and systematically integrated in the bibliographic procedures of national libraries.

The definitions were changed to accommodate for new types of resources and they were accepted by all three serial communities (AACR, ISBD and ISSN) and will be included in the revised standards.

Following the general trends and the expansion of e-publishing the National and University Library (NUL) in Zagreb recognised the need to process, collect, preserve and archive the products of national heritage in the electronic format as well. Already in the early 1990s we started cataloguing Croatian local access electronic resources (CD-ROMs, diskettes) and starting from January 2000 we catalogue the remote access electronic resources as well. Since the continuing resources, as an umbrella term for serials and integrating resources, predominate in the Croatian Web space they seemed a reasonable starting point to start cataloguing.

The Croatian Law on Libraries (Narodne novine 69 (105) 1997) includes under legal deposit "electronic publications: compact disks, magnetic tapes, diskettes, databases and online publications", but unfortunately it is still not enforced. Nevertheless, the National and University Library has started establishing formal criteria parallelly to the actual cataloguing of electronic serial resources.

A research of Croatian remote access electronic serials was performed during the year 2000 to get an overall view of the Croatian Web publishing (Sofija Klarin and Sonja Pigac: Hrvatske daljinski dostupne elektroničke serijske publikacije. In: Vjesnik bibliotekara Hrvatske 43 (4) 156-167, 2000). We are currently monitoring a number of resources on the Internet; those that seem to have "serial" character are contacted in order to help them in editing and presentation of their products. Based on the results of the research it was established that the electronic resource should be continuing, issued in a succession of discrete parts.
and/or regularly updated over time, but it should also have the following characteristics:

- imprint or its equivalent
- numbering or chronological designations
- regular updating
- stable title
- stable URL or one that can be traced by available software solutions.

Out of the total number of 153 titles identified by April 2001, 59 were catalogued as serials. These titles were found by random searching, without any robots, and URL changes were traced without any special software. Selection criteria based on the content are similar to those referring to print resources (i.e. material that has national significance). Two separate bibliographic records are made for titles in both print and electronic formats; i.e. there is a new record for "electronically born" publications. The two records are then linked to one another with the UNIMARC field 452 "Another edition in other media". Thus the library catalogue gathers in one place records representing one title in different media enabling users to access Internet serials through our webpac.

The following standards were applied for cataloguing remote access serial electronic resources: ISBD(S), the ISBD(ER) and the national cataloguing rules (Eva Verona: Pravilnik i priručnik za izradbu abecednih kataloga, Zagreb, 1986). The records are created in UNIMARC format and they are available to library users through the CROLIST application.

ISSN has been assigned to online e-serials from 1998, although only on publisher’s request. Systematic assignment started in 2000 and up to now 25 titles were assigned an ISSN.

The future plans of the National and University Library include the consideration of the criteria for the inclusion of electronic serial resources in the national bibliography, and also for analytical bibliographic processing at the article level. Since online publications are subject to legal deposit, the questions and methods pertaining to acquisition, access, preserving and archiving of such material are yet to be solved and determined.

E-serials in libraries – national developments and practice: Bosnia and Herzegovina

Dijana Bilos - Dzenana Tuzlak
ISSN Centre of Bosnia and Herzegovina
Bibliographic Department of the National and University Library of Bosnia and Herzegovina, Sarajevo (Bosnia and Herzegovina)
dijana@nub.ba, bibliografija@nub.ba

The National and University Library of Bosnia and Herzegovina was established in October 1945 by the decision of the Ministry of Education of the Federal Bosnia and Herzegovina. Until 1992 the library possessed over 2 million volumes and other items including approximately 6 000 titles of periodicals. It was completely destroyed by Serbian bombardment during the night of August 25/26, 1992. With 10% of holdings left the staff of the library continued intensive work on the reconstitution of the library material and reviving its old functions – and established new ones. After the destruction, the library had great difficulties in its recovery as its present premises don't conform to the modern library standards. In spite of the fact that it was completely destroyed, at the end of the second millennium the National and University Library of B&H remains the main focal point for library science and information research in Bosnia and Herzegovina. For this reason it has to rely on the latest achievements of information technology. Before the war there were 108 employees; today only 67. Nevertheless, strong efforts are made to initiate education and training programs for librarians.

