ICABS Activity Report
August 2005 – January 2006

ICABS secretary

ICABS-Board has been on work of the secretary to perform follow-up course work of the ICABS programme during the World Library and Information Congress in Oslo, and to coordinate the planning of the ICABS programme for Seoul. Another main working field was the preparation of the ICABS evaluation that is due in summer 2006. In the field of support for the ISBD Review Group a lot of work has been done, and there is also a progress for the VIAF project to be reported.

Coordination

- WLIC Seoul 2006 programme coordination
- Preparation of the ICABS evaluation
- Organisational work

Publications

- Oehlschlager, Susanne: ICABS beim World Library and Information Congress in Oslo
  In: Dialog mit Bibliotheken 17 (2005) 3, S. 40 – 43
- Oehlschlager, Susanne: IFLA-CDNL Alliance for Bibliographic Standards at the World Library and Information Congress in Oslo
- Oehlschlager, Susanne: ICABS at WLIC in Oslo
  In: ICBC (in preparation)

Susanne Oehlschlager
Die Deutsche Bibliothek
February 2006
International Cataloguing and Bibliographic Control (ICBC) was published on a quarterly basis. Four issues of this periodical completed Volume 34 (2005). ICBC is devoted to issues, projects, research and new development in the broad field mentioned in the title. It provides an international forum for the exchange of views and best practice by members of the library and information management profession in general and those in the sectors of cataloguing, bibliography and indexing in particular. Over the years ICBC has grown from a newsletter to a really international professional journal with currently around 800 subscribers worldwide.

During the reporting period two new titles appeared in the IFLA Series on Bibliographic Control:


And one relevant title came out in the IFLA Publications Series:


In addition a substantial number of translations of existing IFLA Publications in the field of bibliographic control was published. Among translations of ISBD-*) and FRBR-**) publications - apart from the IFLA working languages (English, French, German, Russian, Spanish) - were those into Croatian, Czech, Finnish, Latvian, Portuguese, Serbian and Spanish.

For more information about the work of IFLA please visit IFLANET (http://www.ifla.org). IFLA/UNIMARC Core Activity can be found at http://www.ifla.org/VI/8/up.htm.


Sjoerd Koopman
IFLA Headquarters
The Hague
April 2006

*) International Standard Bibliographic Description
**) Functional Requirements for Bibliographic Records
This report covers the period from August 2005 to January 2006. The main developments are:

**FRBR maintenance and development**

The ICABS/British Library liaison with FRBR Review Group is Alan Danskin.

Alan has conducted a survey of ILS Vendor attitudes to FRBR implementation on library management systems. This was originally proposed to ICABS by the BL at the close of 2004 and the idea was endorsed by the FRBR Workshop in Dublin, Ohio in May 2005. The survey was carried out by questionnaire between June and September 2005. The results and recommendations for action have been sent to the FRBR Review Group and will be circulated more widely after their comments are received.

**FRANAR**

The ICABS/British Library liaison with the FRANAR Working Group is Andrew MacEwan.

The closing date for comments on the FRAR model from the worldwide review was 31st October 2005. The FRANAR working group met in The Hague on 9th December 2005 to review the submitted comments and feedback. The BL, under ICABS, together with Division IV provided funding for the meeting.

The group made significant progress in that meeting on working through all the comments and incorporating appropriate improvements and clarifications to the FRAR model. Work is continuing into early 2006 to complete the review of all the comments through a series of telephone conference calls. A final version of the model should be ready later in 2006.

Caroline Brazier, Alan Danskin, Andrew MacEwan
The British Library
January 2006
This report covers the period from **August 2005 – January 2006**.

During this period the focus of Die Deutsche Bibliothek as the chair of the ICABS-Board has been on work of the secretary to perform follow-up course work of the ICABS programme during the World Library and Information Congress in Oslo, and to coordinate the planning of the ICABS programme for Seoul. Another main working field was the preparation of the ICABS evaluation that is due in summer 2006. In the field of support for the ISBD Review Group a lot of work has been done, and there is also a progress for the VIAF project to be reported.

**VIAF cooperative**

The goal of the VIAF project is to proof the feasibility of a “Virtual International Authority File”. Two big national authority files for personal names - the “Library of Congress Name Authority Files (LCNAF)” and the “Personennamendatei (PND)” - are linked through a crosslink file, the VIAF. The VIAF provides crosswalks between the national authority files and enables users to search in the same way as in a physically unified international file.

