



- Report from the Secretary -

**ICABS Activity Report
August 2006 – February 2008**

Development of the ICABS strategy and framework

Following discussions with IFLA and some CDNL Directors, the ICABS Advisory Committee meeting in Durban agreed to change the focus of the IFLA-CDNL Alliance. While it will still aim to cover important developments in bibliographic standards, it will shift the focus of its efforts to wider issues in digital library developments. Through a web based information resource and a programme of conference activities, in conjunction with IFLA Divisions, it will aim to provide the wider library and information community with knowledge, information and advice on key digital library developments.

The new framework is still being developed but more information will be available at the IFLA conference in Quebec in August.

IFLA

International Cataloguing and Bibliographic Control (ICBC) was published on a quarterly basis. During 2006 four issues (Nrs 1-4) of this periodical appeared as Volume 35 (2006) and in 2007 four further issues were published of Volume 36 (2007).

The third publication in the IFLA Cataloguing Principles series was published in August 2006: *IFLA Cataloguing Principles: Steps towards an International Cataloguing Code, 3. Report from the 3rd Meeting of Experts on an International Cataloguing Code, Cairo, Egypt 2005*. Edited by Barbara B. Tillett, Khaled Mohamed Reyad and Ana Lupe Cristán. München: Saur, 2006, 197 p. ISBN 978-3-598-24278-6. (IFLA Series on Bibliographic Control; vol. 29).

The fourth was published in August 2007: *IFLA Cataloguing Principles: Steps towards an International Cataloguing Code, 4. Report from the 4th Meeting of Experts on an International Cataloguing Code, Seoul, Korea, August 2006*. Edited by Barbara B. Tillett, Jaesun Lee and Ana Lupe Cristán. München: Saur, 2007, 672 p. ISBN 978-3-598-24281-6. (IFLA Series on Bibliographic Control; vol. 32).

The proceedings of the UNIMARC conference held in March 2006 in Lisbon, Portugal, were published in early 2007: *UNIMARC & Friends: Charting the New Landscape of Library Standards; Proceedings of the International Conference Held in Lisbon, 20-21 March 2006*, Edited by Marie-France Plassard. München: Saur, 2007, 133 p. ISBN 978-3-598-24279-3. (IFLA Series on Bibliographic Control; vol. 30).

In addition a number of translations of existing IFLA Publications in the field of bibliographic control was published, including translations of ISBD⁻¹, and FRBR⁻² publications in several other than the IFLA working languages (English, French, German, Russian, Spanish).

¹ International Standard Bibliographic Description

² Functional Requirements for Bibliographic Records

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>

Division IV: Bibliographic Control can be found at <http://www.ifla.org/VII/d4/dbc.htm>

Division VI: Division of Management and Technology at <http://www.ifla.org/VII/d6/dmt.htm>

Sjoerd Koopman
IFLA Headquarters, The Hague, March 2008

British Library

Action 1.1: *Descriptive metadata standards and principles*

- **FRBR maintenance and development**

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

Alan attended the meeting of the Review Group in Seoul and the meeting of the FRSAR working group. During the period under review:

- The FRBR Review Group has adopted and published a formal Process for the approval and publication of amendments to FRBR
- Revised its "terms of reference"
- The Working Group on the Expression Entity issued a revised definition of "Expression" for World Wide Review. The review is now closed and comments are being evaluated.
- The Working Group on FRBR/CRM Dialogue has met during the course of the year and the object oriented expression of FRBR is very nearly complete. The Group will continue its work by incorporating FRAD.

There were no requests for funding for FRBR or related activities in this period.

- **FRANAR**

The ICABS/ British Library liaison with the FRANAR Working Group is Andrew MacEwan. The main development in 2007 was the revised model coming out for worldwide review.

"The IFLA Working Group on Functional Requirements and Numbering of Authority Records is pleased to announce that a 2nd draft of "Functional Requirements for Authority Data" (previously titled "Functional Requirements for Authority Records") is now available for worldwide review. This draft, updated in response to comments received during the previous review, is on the IFLA web site at <http://www.ifla.org/VII/d4/wg-franar.htm>."

