



# Information Technology

## SECTION

## NEWSLETTER

July, 2005

### Contents

#### Editorial

##### From the Chair

#### ITS in brief

- Oslo agenda
- General information
- Standing Committee membership

#### ITS programmes

- Open source software for libraries
- Measures & standards in the electronic age
- Course management systems and library information systems: issues of interoperability
- MARC XML derivatives: the state of the art
- Bibliotheca Universalis – how to organize chaos?

#### IFLA news

- IFLA publications & other news
- IFLA organization & governance
- News from ICABS

#### Back page

- News from ICABS

### Editorial

This issue of the Newsletter brings together a review of the major news of the current year respecting to IFLA that may be of interest to the Information Technology membership. For those that cannot follow regularly the IFLA life throughout the year, it is an informal way of catching up easily with news about the organization governance, the different IFLA bodies and interventions of the Federation in the

international scene like the World Summit on the Information Society or the WIPO. It also contains reference to a selection of the latest IFLA publications and information about standard initiatives connected to IFLA, such as the IFLA-CDNL Alliance for Bibliographic Standards (ICABS). As natural, a central and more extensive space is dedicated to the various programmes organized or co-organized by the

Information Technology Section for the WLIC of the year.

For conference delegates interested in library IT matters this handy information may contribute some practical orientation within the WLIC, while providing at the same time a way to reach those that cannot attend. More important, we hope this to stimulate wider interest and participation in the Information Technology Section activities.

### From the Chair

Being an election year, 2005 brings many changes to the composition of most of the IFLA bodies, renovating membership of standing the committees and its officers, thus providing new opportunities to refresh the ideas, the projects and the representativeness of different types of professionals, institutions and countries. This is certainly the case with the ITS which standing committee is now welcoming nine new members. Leaving the

Committee after having served on it for eight years, I acknowledge the diversified experiences and connections that ITS has brought to my professional life. I believe most of us share this feeling and the will to maintain collaborations with ITS and other IFLA bodies, as the IT perspective pervades all kinds of professional concerns. The programmes prepared or co-organised by the ITS for the WLIC 2005 extensively demonstrate this, by both the range of

topics covered and the exchanges with other IFLA groups. This was only possible by the hard work of many SC members that took charge of the preparation of the various events we are sponsoring at this year Conference. I thank them all on behalf of the Section. As an outgoing Chair, I acknowledge all the support I got from colleagues. It was my privilege to work with the ITS group.

**Maria Inês Cordeiro**  
ilopes@gulbenkian.pt

## ITS IN BRIEF

**OSLO AGENDA****Thursday 11- Friday 12**

Cataloguing Section with ITS (Satellite Meeting, Järvenpää, Finland)

**BIBLIOTECA UNIVERSALIS – HOW TO ORGANISE CHAOS? FRBR, A NEW EFFORT TO ORGANISE CONTENT, AND SOME PRACTICAL APPLICATIONS****Saturday 13 - 08.30-11.20h****ITS STANDING COMMITTEE I****Tuesday 16, 10.00-12.00h**

ITS with University &amp; other General Research Libraries Section (offsite, University of Oslo)

**COURSE MANAGEMENT SYSTEMS AND LIBRARY INFORMATION SYSTEMS: ISSUES OF INTEROPERABILITY****Tuesday 16, 13.45-15.45h**Joint session with UNIMARC Core Activity  
**MARC/XML DERIVATIVES: THE STATE OF THE ART****Wednesday 17, 10.45-12.45h**

Information Technology Section

**OPEN SOURCE SOFTWARE FOR LIBRARIES****Thursday 18, 10.45-12.45h**

Statistics and Evaluation with University Libraries and Information Technology Sections

**MEASURES AND STANDARDS IN THE ELECTRONIC ENVIRONMENT****Friday 19, 08.00-10.50h****ITS STANDING COMMITTEE II****The section**

The Information Technology Section (ITS) serves to promote and advance the application of information technologies (IT) to library and information services in all societies, through activities related to standards, education and training, research, and the marketplace.

The Section belongs to the IFLA Division VI – Management and Technology  
<http://www.ifla.org/VII/d6/dmt.htm>

For more information about the ITS and its strategic plan see  
<http://www.ifla.org/VII/s21/sit.htm>

**The Committee**

At present, the standing Committee of the ITS has 20 members from 16 different countries. There are ballots for elections every two years, as members complete their terms of four years. See the complete list of SC members' on page 3.

Current officers are:

Maria Inês Cordeiro, Chair, outgoing member  
([ilopes@gulbenkian.pt](mailto:ilopes@gulbenkian.pt));

Lawrence Woods, Secretary  
([larry-woods@uiowa.edu](mailto:larry-woods@uiowa.edu))

Gill Hamilton, Information officer ([g.hamilton@nls.uk](mailto:g.hamilton@nls.uk)).

**The membership**

ITS is the second biggest section in IFLA with over 400 members from 90 countries and all types of libraries.