Presently library operations are governed by the law on librarianship activities dated 1995 (Official Gazette of B&H, no. 37 dated October 2, 1995). According to this legal regulation the National and University Library is defined as the central library of Bosnia and Herzegovina; it is thus national and university library at the same time. It has to receive and preserve the documentary heritage of Bosnia and Herzegovina. The library receives legal deposit material but it also works on restoring its destroyed and lost collections. It collects, processes, stores and promotes the library profession. It is also intended for education, information and satisfying cultural needs of the population.

The National and University Library of B&H, as an authorised national centre, produces national current and retrospective bibliographies of monographs and serials, and takes care of
innovations in bibliographic field. These bibliographies are issued on a yearly basis.

The library is member of the most important international library organisations as IFLA, FID, International co-operation is carried out also through interlibrary loan and book exchange. The library carries out the functions of the national centres for ISSN, ISBN and CIP. It represents the depository library for the publications of some UN organisations and UNESCO. The National and University Library of B&H is a central point for links to other libraries in LIS of B&H and connects them in the world information system.

Nowadays, the library holdings total over 300 000 volumes, mostly consisting of the humanities and social sciences, and around 700 domestic serial titles. The National and University Library of B&H is trying to offer its information through the Internet, online and offline databases.

The agreement between the ISSN International Centre and Bosnia and Herzegovina was signed in May 1998; Bosnia and Herzegovina acceded to the ISSN Statutes in June that year. On that occasion the ISSN Centre of Bosnia and Herzegovina was established at the National and University Library of B&H as a part of the Serials Department. The ISSN Centre of B&H has started to assign ISSN to serial publications published in B&H since October 1998. From the beginning the centre has carried out its regular activities: selective registration of serial titles, assigning ISSN to B&H serial publications, assigning prepublication ISSN to publishers requesting it by phone, fax, post and personal visits, updating ISSN records, informing library users and colleagues about serials included in the ISSN database, offering instructions to new publishers providing them with brief information about the concept of ISSN, title, serials and EAN bar code, maintaining several registers (ISSN register, register of key titles, register of B&H publishers of serials, register of ISSN full format, register of proposed abbreviations, register of COBIBB temporary numbers and register of COBIBB titles), control of printed ISSN and bar code on serials, translating ISO and ISBD standards and usual co-operation with the ISSN International Centre. For the time being all work is done in traditional way without using any software. This means that all records are sent to the ISSN International Centre on ISSN data transmittal sheets.

Presence of the electronic publications at the libraries and other cultural and educational institutions is considerably our reality. Because of that, processing of the electronic resources has recently become a very interesting theme, especially in reflection of many discussions about digital libraries. As far as e-serials are concerned we can say that electronic publishing is still in its infancy in Bosnia and Herzegovina. For the time being, there is a certain number of e-serials but we are sure this number will grow in the future.

We don't have yet legal deposit for electronic publications in B&H. The Legal Deposit Law in B&H covers the following documents: books, booklets, journals, newspapers, offprints, dissertations, catalogues, plans, maps, standards, music works, postcards, photographs, microfilms, records, sound cassettes, video cassettes, magnetic tapes, manuscripts and other material intended for the library activity. According to article 3 of the Law of Library Activity "library material is material mentioned above and every other material intended for public and produced by printing press or reproduced by some other mechanical, chemical or electronic way."

National registration of periodicals is realised by the ISSN Centre of B&H and Serials Department of the National and University Library of B&H. Electronic serials are partly covered by this registration: the ISSN Centre of B&H creates the Register of B&H serials publishers and after relevant data we mention the URL of certain serial title for which we know that it has been published on Internet.