Further to this ongoing work the ISPI group met for the third time in April 2007 in London. That meeting proposed that the scope of the ISPI proposed identifier (i.e. what it is an identifier of) should be defined as follows:

- "• A Party is a natural or legal person or a group of natural or legal persons involved in the creation or dissemination of Intellectual Property.
- A Public Identity is an identity that is associated with and used publicly by a Party. Most real persons have one public identity. Some have many.
- ISPI is an identifier for the Public Identity of a Party."

The concept of "public identity" (derived from InterParty project) corresponds to the FRAD entity definition of a person or persona. This increases the potential for the ISPI to act as an identifier that will correspond to persons as identified in library name authority files.

Work remains to be done around the business implementation model for an ISPI registration and dissemination system.

No calls for financial support have been received during this period.

- **MARC related issues**

British Library support for the UKMARC format.

Development of the former UK MARC standard ended in 2002 when the British Library migrated to MARC21. An initial period of 5 years (to the end of 2007) was set for the continued supply of data in UKMARC format. A recent survey of customers still using UKMARC has shown that a considerable number are still unable to make the transfer to MARC21, so it has been decided that the Library will continue UKMARC support for one further year (i.e. to end Dec 2008).

New actions within the proposed ICABS Strategic Plan

Action 1.3: FRBR Quality Measure

Action 2.2: UK Names Agency

Milestones for the development of these activities are under discussion, so will be reported on in the next ICABS report. In the meantime please refer any questions to caroline.brazier@bl.uk

Caroline Brazier, Alan Danskin, Andrew MacEwan, Neil Wilson

The British Library
February 2008

Deutsche Nationalbibliothek

This report covers the period from August 2006 – February 2008

On 29 June 2006 the "Law regarding the Deutsche Nationalbibliothek" came into force replacing the old law of 1969. Since the new law has been effective networked electronic publications have been part of the legal deposit collection. With this expansion our library is enabled to contribute to the safeguarding of the digital cultural heritage of our country.

During the period under report the Deutsche Nationalbibliothek as chair and secretary of the ICABS Advisory Board has been coordinating the planning of the ICABS programme "Libraries contributing to web 2.0" and the Joint session with National Libraries and Information Technology Sections "National libraries and resource discovery strategies - local, national and global" during the World Library and Information Congress in Durban, and collecting and organising translation of the papers.

After last years Advisory Board meeting there have been discussions on the future of ICABS that were continued during the meeting in Durban. Furthermore we can report on a progress within the VIAF project.

Although the draft of the new ICABS work plan 2007-2009 contains some new actions from DNB, we report against the old plan as the Advisory Board has not yet come to a decision on the new plan, and only little progress has been made so far. One exception is the cooperation with Wikipedia.

VIAF cooperative

The goal of the VIAF project is to proof the feasibility of a "Virtual International Authority File". As a first step 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 the Deutsche Nationalbibliothek and the Library of Congress are responsible for the VIAF cooperative. The executing partner in this project is OCLC. In late 2007 the Bibliothèque nationale de France joined in the project.

The project is subdivided into 4 stages:

- Matching of the files, identification of identical records, linking of identical name authority records in a crosslink file. To support the identification the name authority records are enriched by attributes originating from the associated title records.
- Building a VIAF server
- Establishing an update-workflow between the VIAF and the authority files involved by using the OAI protocol
- Providing a user interface, implementation of Unicode, activation for user search

Since the end of 2006, DNB has been delivering updates of the PND records to OCLC monthly. In April 2007 DNB delivered about 110.000 data records of geographic data from the German Subject Headings Authority File (SWD) to OCLC for matching tests with geographic subject headings from LCSH. DNB is going to supply data via OAI very soon.

In June 2007 the project partners met during the ALA conference in Washington, D.C. and discussed further steps as well as the restatement of the Memorandum of Understanding as the Bibliothèque nationale de France joined in the project as a new partner in autumn 2007.

The VIAF prototype system is available at <http://viaf.org/>.

ISBD maintenance and development

The Deutsche Nationalbibliothek is the leading 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 and the Study Group on Future Directions of the ISBDs by Renate Gömpel.

The Deutsche Nationalbibliothek actively supports the Review Group's Study Group on Future Directions of the ISBDs. The group developed a consolidated version of ISBD that combines in a single document provisions for the entire family of ISBDs in order to facilitate revision work and to further avoid inconsistencies in the ISBD stipulations. The publication was launched during the WLIC in Durban in August 2007.