If you are not a member of IFLA and would like to join, please contact IFLA Headquarters or consult the IFLA membership information at  
<http://www.ifla.org/III/members/index.htm>

If you are already a member but want to join the IT Section please review the section “**How to register for IFLA Sections**”.

Alternatively, contact the IT Section Information Co-ordinator.

The **Information Technology Section Newsletter** is published twice a year for free distribution. It serves to inform the ITS membership of the Section's activities, IFLA updates and events related to IT & libraries. **Current editor:** Maria Inês Cordeiro ([ilopes@gulbenkian.pt](mailto:ilopes@gulbenkian.pt)). **Co-editor:** Gill Hamilton ([g.hamilton@nls.uk](mailto:g.hamilton@nls.uk)). Other collaborations in this issue: *Fernanda Campos* (National Library of Portugal), *Reinhard Altenhöner* (Die Deutsche Bibliothek) and *Larry Woods*, ITS Secretary. All contributions are welcome. To receive this Newsletter send your email to the ITS Information Co-ordinator.

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The previous issue of the Newsletter was published in July 2004.

## ITS IN BRIEF

### STANDING COMMITTEE MEMBERSHIP

Following the results of the 2005 postal ballot, eleven candidates were successful for the term of office 2005-2009. The Section welcomes two continuing and nine new members! The current composition of the Standing Committee is as follows:

#### 2005-2009 TERM

Catherine Lupovici, <i>Bibliothèque nationale de France</i> **	France	<a href="mailto:catherine.lupovici@bnf.fr">catherine.lupovici@bnf.fr</a>
Gill Hamilton, <i>National Library of Scotland</i> **	UK	<a href="mailto:g.hamilton@nls.uk">g.hamilton@nls.uk</a>
Mats Herder, <i>Royal Library</i>	Sweden	<a href="mailto:mats.herder@kb.se">mats.herder@kb.se</a>
Noha Adly, <i>Bibliotheca Alexeandrina</i>	Egypt	<a href="mailto:noha.adly@bibalex.org">noha.adly@bibalex.org</a>
Ms Gwen Zilm, <i>University of British Columbia</i>	Canada	<a href="mailto:gzilm@ouc.bc.ca">gzilm@ouc.bc.ca</a>
Wynand van der Walt, <i>Univ. of the Western Cape Library</i>	South Africa	<a href="mailto:wvanderwalt@uwc.ac.za">wvanderwalt@uwc.ac.za</a>
Jagtar Singh, <i>Punjabi University</i>	India	<a href="mailto:jagtarsingh5@hotmail.com">jagtarsingh5@hotmail.com</a>
Robin Fortelius, <i>Helsinki City Library</i>	Finland	<a href="mailto:robin.fortelius@biblioteken.fi">robin.fortelius@biblioteken.fi</a>
Marko Tenkanen, <i>Helsinki University Library</i>	Finland	<a href="mailto:marko.tenkanen@helsinki.fi">marko.tenkanen@helsinki.fi</a>
Takashi Nagatsuka, <i>Tsurumi University</i>	Japan	<a href="mailto:nagatsuka-t@tsurumi-u.ac.jp">nagatsuka-t@tsurumi-u.ac.jp</a>
Zhixiong Zhang, <i>Library of Chinese Academy of Sciences</i>	China	<a href="mailto:zhangzx@mail.las.ac.cn">zhangzx@mail.las.ac.cn</a>

#### 2003 – 2007 TERM

Reinhard Altenhöner, <i>Die Deutsche Bibliothek</i>	Germany	<a href="mailto:altenhoener@dbf.ddb.de">altenhoener@dbf.ddb.de</a>
Mercedes Chacon Fuertes, <i>Biblioteca Nacional</i>	Spain	<a href="mailto:chaconmcf@bne.es">chaconmcf@bne.es</a>
Nazha Hachad, <i>Ecole des Sciences de l'Information, Rabat</i>	Morocco	<a href="mailto:n_hachad@yahoo.com">n_hachad@yahoo.com</a>
Hilde Hoegaas, <i>National Library of Norway</i>	Norway	<a href="mailto:hilde.hogas@nb.no">hilde.hogas@nb.no</a>
Mary E. Jackson, <i>Association of Research Libraries</i>	USA	<a href="mailto:mary@arl.org">mary@arl.org</a>
Wei Liu, <i>Digital Library Institute of Shanghai</i>	China	<a href="mailto:wliu@libnet.sh.cn">wliu@libnet.sh.cn</a>
Sally McCallum, <i>Library of Congress</i> **	USA	<a href="mailto:smcc@loc.gov">smcc@loc.gov</a>
J.L. de Vries, <i>Universiteitsbibliotheek EUR</i>	Netherlands	<a href="mailto:devries@uibib.eur.nl">devries@uibib.eur.nl</a>
Lawrence Woods, <i>University of Iowa Libraries</i> **	USA	<a href="mailto:larry-woods@uiowa.edu">larry-woods@uiowa.edu</a>

\*\* members in their 2<sup>nd</sup> term.