Within ICABS Die Deutsche Bibliothek and the Library of Congress are responsible for the VIAF cooperative. The executing partner in this project is OCLC, a non-member of ICABS.

Within the present stage, OCLC together with LC and DDB is going to conclude the preparatory operations for matching and merging LCNA and PND records. To improve the merging process the name authority records are enriched by attributes taken from the associated bibliographic records from the Library of Congress, Die Deutsche Bibliothek and the BibliotheksVerbund Bayern. Several tests have been carried out to check the algorithm which is used and the weightings of the different attributes. The final merging was planned for December 2005 but due to unexpected difficulties could not be accomplished. The project partners are confident of solving the problems and doing the merging within the first half of 2006. After the successful merging of the LCNA and PND records the project partners will meet to discuss and interpret the results and to agree on further actions.

During the WLIC 2006 in Seoul the project partners will present the results achieved to a broader audience within the Open programme of the Cataloguing Section.

**ISBD maintenance and development**

Die Deutsche Bibliothek is the lead ICABS partner in supporting the work of the IFLA Cataloguing Section’s ISBD Review Group in developing and maintaining the International Standards for Bibliographic Description. We also work to encourage the harmonisation of national practices to follow these standards and to promote the results of the ISBD revisions.

**ISBD Review Group**

ICABS is represented on the ISBD Review Group by Renate Gömpel.
Die Deutsche Bibliothek actively supports the Review Group’s Study Group on Future Directions of the ISBDs. Among other terms of reference this group is considering the use and values of an ISBD that combines into a single document provisions for the entire Family of ISBDs, in order to facilitate revision work and to abolish and further avoid inconsistencies in the ISBD stipulations. Like in the year before Die Deutsche Bibliothek will host a 3-day meeting of the Study Group in April 2006 in Frankfurt.

ICABS secretary

Coordination
WLIC Seoul 2006 programme coordination
Preparation of the evaluation
Organisational work

Promotion for ICABS

Publications

- Renate Gömpel u. a.: Weltkongress Bibliothek und Information, 71. IFLA-Generalkonferenz in Oslo, Norwegen : aus den Veranstaltungen der Division IV Bibliographic Control, der Core Activities ICABS und UNIMARC sowie der Information Technology Section
  In: Bibliotheksdienst 39 (2005) 10, S.
- Oehlschläger, Susanne: ICABS beim World Library and Information Congress in Oslo
  In: Dialog mit Bibliotheken 17 (2005) 3, S. 40 – 43
- Oehlschläger, Susanne: IFLA-CDNL Alliance for Bibliographic Standards at the World Library and Information Congress in Oslo
- Oehlschläger, Susanne: ICABS at WLIC in Oslo
  In: ICBC (in preparation)
Lectures (Forthcoming)

- Gömpel, Renate: ICABS – Umbrella for multifaceted activities in the area of bibliographic and resource control
  UNIMARC & Friends, Lisbon, 20-21 March 2006

Renate Gömpel
Die Deutsche Bibliothek, February 2006
Goal: To advance understanding of issues related to long-term archiving of electronic resources, in order to improve international coordination and to steer developments in the area of digital preservation.

Actions:

4.1 Explore the requirements/conditions for long-term archiving of electronic resources.
4.2 Migration & emulation: explore and promote strategies, methods and standards.

Report:

To reach this goal, the Koninklijke Bibliotheek (KB) conducted a survey on the current state of affairs of digital archiving in 15 national libraries (baseline July 2005). This survey addressed both operational and R&D activities aimed at digital preservation. The main focal points were the use of standards in operational safe place environments and the state of affairs on permanent access strategies, such as migration and emulation. Apart from providing information on the status, function and organisational embedding of digital repositories in the library organisations, the survey also gives an overview of the current national and international R&D projects.