Authority files and Wikipedia

The German National Library is cooperating with the German language Wikipedia. The web encyclopaedia contains more than 600.000 articles from which about 20 % are articles about persons. The German authority file for personal names Personennamendatei (PND) contains about 2,7 million records and is used by libraries, museums and archives.

Within the project, the Wikipedia users link the articles for persons with the corresponding record in the PND by means of a Wikipedia tool. This tool enables the Wikipedia volunteers to search for authority records within DNB's catalogue. The full metadata for one or more persons that match the name searched for are displayed. After deciding on the correct match, the PND ID number will be added to the Wikipedia article thus giving direct access to the title records of the DNB.

In December 2007 more than 40.000 articles were already linked to the DNB catalogue. The authority file takes advantage of the suggestions for corrections from the Wikipedia community. The cooperation has been very successful so far and shall be expanded. We think also about expanding the method to be able to link to other catalogues and sources. Thus the user shall be enabled to navigate by means of the authority record within the semantic web.

Promotion for ICABS

Gömpel, Renate: ICABS - A new approach to well known challenges in the area of bibliographic and resource control

A presentation during the Cataloguing 2007 conference in Reykjavik, January 2007, available at: http://www.congress.is/cataloguing2007/fyrirlestrar/Renate_Gompel.pdf

ICABS secretary

Coordination

WLIC Durban 2007 programme coordination for ICABS session and joint session with National Libraries Section and Information Technology Section

Translations and organisational work

Post-processing of Advisory Board meeting in Seoul
Preparation of Advisory Board meeting in Durban
Post-processing of Advisory Board meeting in Durban

Susanne Oehlschläger
Deutsche Nationalbibliothek, March 2008

Koninklijke Bibliotheek

Report on KB's activities and projects related to managing digital resources for permanent access 2007 to 2008

Organizational issues

Last year KB took the initiative to set up a Netherlands Coalition for Digital Preservation. Its aim is to create an organizational and technical infrastructure in the Netherlands that guarantees permanent access to research data and scientific, cultural and government publications, within a five-year time frame. The Coalition has a small office on KB premises. One of the Coalition's first tasks is to supervise a comprehensive study into the state of the art of permanent access to the records of science, culture and government within the Netherlands. The questions to be answered include: who takes responsibility for archiving these records at the present time, and which systems and tools are in place for this task? <http://www.ncdd.nl>

KB has also joined forces with the BL to set up an Alliance for Permanent Access to the Digital Records of Science in Europe. In November 2007 ten large institutions signed a letter of agreement to participate and create a Foundation: CERN, ESA, ESF, STFC, STM Association, MPG, JISC, BL, KB en DNB. In addition, three national coalitions (UK, Germany, The Netherlands) will join the Alliance. The Alliance organized a strategic conference in Brussels on 15 November 2007, where representatives from the European Commission and large research organizations shared visions and strategies. The Alliance also supported a project proposal, PARSE.Insight, in which a number of actions from the Alliance's Work Programme will be executed. <http://www.alliancepermanentaccess.eu>

Research projects

Emulation

Dioscuri, an emulation tool for digital preservation, was completed in July 2007 and made available as an open source application. <http://dioscuri.sourceforge.net/> The emulator is the result of a joint project by KB and the National Archives of the Netherlands. The prototype is an emulator for a 16-bit computer and it has been presented at various conferences. Dioscuri will be further developed within the framework of the Planets project. In 2008 the tool will be implemented within the e-Depot infrastructure.

Webarchiving

In June 2007 the First phase of KB's webarchiving project was finished. The targets were to harvest a selection of websites, archive these in the e-Depot and describe the workflow for the load process. Also the legal implications were investigated, which resulted in the decision to use the opt-out method. In phase two the aim is to turn selective webharvesting and –archiving into an operational process both technically as well as organizationally. The load process will be refined, indexing, metadata and access to the archive are other issues that need attention. In 2007 KB also became a member of IIPC and takes part in the working groups for Access and Preservation.

Fileformats

After publication of the PDF-guidelines further research was made into (preferred) formats for masterfiles of images (TIFF, JPEG2000) and into PDF-A. A paper has been presented at the IS&T Archiving Conference about the use of compression for long-term archiving. Also the characterization and identification tools Jhove and Droid have been tested.