The ISSN assignment is basically regulated by law in B&H according to the article 32 of the Law of Library Activity (Official Gazette of B&H, no. 37/95). The ISSN Centre of B&H assigns ISSN to e-serials on request. If a publisher insists on acquiring an ISSN for his electronic serial, he receives it. Only one ISSN has been assigned so far to the e-serial Sarajevski svijet online = ISSN 1512-5815. For the time being the National and University Library of B&H doesn't catalogue Internet serials and none of the e-serials is included into the national bibliography. The situation is the same with component parts (e-articles).

The National and University Library of B&H is a central point for links to other libraries in LIS of B&H and connects them in the world information system.

The Reference Department offers the users access to the e-serials via Internet. There are CD-ROM databases also accessible for users. These services are expanding and we hope that the number of available IT resources will grow.
Legislation covering e-serials

Registration of serials is carried out on national level by ISSN Centre Slovenia and National Bibliography Department of the National and University Library. The assignment of ISSN numbers is not legally regulated and is based on a consensus between ISSN Centre and publishers.

Slovenian legislation regulates legal deposit of printed serials but online or remote access e-serials are not subject to legal deposit. In case of registered publishers, legal deposit copies are usually obtained without problems. Publishers of offline electronic (CD-ROM) serials (4 legal deposit copies) usually deposit copies themselves. More problems occur with online electronic serials. It is expected that the new Legal Deposit Act will cover e-serials, regardless of the type of access. As of now, the ISSN center is usually not informed about such publications by their publishers. In the National and University Library, a project is under way within the frames of which the problems of harvesting, preservation, metadata, archiving and best practices of long-term retention of remote access digital objects are being dealt with.

Availability of e-publications and their composite parts is regulated by the Slovenian Copyright Act. These publications are under strict legal provisions regarding the protection of intellectual property. Therefore, access to these publications in the depository library can not be expected to be unrestricted and will be regulated by Copyright Act and the new Legal Deposit Act.

Identification of e-serials

Both ISSN assignment and cataloging of remote access e-serials are carried out at the ISSN Centre at the moment. Data on new remote access e-serials are obtained over Internet, where lists of Slovenian e-serials, mostly thematically organized, are available on Slovenian Internet browsers. These lists also include access (in case of free-of-charge publications) or URL. In most cases, ISSN have been assigned to e-serials on request of the publisher, and only lately we have started a more systematic approach. The ISSN centre is starting to work more intensively on stimulating publishers of e-serials to request ISSN numbers. ISSN are assigned with regard to the type of publication and their importance on Slovenian territory, especially in the case electronic version of a printed serial.

Number of ISSNs assigned to e-serials in Slovenia up to now: 150
Number of offline e-serials: 110
Number of online e-serials: 40

Processing of e-serials

The biggest problem of creating records for online e-serials for retrieval through our online catalog is the updating of data and, in the first place, of URLs. It often happens that a remote access e-serial changes its location and the data in the URL and the local access field of the record becomes useless, unless we are notified by the publisher about the change.

Activities of the Institute of Information Science (IZUM), Slovenia
Denis Rakuša
Database Management
Romana Muhvič Šumandl
Head, COBISS Users’ Service Group
Institute of Information Science, Maribor (Slovenia)
Denis.Rakusa@Izum.si, Romana.Muhvic@Izum.si

Activities of the Institute of Information Science (IZUM), which was founded by the Government of the Republic of Slovenia as a
Identification of continuing resources issued in electronic media in Hungary
Elizabeth Gazdag
Director, ISSN Hungary, National Széchényi Library, Budapest (Hungary)
liza@oszk.hu

The first electronic serial was identified by ISSN Hungary in 1988. It was a monthly publication on floppy disk, however, this physical medium has not become popular in Hungary later. Periodical publications issued in tangible electronic formats have been included in the national bibliography of periodicals, as well, shortly after their appearance. The number of serial publications on floppy disks described has reached by now all in all 14 – while, for the time being, 112 CD-ROM serials are registered in the national ISSN database (and in the national bibliography). Thanks to the new legal deposit legislation of 1998 (and to the publishing activities), the number of CD-ROM products delivered to the national library has been remarkably growing lately. Co-operation has been developed between the ISSN centre and serial cataloguers to optimise the working procedure so as to process tangible electronic periodicals by installing the disks only once during for the creation of our records.