#### OUTGOING MEMBERS

Ten members who completed this year their 2nd term, or one term without re-applying, are leaving the Standing Committee. They are:

Sabine Barral, <i>Agence Bib. de L'Enseignement Supérieur</i>	France	<a href="mailto:barral@abes.fr">barral@abes.fr</a>
Claude Bonnelly, <i>Bibliothèque Université Laval</i>	Canada	<a href="mailto:claud.bonnelly@bibl.ulaval.ca">claud.bonnelly@bibl.ulaval.ca</a>
Maria Inês Cordeiro, <i>Calouste Gulbenkian Foundation</i>	Portugal	<a href="mailto:ilopes@gulbenkian.pt">ilopes@gulbenkian.pt</a>
Yuri Hohlov, <i>Institute of the Information Society</i>	Russian Federation	<a href="mailto:hohlov@iis.ru">hohlov@iis.ru</a>
Mats Lindquist, <i>Goteborgs UB, Economics Library</i>	Sweden	<a href="mailto:mats.Lindquist@ub.gu.se">mats.Lindquist@ub.gu.se</a>
Solomon Mutai, <i>Moi University Library</i>	Kenya	<a href="mailto:mutai@moiuniversity.ac.ke">mutai@moiuniversity.ac.ke</a>
Per Mogens Petersen, <i>Danish Bibliographic Center</i>	Denmark	<a href="mailto:pmp@dbc.dk">pmp@dbc.dk</a>
Diann Rusch-Feja, <i>International University Bremen</i>	Germany	<a href="mailto:d.ruschfeja@iu-bremen.de">d.ruschfeja@iu-bremen.de</a>
Marinus Swanepol, <i>University of Lethbridge</i>	Canada	<a href="mailto:marinus.swanepoel@uleth.ca">marinus.swanepoel@uleth.ca</a>
Mirna Willer, <i>National and University Library</i>	Croatia	<a href="mailto:mwiller@nsk.hr">mwiller@nsk.hr</a>

To them, our appreciation for all the efforts put towards the objectives of the Information Technology Section.

### Meet the ITS officers during IFLA 2005

at the IFLA booth on Monday 15 August from 11.00 to 12.00 h.

*The Standing Committee Meetings are the business meetings of the Section, open to observers. If you are not a SC member but would like to be informed about the work of the ITS, you are welcome.*

OSLO 2005



## ITS PROGRAMMES

### OPEN SOURCE SOFTWARE FOR LIBRARIES

Wednesday 17  
10.45-12.45h  
Session 134

#### Open Source Software - definition, licensing models and organisational consequences (introduction) \*

**Reinhard Altenhöner**  
Die Deutsche Bibliothek,  
Frankfurt/Main, Germany

Increasingly, the international software development is dominated by the discussion on the "magic term" Open Source Software (OSS). The question is adjacent if that concept is also relevant for libraries. This paper, for a start, focuses on the subject in general terms: What was the origin of the Open Source movement, which predecessors did she have? Which conditions are tied to the usage of OSS, which ideas are behind the development of the term? How are the copyright and utilisation rights covered with OSS? And, finally: What are success factors for the usage of OSS especially in libraries, and which concepts already have been developed?

#### The coming revolution in library software

**David Dorman**  
Index Data, Middletown,  
USA

Few libraries have any experience with, or are even aware of, open source software distributed by a commercial vendor. Yet this emerging model of software development and distribution will have a dramatic effect on the library market once librarians understand its value and begin to act on that understanding. When the software code itself can be freely examined and used, the dynamics of the marketplace changes. The end result of these new market dynamics will be that vendors of open source software will produce higher quality software at lower prices than vendors of proprietary software.

\* Also available in French and Deutsch

#### NII-IPR: National Portal to Nation-Wide University Institutional Repositories Network Utilizing Open Source Software

**Noriko Kando and Shigeki Sugita**  
National Informatics Institute, Tokyo,  
Japan

The *National Institute of Informatics' Institutional Repository Portal (NII-IRP)* is a joint project of the National Institute of Informatics (NII) and the university libraries in Japan to establish a network of university/academic institutional repositories (IRs) using OAI-PMH compliant open source software, including DSpace and GNU EPrints. To take the initiative in establishing IRs by the universities, and in particular to encourage the use of open source software in so doing, the NII-IRP provides (1) Japanese translation of the manuals and related documents for the software, (2) related information, including analytical assessments and comparative evaluations of the performance and functionalities across the various OAI-PMH compliant software, (3) case reports of the member libraries, (4) a one-week intensive training workshop to learn and become well versed in the practical knowledge and skills required to implement this software, and (5) the accumulation of FAQs and expertise obtained from the workshop and the experiences of the member libraries. All these except (4) are available at the NII-IRP website. For resource description and discovery of the information objects, the NII-IRP defined the metadata elements set and the NII Thesaurus for the metadata, which is a multi-facetted thesaurus, and each class can be mapped to LCSH, DDC, and the Japanese classification scheme NDC. They also developed the graphical user interfaces (GUI) for metadata creation and retrieval. In contrast to the NII's existing information services, such as its bibliographic utility NACSIS-CAT electronic library NACSIS-ELS, etc., in which dedicated software was developed for both servers and clients, NII-IRP chose to use open source software. This enables each member library to design its IRP with flexibility

and independence. At the same time, being free from the burden of the dedicated software development and its continuous update, this enables NII to concentrate on a range of support functions for collection building and to develop a sophisticated retrieval system that provides integrated access using both multi-faceted metadata and content-based retrieval, such as a vector space model.