The survey concluded that digital preservation in the year 2005 is becoming increasingly integrated in the day-to-day library activities. Digital preservation is a rapidly developing discipline and although there are not many official standards for it yet, emerging best practices might develop into standards within a few years. Since 2003, considerable progress has been made in building digital repositories, or networks of interconnected computer systems. A second development is the emergence of large networks for national and international cooperation. At first, the focus was limited to the cultural heritage sector, but now the perspective is broadening, and cooperation between the cultural heritage sector and the science sector is becoming increasingly important. Although such cooperative projects or platforms often started with a focus on knowledge dissemination and knowledge sharing, it is likely that they could be used in the near future for the joint development of tools for permanent access as well.

The KB-ICABS survey will be published by the end of February 2006 in IFLA’s Green Series (K.G. Saur Verlag, München), with the title Networking for digital preservation. Current practice in 15 national libraries. In March 2006, the publication will also be available online through the websites of ICABS and PADI.

In July 2005 the survey was made available for review. The August-December 2005 period has mainly been used to implement the additional comments of the members of the ICABS Board and of the libraries involved.
In the 2004-2005 period, The National Library of Australia (NLA) also carried out a survey for ICABS, which focused on the availability of guidances in digital preservation. During the ICABS Session on Digital Preservation on the 18th of August at the WLIC in Oslo, Norway, Ingeborg Verheul of KB presented the results of both surveys in one presentation. Since the NLA-ICABS Survey will only be available online, the KB-publication also contains a Summary of the NLA-report.

In Oslo, KB also gave a presentation on ICABS for the annual meeting of CDNL, which took place on the 17th of August.

By the end of 2005 KB and NLA developed plans to jointly take up new initiatives on digital preservation in 2006. The focus will be on developing and testing tools for preservation planning and risk alert. KB will develop several preservation management tools within the framework of the PLANETS (Preservation and Long-term Access NETworked Services) Project, whereas NLA will work on an approach to notification of obsolete file formats as scope of the ASPR Project (Australian Partnership for Sustainable Repositories). The two libraries will cooperate by sharing information, providing input to specification and testing tools developed in the areas of focus mentioned above.

Ingeborg Verheul  
Koninklijke Bibliotheek  
February 2006
MARC 21 and its XML derivatives

MODS has been adopted for the metadata in Aquifer, a Digital Library Federation project to build a digital library model based on distributed content with rich, shareable metadata. Since tools and best practices are primary goals of the project, a MODS Implementation Guidelines document (www.diglib.org/aquifer/index.htm) was prepared and posted for review December 2005-January 2006. It is based on the MODS User Guidelines that are available on the MODS site (www.loc.gov/mods). Other recent implementation activity comes from the Colorado Digitization Project in the U.S., the University of Manchester (U.K.) Copac catalogue, and the federated search of the library and archival databases at the Library and Archives Canada (www.loc.gov/standards/mods/registry.html). The mapping for conversion of the XML Metadata Authority Description Schema (MADS) (www.loc.gov/mads), to MARC 21 Authority data was completed and the XSLT style sheet (http://www.loc.gov/standards/mads/mads-mapping.html) was recently posted on the MADS web site.

MARCXML, which had been available from the MARC 21 web site since 2002 (www.loc.gov/marcxml), provides a lossless pathway from MARC 21 to MARC in XML and then back. Work is underway, led by Danish Standards, to create an ISO standard, called MarcXchange, for the basic underlying structure of MARCXML, similar to the structure standard for MARC 21 which is ISO 2709. In September 2005, the MarcXchange initiative was approved as a new work item in ISO that could be progressed directly to DIS (Draft International Standard) ballot. Subsequently, in December 2005 it was submitted to ISO for DIS ballot distribution.

MARC 21 documentation activities included development of proposals, posting them on the web, and gaining consensus for 2006 format changes. A major proposal that was approved was a technique for reducing Unicode encoding to the MARC-8 encoding for distribution to systems that handle MARC-8 only. MARC-8 encompasses 16,000 characters covering Latin, Cyrillic, Greek, Chinese, Japanese, Korean, and Arabic scripts, but with the implementation of Unicode, more scripts and additional characters will become common. For example, recently OCLC announced it will soon begin to support Thai and Tamil, while the British Library is experimenting with Armenian. The technique approved was a lossy one that substitutes a mark for the non-MARC-8 character, although a lossless one will also be standardized. In the end, MARC 21 will have standard lossy and lossless techniques for Unicode to MARC-8 encoding conversion. In addition, the 2005 update for MARC 21 was prepared.