Characterization

In September 2007 KB started the project Characterization. Its aim is to develop four services that are necessary for a number of tasks (identification, validation and characterization) for the pre-ingest process for the e-Depot. These services should help us to gather more and better technical metadata about the files the KB is loading in its e-Depot. First implementation is expected Q2-2008.

Migration

In 2007 the implementation of the migration module for the e-Depot was started. This module will be able to migrate non-standardised text based publications into PDF-A.

KB & IBM Digital Preservation Group

Together with IBM, KB's supplier of the DIAS system, an initiative was started to investigate the impact of future developments on digital preservation at the KB. Two main topics were investigated: the Preservation Manager and a Framework for tools and services in relation to the DIAS system. With regard to the Preservation Manager an outline of new functional requirements were formulated, inspired by new developments like GDFR and Pronom, the management of complex objects and the implementation of the Preservation Manager in the workflows.

The Framework group looked into the ways tools and services could be used in the KB environment and at the opportunities the SOA architecture can offer. The results will be used in another project at the KB, the redesign of the pre-ingest process.

PLANETS

Further progress has been made within the EU PLANETS project. KB leads the subproject *Preservation Action*. This subproject is aimed at the provision of conversion tools. Currently existing migration and emulation tools are being mapped in order to assess which ones are missing and should be developed. The first version of the emulation tool Dioscuri (see above) is available. The usability of different tools will be described and criteria will be formulated for tools to be developed. All these tools will be available in the central registry within Planets. This registry will be developed in 2008.

The KB also leads a work package in Preservation Planning, in which a comparison will be made between the OAIS view on Preservation Planning and the translation into practice realized in the Planets project.

<http://www.planets-project.eu>

Hans Jansen
21 February 2008

National Library of Australia

**ICABS Action Plan 2005-2006,
progress report for April 2008**

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

3.4 Role of the catalogue

The report on the findings of the working group established to investigate issues associated with replacing our ILMS catalogue with the national union catalogue, *Libraries Australia Search*, has been finalised. A presentation on the outcomes of the investigation was delivered at the ICABS session at IFLA in Seoul, August 2006 (see <http://www.ifla.org/IV/ifla72/papers/102-Cathro-en.pdf>).

In February 2008, following a rapid prototype approach, the National Library implemented a more user friendly search and delivery interface to its online catalogue using VuFind open source software. The interface provides easy searching, and incorporates features such as relevance ranking, clustering and linking to related resources. It has been enthusiastically received by our users. The beta version of the catalogue interface is available at <http://protocat.nla.gov.au/>. Information about how this development fits into our single business approach to developing our digital library services using a service oriented architecture and open source software solutions is available at <https://wiki.nla.gov.au/display/LABS/Home>.

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

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

In February 2007, the NLA renewed its commitment to the IIPC phase 2 (2007-2009) and continues to be a member of the IIPC Steering Committee. The Library hosted the Second IIPC General Assembly in April 2008. Within IIPC, the Library leads a Preservation Working Group identifying emerging preservation solutions that apply to web resources and areas where development is still required.

(ii) Maintain information available through the PADI subject gateway

Due to competing priorities, for the last 18 months the NLA has not been able to commit the level of staff resource required to actively maintain and update the PADI database. Future options for managing the database are being explored and hopefully will be resolved by mid-2008.

(iii) Search access to web resources collected by selective archiving as well as whole domain harvesting

As part of a wide-reaching review of its web archiving activities, the Library has been investigating technical and policy issues associated with providing public access to its archives of resources collected through whole domain harvesting. Large scale harvests have been conducted in 2005, 2006 and 2007. While technical work is being done on integrating search functionality for PANDORA and the Library's domain harvests, the lack of legal deposit for digital materials constrains the provision of access to the domain harvests. The Australian Government is currently considering a proposal which would address these constraints for future harvests.

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

(ii) METS Project

NLA developed an Australian METS Profile in conjunction with the Australian Partnership for Sustainable Repositories in 2007. The profile was registered by the Library of Congress, and a report on the project is available from the APSR website (at <http://www.apsr.edu.au/nla-mets/index.htm>) along with the content of a presentation given at the Australian National University on 5 December 2007 (*Australian METS Profile : metadata about a journey* by Judith Pearce and David Pearson).