As far as monographic publications issued in off-line electronic media concerned, they have not been included in the Hungarian national bibliography so far – however, these descriptions are appearing in the OPAC system of the national library together with the related records registering the corresponding series titles, if any. The records follow the prescriptions of the respective ISBD(ER) standard, which was translated into Hungarian and published in 2000.

As the moment, the integrated library system is under development in the Hungarian national library: the Amicus integrated system together with its OPAC, called LibriVision, has been in use since December 2000. As periodicals have not yet been included in the system (they are available in a separate database), it is only the ISSN data file where all kind of serials can be found in one registration, including newspapers, periodicals and series titles.

Since remote electronic documents are not represented in the national bibliographic system in Hungary, registration of online electronic resources
is another unique feature of the ISSN database. However, the legal deposit law provides in general that deposit copies of all kinds of press products have to be delivered regardless of their medium, neither organisational structure appointed, nor technical facilities available to receive online documents delivered. There is no nation-wide archive or archiving project developed in Hungary at the moment. Yet, the number of identified Web-publications in the ISSN database was 237 at the end of March 2001.

The ISSN national centre in Hungary started the identification of remote continuing resources in 1996. The year 1996 is considered to be the year of Internet "explosion" in Hungary, when nation-wide daily newspapers one after the other became available online, via the Internet, and together with the online versions of printed serials, independent online magazines also started their careers.

Most of the ISSN assignments are originated from the printed version. As soon as the library receives the legal deposit copies of a new serial, and we find a reference in the publication to an Internet access, we visit the web site and check the existence of the online publication together with the presence of full text articles, documents.

The awareness of Internet publishers concerning identification is developing however, but it is still not satisfactory. Only about 20% of the registered remote resources were described on request coming from the publisher or the Internet provider. Some of the requests are justified by official document issued by the Periodicals Registration Department of the Ministry of Cultural Heritage – as in case of printed serials. The official form designates the publication a "serial" regardless of the real type of the resource according to the new definitions developed for the revised cataloguing codes. The experience shows that most of the requesters maintain – or planning to maintain – a continuing resource of "integrating" type.

Taking into account the great backlog in identification of remote resources, ISSN Hungary decided to identify preferably online serials available in discrete parts rather than integrating resources on the Hungarian Web. Hundreds of titles should be registered in the nearest future to cope with the strategic plan announced and undertaken by the ISSN network. During the summer of 2001, we plan a common project enabling one Hungarian cataloguer to be delegated to the staff of the ISSN International Centre in Paris with the aim of identifying and registering Hungarian remote electronic resources in the ISSN database. To ensure finding and processing the most important Hungarian publications on the net, an online catalogue of Hungarian Internet resources built by the John von Neumann Digital Library under the name WebKat.hu was chosen as a basis for selecting identifiable serials. Cooperation has been developed between the John von Neumann Digital Library and ISSN Hungary to exchange information on online serial resources and ISSN assignments. As a result of the planned project the number of records describing online resources will probably be doubled in the national ISSN database by the end of the year. Maintenance of the growing number of records describing online resources remains a future question.

Until bibliographic control and long-time preservation of the Hungarian web is solved in our country co-operation's of national and international level play an important role in identification of continuing bibliographic resources issued in electronic media.

E-serials in libraries – country report: Czech Republic
Eva Jerabková
State Technical Library, Prague
(Czech Republic)
E.Jerabkova@stk.cz

Legislation and identification of e-serials

The legal deposit on periodicals (Periodicals Printing Act No.46/2000 Coll., effective from
(2000) deals only with printed periodicals. The Czech Republic still has not established any bibliographic registration of online electronic documents. The new copyright law (amended in 2000) puts electronic publishing under the copyright protection.