#### Delivering Sizzling Services and Solid Support with Open Source Software \*

**Roger Evans**, Deichmanske Bibliotek  
Oslo, Norway

Good stewardship of scarce library resources demands that librarians consider the costs of implementing a new service. By using Open Source Software as a base for new Internet services, the library saves in 3 ways: 1) Open Source Software is free. The library saves licensing costs. These costs are significant (examples: Microsoft Office, Server, Oracle) 2) Open Source Software runs on cheaper hardware. The library saves investment in new machines. 3) Projects developed with Open Source Software can be shared between libraries, giving all participants access to new services to offer patrons. Libraries do not compete. They seek to complement and cooperate. By their very nature, they are ideal users of the Open Source Business Model. Deichmanske Bibliotek / The Oslo Public Library has used Open Source Software for both office support and as a platform for servers providing exciting multimedia services to its target public. If proprietary software had been used, the costs would have been significantly higher and would in most cases have been prohibitive, so that the projects would never have been realized. This paper gives an overview of Open Source-based services at the Oslo Public Library, and maps out a plan for international cooperation between libraries to produce a customized Linux distribution for libraries modelled on the Norwegian 'Skolelinux' project.

OSLO 2005



## ITS PROGRAMMES

### MEASURES & STANDARDS IN THE ELECTRONIC AGE

Jointly organized by the Statistics and Evaluation Section, the University and other General Research Libraries Section and the ITS

#### Measuring the Impact of New Library Services

Roswitha Poll,

University and Regional Library  
Münster, Germany

Libraries today introduce many new services, either by converting existing services into eservices, or by developing and implementing entirely new services for search, delivery and use of information. Such new or converted services include e.g. online delivery, portals, personalized services, online teaching modules, online reference, digitised collections, or electronic publishing. In most cases, introducing new services requires special funding. For reporting to funding agencies, but also for management and further planning, libraries need to assess the impact of new services on users, staff and the library's organisation. Positive impact of new library services could be shown by: time saved in information search and delivery; enlargement of the scope of resources used; better knowledge of information seeking ways; and lower costs for the delivery of services. On the other side, there might also be negative effects or consequences like information overflow, problems in using new services, or a high involvement of workload and/or costs for the library. The paper shows methods for assessing the impact of new services like user and staff surveys, focus groups, time measurement, analysis of use data, or observation studies. Examples are given for illustrating the usefulness and problems of each method.

**Thursday 18  
10.45-12.45h  
Session 157**

#### Successful Web Survey Methodologies for Measuring the Impact of Networked Electronic Services (MINES for Libraries)

Brinley Franklin, University of  
Connecticut, Connecticut, USA

Terry Plum, Simmons Graduate School  
of Library and Information Science,  
Boston, USA

##### Introduction

Web-based usage surveys are increasingly relevant in the collection of usage data to make collection development and service decisions, to document evidence of usage by certain patron populations, and to collect and analyze performance outputs. This paper discusses web based survey methodological considerations and reviews results from the MINES for Libraries web based survey at more than thirty North American universities between 2003 and 2005. The most popular current method of measuring usage of electronic resources by libraries is not through web based usage surveys, but through vendor supplied data of library patron usage or transaction based usage. There are several standards-making groups involved with setting consistent measures of usage across publishers and products. Project COUNTER – Counting Online Usage of Networked Electronic Resources, ICOLC – International Coalition of Library Consortia, ISO 11620 Library Performance Indicators and NISO Z39.7 Library Statistics. Release 2 of the COUNTER *Code of Practice* for vendors to obtain COUNTER compliant certification came out in April 2005. ICOLC issued updated guidelines of their *Guidelines for Statistical Measure of Usage of Web-Based Information Resources*, for reporting online database and journal usage in December 2001. NISO under Z39.7-2002 has developed its *Draft Standard for Trial Use: Information Services and Use Metrics and Statistics for Libraries and Information Providers Data Dictionary*.

ARL *E-Metrics Project* is a parallel effort to develop new measures that describe and measure networked electronic resources, based upon the *Data Collection Manual* written by Shim and others (2001).

Why is there such an emphasis on vendor-supplied data for evaluating electronic resources? Vendor supplied output data of networked electronic resources have been considered trusted because they are based on patrons' interaction with the networked electronic resource marketed or paid for by the library. The units of measure generally agreed upon across the relevant standards setting groups are based on usage of the resource in some way; either usage by session, queries, views, downloads, prints, etc. The closer the usage data is to the actual transaction or use of the resource, it seems the more reliable or fundamental it is assumed to be.