(iii) Develop an Open Source Automatic Obsolescence Notification Service (AONS)

A prototype AONS tool was developed in late 2006. During 2007, the National Library undertook a major project for APSR which refined the prototype tool for use with a range of format types, repository types and emerging format registries. As well as software development, the project involved development of a series of questions to identify obsolescence risks in both community use of formats and local repository factors. The project is reported at the APSR website (at <http://www.apsr.edu.au/aons2/index.htm>) and was discussed in papers to the iPRES 2007 conference in Beijing (at http://www.apsr.edu.au/aons2/pearson_ipres_2007_text.pdf) and at the 3rd International Digital Curation Conference in Washington, DC (at http://www.dcc.ac.uk/events/dcc-2007/programme/presentations/Day_Two/David_Pearson_1145-1215.ppt).

Pam Gatenby
11 March 2008

Library of Congress

ICABS Activities Report

August 2006-April 2008

MARC 21 and its XML derivatives

The Library of Congress finalized version 3.3 for the Metadata Object Description Standard (MODS) in January 2008 after a six month review period (www.loc.gov/mods/). This upward compatible version includes an expanded capability for holdings information. There have been calls for a modest increase in the "native" MODS holdings tagging. The additions took into account the local additions that Copac in the UK developed, compatibility with MARC 21 Holdings, but most importantly, compatibility with the ISO holdings schema currently under development. MODS can now accommodate very simple holdings or more detailed holdings using MODS defined tags. If very detailed holdings or a different schema are required, they can be included in the MODS record through an extension mechanism. MODS is being widely used for rich descriptive metadata in digital library projects, and many METS profiles are including MODS for their descriptive metadata component. Recent additions to the MODS implementation registry (www.loc.gov/mods/registry.php) are the digital initiatives to use MODS with METS at Brown University and at the University of California at Berkeley (U.S.), the Copac Academic Catalogue (U.K.), a historical buildings survey at the Historical Center of Corfu (Greece), a Finding Aid Discovery Project at the University of Chicago (U.S.), National Diet Library digital archive initiatives (Japan), and a virtual library project at University College, Dublin (Ireland)

MARCXML, which was first made available from the MARC 21 web site in 2002 (www.loc.gov/marcxml), is very stable and used in a variety of MARC applications that need a crossover to XML. It provides a lossless pathway from MARC 21 to MARC in XML and back. ISO/DIS 25577 (called MarcXchange, and introduced by Danish Standards), which uses the basic underlying structure of MARCXML, was balloted as a DIS (Draft International Standard) in 2006 and passed with no negative votes. The Danish editors of the standard are preparing it for publication in 2008.

MARC 21 activities included development of change and enhancement proposals, posting them on the web site for meetings, January and June 2007, and January 2008. Consensus on the changes is gained at the meetings and via the Internet discussion. One major proposal for those meetings specifies enhancements to MARC 21 needed by the German and Austrian community to support their movement from the MAB format to MARC 21 for interchange. The Dewey Decimal Classification (DDC) is being converted to MARC 21 for future interchange opportunities, thus another major proposal that primarily enhanced to the MARC 21 Classification format was approved.

The 2007 editions of both the full MARC 21 format documentation and *MARC 21 Concise Formats* are available online at www.loc.gov/marc.

SRU and Z39.50 search protocols

Search/Retrieve via URL (SRU) (www.loc.gov/sru), which is seeing wide use in XML and digital resource initiatives, has had a number of developments recently. Version 1.2 was published in mid 2007, after wide community review and official approval by the international SRU Editorial Board. The standardization activity for SRU is under the umbrella of OASIS (Organization for the Advancement of Structured Information Standards). Through OASIS's affiliation with ISO, ISO will accept OASIS standards for fast processing. In June 2007 an OASIS Technical Committee, *Search Web Services*, was established to study the coordination of SRU and OpenSearch. The OASIS Committee is developing a framework for the development of bindings for various search engine models. Static bindings will be developed for a new version of SRU (version 2.0) as well as for OpenSearch. Dynamic bindings will allow any server, even one that existed prior to development of the standard, to be accessed simply by providing a self-description.