The Czech ISSN National Centre started to register and process e-serials located in Czech Internet domains for the ISSN system from the end of 1999. The CNC (see homepage at http://www.issn.cz/issn/index.htm) assigns ISSN upon publisher’s request using an electronic request form (http://www.issn.cz/issn/online_form.htm). Up to now 129 ISSN have been assigned to e-serials, i.e. 114 ISSN to e-journals, online versions of printed journals, e-magazines, integrating websites; 15 to offline e-serials.

Processing and archiving of e-serials

In the Czech Republic, Internet serials are not processed in general. However, from 2000 two main projects co-ordinated by the National Library of CR are under way. The project "Registration, preservation and accessing of Czech electronic resources in Internet" is focused on all aspects of electronic online resources, and especially on including these resources to the national bibliography. Technical equipment is based on project NEDLIB engines on Linux server. The project is in its testing phase.

The second project "Union Database of Article Bibliography Cooperative System – optimisation of heterogeneous data integration and managing" aims to extend area of processing and accessing Czech articles, thanks to the exploitation of technologies in the electronic environment. Records should be linked with full texts of the articles. On the technical part, a Czech firm Anopress, maintaining its own archive of full text articles, cooperates in the project. As far as processing is concerned, structures of UNIMARC, AACR2 rules for bibliographic record and Dublin Core for structure of metadata in full text are used. Identification is based on URL, SICI, NBN and ISSN standards. The system is in its testing phase.

Licensing the e-serials

Terms and conditions of individual licence contracts define consortial access to services; it is controlled mostly through logins (ID) and passwords or through IP address range or IP of proxy server of the institution. E.g. the State Technical Library offers an access to sets of electronic journals through services: Science Direct/Elsevier Science service; LINK service of the Springer Vlg.; EFL Direct service of the EBSCO publisher; PROQUEST 5000; electronic versions of selected journal titles of publisher Wiley and bookseller Minerva (tied with subscription of printed journals); Czech database TAM-TAM (articles from Czech newspapers); Web of Science citation database; JCR Web; METADEX; (see http://www.stk.cz/zdroje/baze.htm).

Electronic serials in Slovakia
PhDr. Beáta Katrincová
ISSN National Agency
University Library Bratislava (Slovak Republic)
katrin@ulib.sk

Up to now any national policy for e-serials has been missing in Slovakia, but there is evidently a more intensive development in this area nowadays. The Slovak National Library (Bibliographical Institute of the SNL) prepares translation of ISBD (ER), events aimed on electronic serials are organized, and articles concerning e-serials problems are published.

Identification of e-serials published in Slovakia is provided by the ISSN National Centre at the University Library in Bratislava. ISSN to e-serials
have been assigned since 1998, in spite of the fact, that the Legal Deposit Law in Slovak Republic (Act No. 212/1997 Amendment No. 182/2000) does not cover publications issued exclusively in electronic form, only printed publications and printed publications published also on other physical medium are included. Up to now ISSN have been assigned on request only to online serials published in separate issues or using another updating structure, and also experimentally to databases. Institutional web pages and e-serials, which contain only abstracts from printed periodicals or articles downloaded from other resources are excluded. The requests have been provided using an e-form (www.ulib.sk/issn.htm). The ISSN NC staff checks the resource, decides about the assignment and advises publishers to display the ISSN number and other usual publisher data within the e-serial. ISSN have been assigned only after e-serials had been published on Internet. Processing of resources and reporting of records for the ISSN Register follow after publishing the ISSN on the resource. The Union Catalogue Department in University Library, Bratislava, processes registered e-serials in UNIMARC format.

These days the ISSN National Centre in Slovakia is intensively involved in processing of e-serials, thus answering the needs of the ISSN network. ISSN will be assigned to all ISSN-able e-resources and each processed e-resource will receive metadata (Dublin Core) generated from the OSIRIS (micro CDS/ISIS) application.

The University Library in Bratislava participates in the ESPRIT Project 977062 – Establishment of Electronic Information Services. The main aim of this project is to gather information about existing e-resources in the country. The archiving of e-serials and databases does not exist in Slovakia yet. Last year excellent possibility for accessing of e-resources has been provided by opening a Multimedia Reading Room at the University Library in Bratislava, which is equipped with modern information technology (Japanese Cultural Grant).