#### Usability of digital libraries: a study based on the areas of information science and human-computer-interaction<sup>1</sup>

Sueli Mara Ferreira  
Denise Nunes Pithan

University of Sao Paulo, Sao Paulo,  
Brazil

The conception, planning and implementation of digital libraries, in any area of knowledge, demand innumerable studies in order to verify and guarantee their adequacy to the users' necessities. Such studies find methodological, conceptual and theoretical support in some areas of knowledge, such as Human-Computer-Interaction (HCI) (Usability Studies, in particular) and Information Science (IS) (especially studies about users' necessities and behavior in information search and use). This research, therefore, intends to integrate concepts and techniques from these two areas, that is, it analyzes the usability of the InfoHab digital library, having as theoretical base the Constructivist (cont. on p. 7)

OSLO 2005



## ITS PROGRAMMES

### COURSE MANAGEMENT SYSTEMS AND LIBRARY INFORMATION SYSTEMS: ISSUES OF INTEROPERABILITY

Jointly organized by the ITS and the University and Other General Research Libraries Section

16 August, 10.00-12.00h - University of Oslo, Blindern, Helga Engs hus, Auditorium 1 (unit 20 on the map)

#### The convergence of CMS and the digital library: can it happen?

**Kenneth E. Dowlin**, San Jose State University, School of Library and Information Science, San Jose, USA

The School of Library and Information Science (SLIS) at San Jose State University in California now provides its entire Master's in Library and Information Science classes through the use of online or hybrid courses. It has grown to be the largest accredited graduate only, MLIS program in the US. An important element toward the success is the successful implementation, use, and continued enhancement of the Course Management System software provided by BlackBoard. Since the vast majority of students do not live in San Jose or Fullerton where the two campuses are located they rely heavily on the CMS and the Digital Libraries that are emerging in the traditional campus based libraries and in other Digital Collections around the world. There are tremendous resources available for free at such places as the American Memory Project at the Library of Congress, the California Digital Library in the University of California System, and many popular sources like the Perseus Digital Library at Tufts University. The faculty of the SLIS has identified a need for the development of a user friendly interface between the CMS and the emerging Digital Libraries that will allow faculty and even trainers to assemble powerful class online modules. This interface will have to deal with the logical organization and searching capabilities of digital content needed in the CMS and with the Intellectual Property and authentication and preservation issues inherent in the Digital Library. A current look at CMS development related to digital collections reveals that the area of the most activity is in the development of Learning Object Repositories.

The SLIS has developed a project titled THE KNOWLEDGE BRIDGE to build a crossover among the CMS, LOR and Digital Libraries. In addition to surveying the current state of both systems it will work with current faculty in at least three university DE programs to identify best practices. The project will then locate current tools, identify new tools that are needed, blend them into a digital desktop as part of the current SLIS program, and provide the design to other educational institutions. It is hoped that the KNOWLEDGE BRIDGE will support a global online collaboration for the education of LIS education and training.

#### Interoperability is the answer: a case study

**Lourdes Feria**  
University of Colima, Colima, México

Libraries are increasingly turning their attention to issues regarding access and proper use of ICTs so as to access, organize, integrate, assess, develop and communicate information. The case that is herein presented is that of a Latin American university that has developed its own informatics platforms for education, library automation, the development of skills in the use of information, the management of learning objects, and the generation of digital repositories.

A careful analysis of said platforms leads us to these questions: Is the way these digital libraries have been established compatible with other similar projects being conceived at other institutions in our country and even abroad? Does the way information resources are described, that is, metadata, meet international standards to ensure browsing and information retrieval and even the exchange of data with other libraries? Are the methodologies currently used to record information capable of dealing with the use of retrieval techniques based on semantics?



Can the formats, techniques and technologies used in the digitization of information resources ensure the preservation and access to processed documents in addition to preventing their digital death? Are the interfaces contained in the system user-friendly, intuitive and easy to implement and manage? Are the system's prototypes and the components of the software that constitute the digital library of free distribution and easy to configure? It is clear that changes in methodologies, formats and architecture are needed to stop these projects from being isolated and independent platforms. By updating and redefining our methodology we will produce a guide that will enable new projects to be conceived and update those that already exist, thus ensuring their compatibility with new international standards. Arrangements will be made to make sure the projects that involve digital libraries and their future developments result in the transparent exchange of information and services with other similar world projects. To achieve this goal, a 1-year research programme is being developed that aims to obtain the following results: i) definition of the metadata to be used in the description of information resources; ii) description of the best practices, formats and technological tools to be used in the digitization of all kinds of information resources; and iii) Development of a guide to design and implement web interfaces used in the management of digital libraries and for the links established with other education and information platforms of the institution.