For bibliographic searching there is a proposal for a bibliographic index set, based on MODS and DC, to be used with the Contextual Query Language (CQL) (the query language used by SRU). This set is ready for standardization and it may be taken to NISO where SRU is currently recognized as a Registration. Work has also begun on a mapping of OpenURL keys to CQL and on correspondences with OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting). These

developments will assist with use interactions of these important protocol standards. They may be combined into a “bibliographic profile”. As they develop they will be available on the SRU web site.

There was a meeting in June 2007 in Washington sponsored by the Library of Congress that discussed items related to moving SRU to standardization. Agenda items include the OASIS process, bibliographic profile, Xquery, Opensearch, and record metadata.

The widely implemented Z39.50 search and retrieval protocol remained stable and a major source of material for SRU development.

METS, PREMIS, identifiers, and other standards for digital archiving

Since the Library of Congress established the web site for the PREMIS (Preservation Metadata Implementation Strategies) maintenance activity (www.loc.gov/premis/), the PREMIS Data Dictionary and accompanying schemas have gained recognition as an important standard for preservation metadata. The PREMIS Data Dictionary, version 2.0 was released in April 2008. It is based on comments from users during a 2 year trial use period that were studied by the international PREMIS Editorial Committee (EC) composed of active implementors. The EC either decides about a change within the EC or refers the issue to the PREMIS Implementors Group (PIG) listserv for broader discussion, especially for more complex issues.

The Library of Congress, as part of its PREMIS Managing Agency role, commissioned two studies to assist with the use of PREMIS and development of version 2.0. The first study was *Rights in the PREMIS Data Model* with an emphasis on PREMIS-related metadata requirements. The second, *Implementing the PREMIS Data Dictionary: a Survey of Approaches*, is a guide to the implementation of PREMIS presented in the context of a set of common digital preservation use cases. Both are available in pdf on the PREMIS Web site. The Web site also contains information about using PREMIS with METS, a discussion that it ongoing.

The Library of Congress maintains an Implementation Registry and a new Tool page for the PREMIS on the web site. Some recent implementations or experiments with PREMIS are reported by the University of Illinois/OCLC web archiving project, the U. S. Government Printing Office, the D-Space developers, and the Moving Image Collections' (MIC) union catalog for moving image footage. A number of PREMIS tutorials have been held over the last year, in Glasgow, Stockholm, Boston, Albuquerque, Washington, and San Diego. A guide to use of METS (Metadata Encoding and Transmission Standard), *METS Primer and Reference Manual*, was published in draft form in March 2007 and in its final version in September on the METS Web site (www.loc.gov/mets/). It is a welcome detailed explanation of the content of the standard. Version 1.7 of METS was released as the new official version of the schema in October 2007. It provides for better compatibility of METS with the Encoded Archival Description (EAD) schema. A recent development is the investigation of a translation of the METS schema into Chinese being undertaken by a group in China. Another new activity is the formation of a working group to develop best practices for use of METS with PREMIS.

The METS Editorial Board has approved for registration several new METS Profiles in the last year. The University of Illinois registered a generic profile and a Web capture profile, the University of California at Berkeley registered a general profile, the German National Library registered a profile for use of METS as part of a Universal Object Format, the National Library of Australia registered a general profile and one subprofile for journal articles, the Library of Congress registered one for bibliographic records, and the software company Ex Libris registered a profile for complex hierarchical objects. A Working Group has been set up by the METS Board to develop best practices for profiles to include aspects of machine actionability and improved authoring and documentation.

A METS Implementors Meeting (MIM) was held in May 2007 in Gottingen, Germany.

Two widely used technical metadata standards for use when digital archiving with METS have had recent developments. A new version of the Metadata for Images in XML (MIX) schema was released for testing in December 2007 (www.loc.gov/standards/mix). Also the Library of Congress assumed the maintenance agency role for textMD, an XML Schema that details technical metadata for text-based digital objects (www.loc.gov/standards/textMD/). Originally developed at New York University, the majority of the qualitative work on the textMD schema will continue to come from the larger METS community.

The Library of Congress added several postings to the *URI Resource Page* (www.loc.gov/standards/uri/). One from October 2006 describes the new *URI Template*, a string that may be transformed into a URI by substituting values for variables that are embedded within the

string. There are August and January reports of the W3C work on the representation of metadata in URIs. And a report from April 2007 addresses the question of XML namespaces in URIs. The Library of Congress has been assigned an 'info:lc' namespace, for "Library of Congress Identifiers". LC can register XML namespace URIs via this 'info' namespace.