E-serials statistics:

- Number of ISSN assigned to continuing e-resources: 29
- Number of ISSN assigned to locally accessed e-resources (CD ROMs): 7
  - (6 - databases and 1 e-journal)
- Number of remotely accessed e-resources: 22
  - (6 successively issued, 18 other form of structure)

**E-serials in Martynas Mazvydas National Library of Lithuania**

Danutė Petrauskienė
Director, Lithuanian ISSN Agency
Centre of Bibliography & Book Science
National Library of Lithuania, Vilnius (Lithuania)
issnltu@lnb.lrs.lt

Bibliographic control of electronic publications raises many problems in our country. Presently, we have no policy about registration of electronic documents and no facilities to store them in our National Library.

We have Legal Deposit Law in Lithuania since 1996. This Law covers the following documents: books, periodicals, printed music, microforms, audio and video materials, cartographic materials, fine art publications, electronic publications, publications in Braille. It is specified which types of periodicals and how many copies should be delivered to the depository libraries without charge. Though delivery of e-publications is object of Legal Deposit Law, Lithuanian publishers do not want to deliver the number of copies of offline publications predetermined by the Law. The situation with online publications is more complicated, because we have no facilities to store them: there is no selection policy regarding remote accessed publications, technical facilities and staff.

ISSN assignment is regulated by "Law of Mass Information of Lithuania", which was issued in 1996. The new revised edition of this Law was passed in the year 2000. The relevant article is: Article 36. Requirements for publications and their dissemination, according to which every publication should have data about the print run,
publishing data predetermined by the relevant Lithuanian standard and international standard document numbers (ISBN, ISSN, ISMN).

At the moment, we have no national policy or guidelines regarding e-serials. There is no systematic ISSN assignment. Lithuanian ISSN Agency assigns ISSN to e-serials upon publishers’ request. We receive requests by e-mail, mail or fax. Another form for e-serials available on the Web is in preparation. It is difficult to encourage e-publishers to acquire ISSN for e-serials in our country as most of e-publishers are new people in the publishing world, and they know nothing about the ISSN network. Even traditional publishers issuing books or serials in printed form sometimes forget, that the publication in other media should have another ISSN. Though we popularise international standard numbers in the Lithuanian press, publishers of e-serials do not apply to the ISSN Agency. Several articles were published about the ISBN and ISSN systems, including explanation of rules of assignment of standard numbers. In addition, each publisher coming to the ISSN Agency gets a booklet where all explanations on ISSN assignment can be found.

The number of online serials registered in the ISSN Lithuanian Agency is small, it is not difficult to control them and to check their URL’s and mistakes. In online serials identified by ISSN three types of mistakes can be defined:
1. The publisher displays the ISSN assigned to the printed serial.
2. The publisher does not display any ISSN in the online serial.
3. The publisher changes the title which was identified by ISSN.

In all these cases we inform the publisher about the specific rules regarding ISSN assignment. Presently, the Lithuanian ISSN Agency and a staff member from the Information Centre of the National Library are preparing information about online serials and on the procedure of ISSN assignment to them together with examples of online publications eligible for ISSN assignment. Information will be published in the magazine "Naujoji komunikacija" (New Communication) which is very popular among e-publishers.

There is a database of e-serials in Lithuania. Although it is a new database, it covers most of the Lithuanian e-serials. We are planning to include information on ISSN assignment for this type of publications, on rules of assignment, about the advantages and also instructions on how to locate the ISSN on the online serial.

This year, a project titled "Accumulation, Archiving and Organization of Bibliographic Control of E-documents in the Structure of LIBIS" (Lithuanian Integrated Library Information System) was prepared. We expect to get funding for its realisation. The Working Group is preparing the requirements for this project including rules for selection of e-documents. We follow the practice of those countries, which are already accumulating and archiving e-documents, especially online ones.