OSLO 2005



## ITS PROGRAMMES

**COURSE MANAGEMENT SYSTEMS AND LIBRARY INFORMATION SYSTEMS: ISSUES OF INTEROPERABILITY** (cont. from p. 6)

**MEASURES & STANDARDS IN THE ELECTRONIC AGE** (cont. from p. 5)

**There be dragons: Course management systems and Library systems at SFU Library and BC Campus**

**Lynn Copeland**  
Simon Fraser University,  
Burnaby, British Columbia

Various SFU faculty use WebCT, First Class, Lon-Capa and the locally developed CMS. SFU is a partner in SAKAI and the Library developed MOSSST for online library instructional. SFU Library has achieved considerable success in technology, having developed *reSearcher* for Western Canadian university libraries; maintaining active digitization, Institutional repository, and e-journal support programmes; and supporting a very strong e-collection. SFU Library has a very active on-campus course-based instruction programme; extending that programme to the CMS environment has been challenging and, at times, frustrating. Through technology, strategic activity, and active involvement in online paedagogical initiatives, some success has been achieved.

**Pursuing the Vision: Adopting and Integrating OAI Initiatives at Yale**

**Emily Horning**, Instruction Coordinator, and **Kalee Sprague**, Systems Librarian, Yale University Library

In 2002, the Committee on Yale College Education (CYCE), a group composed of faculty and administrators, issued a report on the future of undergraduate education at Yale. A recurring theme of this report was the impact that advances in information technology will have on the undergraduate curriculum. Two years later, Yale University Librarian (YUL) Alice Prochaska announced the implementation of a 5-year Strategic Plan for the library system, one of whose components was the creation of "The Integrated Library," which

should ensure full and enduring access to the entire range of library resources regardless of format or point of access. This paper will discuss the year-old effort of YUL to pursue the vision of the Strategic Plan in keeping with the needs addressed in the CYCE report by making its library catalog, subscription databases, image collections and many other repositories and services interoperable with course management systems and the university portal using standards like the Open Archives Initiative – Protocol for Metadata Harvesting ("OAI-PMH"). Three main issues generated by the project so far include: how to identify what library services students and faculty really want and need from such a unified system, how to implement the identified services using existing technology, and how to find the resources (human, technological, and financial) to implement and maintain them. Yale librarians and systems officers are working together to develop assessment tools, implement prototype projects, and generate policy

**Usability of digital libraries...(cont.)**

model of user study proposed by Carol Kuhlthau and the criteria of usability established by Jacob Nielsen. In order to do so, a qualitative study with six users with different levels of academic formation and experience in the use of recovery systems was developed. Data was collected through personal interviews, prototype of the library, direct observation, image and sound records. The variables of this study included the following criteria: learnability, efficiency and effectiveness of the digital library, management of errors, memorability and the user's satisfaction from the perspective of cognitive and affective aspects and the actions taken by the users during the information search process. The aspects identified in the collected data are discussed and the results are evidence of the possible synergy between the HCI and IS fields. So we expect to contribute conceptually for a discussion about a model of usability study that can be more inclusive and incorporate the aspects pointed by the Constructivist model.

### MARC/XML derivatives: the state of the art

Jointly organized by the UNIMARC Core Activity and the ITS

**An XML representation of the UNIMARC Manual: a working prototype**

**Joaquim Ramos de Carvalho**,  
University of Coimbra, Portugal

The UNIMARC manual defines a standard for the formal representation of bibliographic information. For that purpose it contains different types of information: structural rules which define that records are composed of a leader, a set of control fields and a set of data fields, with certain syntactic characteristics; content rules, defining required fields and acceptable values for certain components of the record; and finally, examples, explanatory notes and cross-references within the manual. Much of this information must find its way into computer systems where it will be used to validate records,

produce indexes, adequately format records for display and, in some cases, provide human readable help. Providing the UNIMARC manual in XML greatly simplifies the full implementation of the format in computer systems. Our goal was to produce a formal representation of the UNIMARC format, so that the standard can be incorporated in software systems in a transparent way. The outcome is an XML representation of the UNIMARC manual, which can be processed automatically by applications that need to enforce the format rules, provide help information, or vocabularies. We developed a scheme for the UNIMARC manual and a set of software tools that demonstrate its usage.

**Tuesday 16, 13.45-15.45h**  
**Session 121**

OSLO 2005



## ITS PROGRAMMES

### Bibliotheca Universalis – how to organize chaos? FRBR, a new effort to organise content, and some practical applications

Jointly organized by the Cataloguing Section and the ITS



Järvenpää Hall,  
Järvenpää, Finland

11-12 August 2005

**MARC/XML  
derivatives:  
the state of the art**  
(cont. from p. 7)

**UNIMARX/XML Slim  
Schema: living in a new  
environment**

**Vladimir Skvortsov, Olga  
Zhlobinskaya and Alla  
Pashkova**, National Library  
of Russia, St. Petersburg,  
Russian Federation

The paper discusses the role of XML and its perspectives in library information systems, particularly with regards to basic functions of bibliographic formats – storage and transportation of the data. Slim XML Schema for UNIMARC representation is presented, its main features being lossless conversion from MARC to XML, roundtripability from XML back to MARC, support for embedded fields and extended range of indicator values, independence from any specific dialect of MARC format, stability to any changes of the format.