Sally H. McCallum
Library of Congress
April, 2008

National Library of Portugal: IFLA UNIMARC Core Activity

August 2006 – March 2008

1. MAINTENANCE AND UPDATE OF THE UNIMARC FORMATS

In December 2006, the *UNIMARC/Holdings* format final version was published on IFLANET (<http://www.ifla.org/VI/8/projects/UNIMARC-HoldingsFormat.pdf>).

The work on the maintenance of the *Bibliographic* and *Authorities* formats continued with major decisions made at the 18th and 19th PUC Meetings (held in Lisbon, from 12-14 March 2007 and in Florence, from 12-13 March 2008). Beyond many other corrections, clarifications and minor changes, most significant updates discussed and agreed include provisions for the accommodation of ISBN 13, Linking ISSN or ISSN-L, and the ISIL - *International Standard Identifier for Libraries and Related Organizations*, as well as the establishment of new fields for authority controlled conventional uniform headings for legal and religious texts.

The third edition of *UNIMARC/Bibliographic*, originally projected for publication in 2007, will be issued in two volumes in Summer 2008. An updated version of the UNIMARC Concise Bibliographic Format (as of 2005) was made available on the Web in 2007.

The third edition of *UNIMARC/Authorities* continues under development and it is expected to be accomplished in 2008. The final completion of *UNIMARC/Classification* is still in progress. It is expected to be finalized during 2008, in collaboration with the UDC Consortium.

2. UNIMARC GUIDELINES

The *UNIMARC Guidelines for Continuing Resources* were completed in 2006 and made available online in 2007. Ongoing developments regarding guidance materials include the revision of *Guidelines for Using UNIMARC for Microforms*, first published in 1999, and preparation of the new *UNIMARC Guidelines for Manuscripts*, of which a first version was already discussed at the 19th PUC meeting, March 2008.

3. OTHER PUBLICATIONS

Edited by Marie-France Plassard, the proceedings of the International Conference *UNIMARC & Friends: Charting the New Landscape of Library Standards*, held in Lisbon; 20-21 March 2006, were published in 2007 by Saur (IFLA Series on Bibliographic Control, no 30, ISBN-13: 978-3-598-24279-3).

Saur also published, in November 2007, the *Manuel UNIMARC: Format bibliographique*, 5e édition, Version française (IFLA Series on Bibliographic Control, no 33, ISBN 978-3-598-11779-4). This edition comprises all the changes to the format up to the UNIMARC Update 5 (2005) and was prepared by the CFU – Comité Français UNIMARC.

4. UNIMARC WEB PAGES

During 2007, a complete revision of the UNIMARC Core Activity and PUC web pages was done, in order to provide more comprehensive information on UNIMARC related activities and, especially, on the complete set of current UNIMARC documentation.

5. UNIMARC SURVEY

A UNIMARC SURVEY is being distributed aimed at updating knowledge on the usage of UNIMARC and related editorial and training activities worldwide. It is expected to produce data for an actual picture of the UNIMARC community to be presented at IFLA 2008, Quebec.

5. CONFERENCES AND FUTURE MEETINGS

IFLA 2006, Seoul, South Korea

The UCA organized a programme on *Scripts, UNIMARC and UNICODE*. With six presentations, the session was very well attended (over 100 attendees) providing experiences and discussing issues presented by authors from four European countries, plus Japan and China.

IFLA 2007, Durban, South Africa

The UNIMARC programme held in Durban was attended by around 60 people. Entitled *UNIMARC in a changing information environment*, the session provided an overview of the current state of affairs and future directions of UNIMARC, by Maria Inês Cordeiro and Alan Hopkinson, followed by reports on experiences with UNIMARC in some African countries: Angola, Namibia, Senegal and Tunisia.

UNIMARC Users Meeting, 2008, Florence, Italy

The 2nd *UNIMARC Users Meeting* took place in the Biblioteca Nazionale Centrale di Firenze, the 14th of March 2008, following the 19th PUC Meeting. The meeting gathered 70 participants from 7 countries and the programme included, following introductory speeches by the BNCF and the PUC Director and Chair, seven presentations by users from Italy, Greece, Slovenia, Russia, France and the Consortium of European Research Libraries (CERL).

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