The authorities of the National Library pay special attention to organization of user access to e-serials. We have an Internet reading room with 9 computerised workstations in the library. Users have a choice to search either free data bases and online serials or subscribed full text databases. Additionally, 18 computerised workstations with Internet access are accessible in special reading rooms, where search is allowed only in specific data bases (National Library data bases and subscribed databases according to the category of a particular reading room).

Some years ago, we have subscribed 7-8 collections of journals. This year, funds for acquisition were considerably cut and the National Library could subscribe only the EBSCO database.
Programs of the IFLA Section on Serial Publications in 2001, Boston

Saturday, August 18, 2001 08.30-11.20

23. SC I Serial Publications

SC Meetings are the business meetings of the Standing Committees of IFLA Sections. They may be attended by observers by permission of the chairs which is usually given. They are a good way of getting to know the work of a Section and may lead to direct involvement.

Tuesday, August 21, 2001 12.30-15.00

134. Serial Publications

'From Bibliographic Access to Content with a Click of a Mouse'

1. CrossRef: a Publisher’s Perspective
   KAREN HUNTER (Elsevier US, USA)

2. [Title will be announced later]
   KNUT DORN (Otto Harrassowitz Publishers and Booksellers, Wiesbaden, Germany)

3. From Bibliographic Database to Content - New Aspects for Library Work, New Aspects for Research, Education and Information Provision
   DIANN RUSCH-FEJA (Director, Library, Max-Planck-Institut für Bildungsforschung, Berlin, Germany)

Friday, August 24, 2001 10.15-12.15

242. SC II Serial Publications

Meeting may be attended by observers by permission of the chair which is usually given. It is a good way of getting to know the work of the Section and may lead to direct involvement. You are welcome.

IFLA Section on Serial Publications

<table>
<thead>
<tr>
<th>Chair:</th>
<th>Secretary:</th>
<th>Information Co-ordinator:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr Hartmut Walravens</td>
<td>Ms Agneta Holmenmark</td>
<td>Ms Elizabeth Gazdag</td>
</tr>
<tr>
<td>Staatsbibliothek zu Berlin -</td>
<td>National Bibliography</td>
<td>ISSN Hungary</td>
</tr>
<tr>
<td>PK</td>
<td>Periodicals</td>
<td>National Széchényi Library</td>
</tr>
<tr>
<td>Potsdamer Str. 33</td>
<td>Royal Library,</td>
<td>Budavári Palota F épület</td>
</tr>
<tr>
<td>D-10772 BERLIN</td>
<td>National Library</td>
<td>H-1827 BUDAPEST</td>
</tr>
<tr>
<td>Germany</td>
<td>of Sweden</td>
<td>Hungary</td>
</tr>
<tr>
<td>Tel.:+(49) (30) 266 2498</td>
<td>Box 5039</td>
<td>Tel.:+(36) (1) 224 3842,</td>
</tr>
<tr>
<td>Fax: +(49) (30) 266 2378</td>
<td>S-102 41 STOCKHOLM</td>
<td>Fax: +(36) (1) 202 0804</td>
</tr>
<tr>
<td>E-mail:</td>
<td>Sweden</td>
<td>E-mail:</td>
</tr>
<tr>
<td><a href="mailto:walravens@sbb.spk-berlin.de">walravens@sbb.spk-berlin.de</a></td>
<td>Tel.:+(46) (8) 463 4211</td>
<td><a href="mailto:liza@oszk.hu">liza@oszk.hu</a></td>
</tr>
<tr>
<td></td>
<td>Fax: +(46) (8) 463 4228</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E-mail:</td>
<td></td>
</tr>
<tr>
<td></td>
<td><a href="mailto:agneta.holmenmark@kb.se">agneta.holmenmark@kb.se</a></td>
<td></td>
</tr>
</tbody>
</table>

Editor of this issue: Elizabeth Gazdag, Information Co-ordinator for IFLA Section on Serial Publications

The electronic version of the Newsletter is available via IFLANET: http://www.ifla.org/VII/s16/ssp.htm