THURSDAY, 11 AUGUST

**To the basics: is it possible to organise  
all information?**

**General viewpoint**, Jaana Keläläinen,  
Professor, Department of Information  
Studies, University of Tampere;

**Library viewpoint**, Patrick le Boeuf,  
Curator, Bibliothèque nationale de France,  
France

**Bibliographic universe created by FRBR  
and FRAR**, Barbara B. Tillett, Chief,  
Cataloging Policy and Support Office Library  
of Congress, USA

**Metadata in relation to FRBR**, Christina  
Magliano, Head of Department, Cataloguing  
and Training, ICCU, Rome, Italy

**From MARC to FRBR - a case study in the  
use of the FRBR model on the BIBSYS  
database**, Trond Aalberg, Associate  
Professor, Norwegian University of Science  
and Technology, Norway & Project manager  
BIBSYS FRBR project, BIBSYS, Norway

FRIDAY 12 AUGUST

**Modeling subject access**, Tom Delsey,  
Consultant, Canada

**MARC/XML derivatives: the state of the art (cont. from p. 7)**

**Delivering MARC/XML records from the Library of Congress catalogue using the  
open protocols SRW/U and Z39.50**

**Mike Taylor**, Index Data, UK; **Adam Dickmeiss**, Index Data, Denmark

The MARC standard for representing catalogue records and the Z39.50 standard for locating and retrieving them have facilitated interoperability in the library domain for more than a decade. With the increasing ubiquity of XML, these standards are being superseded by MARCXML and MarcXchange for record representation and SRW/U for searching and retrieval. Service providers moving from the older standards to the newer generally need to support both old and new forms during the transition period. YAZ Proxy uses a novel approach to provide SRW/MARCXML access to the Library of Congress catalogue, by translating requests into Z39.50 and querying the older system directly. As a fringe benefit, it also greatly accelerates Z39.50 access.

**MARC XML in use**

**Sally McCallum**, Library of Congress, Washington D.C., USA.

**“Citizen's Gateway to Information”, the  
Finnish library portal for information  
search, based on the ideas of the semantic  
web**, Erkki Lounasvuori, senior library adviser,  
Ministry of Education / Helsinki City Library,  
Finland

**Structuring the catalogue according to  
FRBR user task: collocation and linking**  
Erik Thorlund Jepsen, Library advisory officer,  
Danish National Library Authority

**FRBR as user's model**, Maja Zumer,  
Associate Professor of Library and Information  
Science and Book Studies, University of  
Ljubljana, Slovenia

**The FRBR Tool of the Library of Congress**  
Sally McCallum, Chief, Network Development  
and MARC Standards Office, Library of  
Congress

**FRBR activities at OCLC**, Glenn Patton,  
Director, WorldCat Quality Management,  
OCLC

**Searching; FRBR implementation in Virtua**  
Jack Bazuzi, Managing Director, VTLS Europe

**Bibliotheca Universalis, the creation of  
Conrad Gessner 1516-1565, father of  
bibliography and monster of science**  
Sirkka Havu, Librarian, Helsinki University  
Library, Finland



## IFLA NEWS

## IFLA PUBLICATIONS &amp; OTHER BRIEF NEWS

## SELECTION OF PUBLICATIONS (cont.)

Recommandations relatives aux documents audiovisuels et multimédias et l'usage des bibliothèques et autres institutions. By Bruce Royan, Monika Cremer et al. for the IFLA Audiovisual and Multimedia Section. Translation by Gregory Miura. The Hague: IFLA Headquarters, 2005. 25p. (IFLA Professional Reports: 87). ISBN 907789702X; ISSN 0168-1931. Available at: <http://www.ifla.org/VII/s35/pubs/Profrep87.pdf>.

**First, Do No Harm. A Register of Standards, Codes of Practice, Guidelines Recommendations and Similar Works relating to Preservation and Conservation in Libraries and Archives.**

Compiled by John McIlwaine on behalf of the IFLA Preservation and Conservation Section. Available at: <http://www.ifla.org/VII/s19/pubs/first-do-no-harm.pdf>

**UNIMARC Holdings Format Version 1. Final Version.**

Available at: <http://www.ifla.org/VI/8/projects/UNIMARC-HoldingsFormat04.pdf>

This is the result of a Working Group appointed by the Permanent UNIMARC Committee (PUC) in 1999 and chaired by Rosa Maria Galvão, National Library of Portugal. The work was based on the *UNIMARC Manual – Bibliographic Format* and ISO 10324 : 1997 – *Information and documentation – Holdings statements - Summary level*: the first was the basis for the structure of data elements and second one for the main concepts. The format is intended to facilitate the reporting of holdings data at national or international level and promote consistency in the communication of holdings information and location of an item.