Z39.50 and SRW/SRU

The SRU implementers have been discussing and developing various proposals for changes and features to be included in the next version, 1.2 or 2.0. These include: sort (to move sort from an SRU parameter to a CQL parameter), proximity, and bibliographic indexes. The latter includes an index set based on MODS, and one based on OpenURL. Among other issues discussed were official standardization of SRU, and the integration of SRU with other potential protocols, for example, Amazon's OpenSearch. Work continued on a draft Record Update protocol, which is near completion. Several implementations are already planned. A meeting of SRU implementers will be held March 1-2 in The Hague to consider these items.
and proposals. As an add-on to the implementers meeting, there will also be a one-day integration workshop, focused on integrating SRU with other protocols and services.

During the past six months the SRU (Search Retrieve via URL) web site was completely reorganized (www.loc.gov/sru). The widely used Z39.50 protocol remained stable and a major source of material for SRU development.

**Metadata and XML metadata schemes**

Since the Library of Congress established the web site for the PREMIS maintenance activity (www.loc.gov/standards/premis/), the PREMIS data dictionary and accompanying schemas have gained recognition as an important standard for preservation metadata. In November 2005 the PREMIS working group was awarded the Digital Preservation Award for its groundbreaking work. The award was sponsored by the UK Digital Preservation Coalition as part of the Conservation Awards supported by a number of UK cultural heritage institutions.

The Library of Congress, as part of the PREMIS Maintenance Activity has commissioned two consultancies to move the PREMIS work forward. One is a study of rights issues related to the preservation of digital materials, with an emphasis on the metadata requirements needed to document and manage these rights in a digital preservation repository setting. A second one is to compile guidelines and recommendations for implementing the PREMIS data dictionary in the context of a set of common digital preservation use cases.

Other work includes the development of a document that will place the PREMIS data dictionary in the context of the OAIS Reference Model and a registry of institutions implementing the data dictionary in their own repositories. Discussions are underway with the UK Digital Curation Centre to arrange one or more training events in the UK on use of the PREMIS Data Dictionary.

The PREMIS Implementers’ Group discussion list has more than 100 subscribers. Current discussion is focused on how the PREMIS data dictionary and XML schema can be used in conjunction with METS.

The METS Editorial Board, an international group that finalizes changes proposed for METS and approves profiles and related documentation, conducted a METS Opening Day (a training and outreach event) on October 15, 2005 in Edmonton, Canada. This was the fourth METS Opening Day. Others have been held at the Library of Congress, Stanford University, and the British Library. The Board is currently making plans for a METS Implementors Meeting. This event is targeted at those who have already started METS-based projects, and especially for those responsible for software application development.

The Editorial Board approved for registration two new METS Profiles. A profile from the Research Libraries Group (RLG) describes the METS documents created by RLG for use with the Trove.net site, a freely accessible image database that contains rare and unusual images, reflecting the world's cultures. The Library of Congress submitted a METS profile for Recorded Events. This profile is intended for use with either audio or video recordings. The profile has been implemented in the LC digital library project "Library of Congress Presents: Music, Theater, and Dance" (formerly called "I Hear America Singing").

The tutorial document "METS Overview" on the METS website was recently translated into German. The German translation was provided by Angelika Menne-Haritz and Markus Enders. The Overview is also available in English, Italian, and Portuguese.
Monitor work on Identifiers

The Library of Congress added new postings to the URI Resource Page in September, October, and November 2005, reporting on actions and activities relating to URIs taking place in the IETF and the W3C (www.loc.gov/standards/uri/). The latest postings review the issues mentioned below.

Character encoding has been a major topic in the identifier arena. The IRI -- Internationalized Resource Identifier -- has been finalized (RFC3987). It extends the URI, defined as a sequence of characters from a limited subset of the ASCII character repertoire, to a wider set of allowed characters. In a related development, a new Internet proposal would extend the "mailto:" scheme to allow characters to be percent-encoded based on UTF-8, offering a more consistent way of dealing with non-ASCII characters.

The "info" URI has been officially approved as a URI scheme. There are currently 20 "info" namespaces. These include info:doi, info:lccn, and info:nla. Recent additions (since last July) are info:pronon (National Archive Pronon identifiers), info:archiv (to identify papers in the arXiv.org e-print repository), info:hdl (handles).

Sally McCallum
Library of Congress
February, 14, 2006
**National Library of Australia**


Goal 3: Develop strategies for bibliographic and resource control and ensure the promotion of new and recommended conventions

**Actions**

3.4 Role of the catalogue

Explore the role and requirements of the catalogue in supporting rapid and easy access by users to information in all formats, identifying enablers and inhibitors associated with for instance, functionality, international standards support, cataloguing conventions, and other resource discovery infrastructure.

The NLA has established a working group to explore these issues within the context of the Library’s strategic plan and the services provided by Libraries Australia, an online subscription service, which enables the combined catalogues of over 1,000 Australian to be searched. The database lists more than 40 million items including books, maps, pictures, journals, films and videos, CDs, DVDs, government reports, newspapers, talking books and musical scores. ([http://librariesaustralia.nla.gov.au/apps/kss](http://librariesaustralia.nla.gov.au/apps/kss))

Update February 2006 - The Working Group is still meeting and developing an action plan. A report on outcomes will be presented at the ICABS session at IFLA in Seoul.

Goal 4: Advance understanding of issues related to long-term archiving of electronic resources

**Actions**

4.1 Web harvesting
4.2 Develop tools to improve preservation planning and implementation of solutions
4.3 Improve knowledge sharing and dissemination on emerging topics in long-term preservation of and access to digital resources

4.1 Web Harvesting

Explore and promote methods to archive web-based publications collected by web harvesting.

(i) Contribute to the work program of the International Internet Preservation Consortium (IIPC)

The Library joined the International Internet Preservation Consortium (IIPC) in July 2003 and has been actively involved in its work since then. Based on its experience in creating the PANDORA Digital Archiving System (PANDAS), in November 2004 the Library was asked to lead the initial phases of a new IIPC project, the development of a Curator Tool, which will enable non-technical staff of collecting agencies to initiate and manage web archiving programs.
Update February 2006 – NLA staff are currently participating in the work of the IIPC group established to identify requirements for a tool to support web archiving functions that can be used by collection curators.

(ii) Maintain information available through the PADI subject gateway (http://www.nla.gov.au/padi/) that relates to harvesting and archiving web resources to ensure it is up-to-date

The PADI subject gateway (http://www.nla.gov.au/padi/) to digital preservation resources has been modified to incorporate information that provides an overview of approaches to archiving web based publications. Brief descriptions of a number of archiving programs that illustrate how the various approaches are being implemented have been linked to the overview page. These will be updated on an on-going basis in consultation with the owners of the programs described. In addition, current information relating to legal deposit and electronic resources will be available through PADI.

(iii) Explore ways of providing cost-effective search access to web resources that have been collected by means of selective archiving as well as through the Whole Domain Harvest approach.

Currently the National Library of Australia provides full MARC cataloguing for all web resources selected for archiving in PANDORA: Australia’s web archive. With the aim of reducing the cost of this component of the archiving process, a review of standards and international approaches to metadata creation for web resources will be undertaken, basic requirements determined and options for providing access assessed.

The new Access Level record proposed by Library of Congress will be considered as part of the review. In addition, the Library completed a harvest of the whole Australian domain in August 2005 and wishes to integrate access to this with the PANDORA archive. The issues associated with both approaches will be explored.

Update February 2006 – A working group is determining a strategy for providing public access to the contents of the Whole Domain Harvest using tools developed through the IIPC. The aim will be to provide integrated access with PANDORA content and unrestricted public access to components of the harvested content. A prototype will be developed by mid-2006

Action 4.2 Develop tools to improve preservation planning and implementation of solutions.

Actions

(i) The National Library of Australia (NLA) and the Koninklijke Bibliotheek (KB) will work together on developing and testing tools for preservation strategies and risk alert.

In the 2005-2006 plan period NLA will continue the activities for ICABS on advancing understanding of issues related to long-term archiving of electronic resources. The focus will be on developing and testing tools for preservation strategies and risk alert. In this field of interest NLA will closely work together with KB.

Since both libraries have an operational digital repository in place for several years now, the activities in digital preservation are now focusing on the development of permanent access solutions. NLA will work on an approach to notification of obsolete file formats (see (iii) below), whereas KB will develop several preservation management tools within the framework of the PLANETS Project (see Strategic Plan KB). The two libraries will cooperate
by sharing information, providing input to specifications and testing tools developed in the
areas of focus mentioned above.

(ii) The National Library of Australia will carry out a project to identify elements from the
PREMIS Preservation Metadata Framework required for preservation management purposes
in the digital repository environment and assess the extent to which Australian repository
implementations support the mandatory preservation elements.

Update February 2006 – Project commenced and will continue for several months.

(iii) As a member of the Australian Partnership for Sustainable Repositories (APSR) project,
the National Library of Australia will lead a project to develop an Open Source Automatic
Obsolescence Notification Service (AONS) (http://www.apsr.edu.au/) that notifies repository
managers of obsolete digital formats.

Update February 2006 – Not yet started.

Action 4.3 Improve knowledge sharing and dissemination on emerging topics in long-term
preservation of and access to digital resources.

(i) The National Library of Australia will maintain the PADI subject gateway
(http://www.nla.gov.au/padi/) and provide access via the gateway to selected, current
resources relating to digital preservation.

(ii) The ICABS survey on digital preservation guidance documents undertaken by the NLA,in
2005 as well as the ICABS survey on the state of the art of digital preservation undertaken by
KB will be made available online on the ICABS website and on PADI.
1. **MAINTENANCE AND UPDATE OF UNIMARC FORMATS**

In August 2005 the Update 5 of UNIMARC Manual, 2nd edition, was published by Saur and presented in the IFLA booth at the Oslo Conference UNIMARC/Authorities in a revised electronic version and Guidelines for Music were posted on IFLANET, in December.

2. **UNIMARC SESSION IN OSLO 2005, JOINTLY WITH INFORMATION TECHNOLOGY SECTION AND ICABS**

As indicated in the previous report, the session was about “MARC/XML derivatives: the state of the art” and it occurred August 16, 13.45-15.45. Under discussion were the improvements in accessibility and reusability of UNIMARC and MARC 21 data, made possible by XML representations. The session was very attended (around 200 delegates present).

3. **INTERNATIONAL CONFERENCE – UNIMARC & FRIENDS: CHARTING THE NEW LANDSCAPE OF LIBRARY STANDARDS, LISBON, 21-21 MARC 2006**

The UNIMARC Core Activity with the sponsorship of the National Library of Portugal and the Art Library – Calouste Gulbenkian Foundation has been preparing this conference and copies of the provisional programme were available in Oslo. Registration is free of charge and at the moment of this report there are already 120 delegates registered from countries all over the world. The programme is available at [http://unimarc.bn.pt](http://unimarc.bn.pt).

The conference will bring together current bibliographic developments on ISBD, FRBR, FRANAR, MARC along with the revision of cataloguing codes and web based transmission standards with the objective of disclosing the current state of the art of new conceptual models and data specifications with implications for the future of MARC standards.

Speakers, according the sessions, are:

**SESSION 1:**

**CATALOGUING STANDARDS: CHALLENGES AND FUTURE DIRECTIONS**

John Byrum, Barbara B. Tillett, Patrick Le Boeuf, Glen Patton and Mirna Willer

**SESSION 2:**

**MARC PORTABILITY AND REUSE IN THE OPEN WEB ENVIRONMENT**

Michel Bottin, Vladimir Skvortsov, José Borbinha and Nuno Freire, and Giovanni Bergamin

**SESSION 3:**

**ROUND TABLE: EVOLVING STANDARDS FOR BIBLIOGRAPHIC DATA HANDLING: THE IFLA’S ROLE**
The first UNIMARC Users Group meeting will take place after the Conference with the aim of exchanging information about the use of UNIMARC and to promote its usability in different languages and countries.

The Conference endorses Goal 2 of ICABS Strategic Plan which is to “Maintain, promote and harmonise existing standards and concepts related to bibliographic and resource control”.

4. IFLA SEOUL 2006

The UNIMARC Core Activity prepared a new strategic plan for 2006-2007 and, in accordance, at IFLA Conference in Seoul, 2006, there will be a UNIMARC session about Scripts, UNIMARC and UNICODE, concentrating on the state of the art regarding multi-scripts and UNICODE.

Fernanda Maria Campos
Director, IFLA UNIMARC Core Activity

15 February 2006