**ICBC - International Cataloguing and Bibliographic Control**

Vol. 34, no. 1 (January/March 2005)  
Vol. 34, no. 2 (April/June 2005)  
See the contents at: <http://www.ifla.org/VI/3/admin/content.htm>

**IFLA Journal**

**Index 1994-2004.**

Alphabetical English/Russian index of authors with articles titles published in IFLA Journal, vol. 20 (1994), No. 2 - vol. 30 (2004), No. 4. Available at: <http://www.ifla.org/V/iflaj/index.htm#1994-2004>.

**vol. 21, no. 1 (2005) at:**

<http://www.ifla.org/V/iflaj/IFLA-Journal-1-2005.pdf>

**vol. 21, no. 2 (2005) at:**

<http://www.ifla.org/V/iflaj/IFLA-Journal-2-2005.pdf>

**NEW IFLA MAILING LISTS**

**NPDG-L - New Professionals Discussion Group Mailing List**  
For new professionals interested in issues regarding career development and professional opportunities. Messages to the list should be sent to: [npdg-l@infoserv.inist.fr](mailto:npdg-l@infoserv.inist.fr). More information at <http://infoserv.inist.fr/wwsympa.fcgi/info/npdg-l>.

**QUALITY - Quality Issues in Libraries Discussion Group**  
For members of the IFLA community who have asked to participate in discussions on "Quality Issues in Libraries". Messages should be sent to: [quality@infoserv.inist.fr](mailto:quality@infoserv.inist.fr). More information at: <http://infoserv.inist.fr/wwsympa.fcgi/info/quality>.

**UNIVERS - University Libraries and Other General Research Libraries Mailing List.** For communication with members of this IFLA Section. Messages should be sent to: [univers@infoserv.inist.fr](mailto:univers@infoserv.inist.fr). More information at: <http://infoserv.inist.fr/wwsympa.fcgi/info/univers>.

**CLASSIFICATION AND INDEXING SECTION**

**Working Group Functional Requirements For Subject Authority Records (FRSAR)**

This working group was established in April 2005 with the following terms of reference

- Build a conceptual model of Group 3 entities within the FRBR framework as they relate to the aboutness of works (Entities in Group 1 and Group 2 can be used as the subjects of works but further inclusion of them will depend on the outcomes of the work of the FRANAR Working Group);
- provide a clearly defined, structured frame of reference for relating the data that are recorded in subject authority records to the needs of the users of those records; and
- assist in an assessment of the potential for international sharing and use of subject authority data both within the library sector and beyond. Contact: Marcia Lei Zeng (E-mail: [mzeng@kent.edu](mailto:mzeng@kent.edu)).

**COMMITTEE ON COPYRIGHT AND OTHER LEGAL MATTERS (CLM)**

Issued in April 2005, the IFLA **Position on Public Lending Right (PLR)** is available in English, French, Spanish and Polish, at:

<http://www.ifla.org/III/clm/p1/PublicLendingRigh.htm>.

An accompanying **Background Paper on Public Lending Right** is available in English and Polish, at: <http://www.ifla.org/iii/clm/p1/publiclendingright-backgr.htm>.

**IFLA & WIPO - ACCESS TO KNOWLEDGE (A2K) TREATY**

**Statement Supporting a Development Agenda for WIPO**

<http://www.ifla.org/III/clm/p1/A2K-5.htm>

**Statement by IFLA**, Inter-Sessional Intergovernmental Meeting on a Development Agenda for WIPO 2nd Session, Geneva, June 20-22, 2005 <http://www.ifla.org/III/clm/p1/A2K-1.htm> (cont. page 10)

## IFLA NEWS

## IFLA ORGANIZATION &amp; GOVERNANCE

## IFLA'S THREE PILLARS: SOCIETY, MEMBERS AND PROFESSION

At its December 2004 meeting, the Governing Board decided to endorse a new model for IFLA's operations, the three pillars, which recognises that IFLA's core functions relate to the societal contexts in which libraries and information services operate, IFLA's membership and professional matters. These three pillars are supported by the infrastructure offered by IFLA HQ, IFLANET and the Federation's governance structures.

See more at:

<http://www.ifla.org/III/IFLA3Pillars.htm>.

## IFLA SECRETARY GENERAL



In December 2004 IFLA announced the resignation of Mr Ramachandran who was Secretary General since April 2004. Following a decision of the Governing Board,

**Professor Peter Lor** assumed the post of Secretary general as of 15 February 2005.

## IFLA DIRECTORY

Due to financial and organisational reasons, the publication of the IFLA Directory 2004-2005 has been cancelled. The Governing Board decided, at its December meeting, to reorganise the publication process in order to have it available earlier in the 2-year cycle, namely in October of an election year. **The next IFLA Directory**, therefore, will be distributed to all members in **October 2005**. In the meantime, IFLA members and Standing Committee members can be located in the **online Directory** at:

<http://www.ifla.org/database/directy.htm>.

Also, IFLA HQ made available an alternative, **Addresses and Data. IFLA Bodies 2004-2005**, providing structure and addresses for IFLA Bodies. See at :

<http://www.ifla.org/database/IFLADirectory2004-5.pdf>.

## IFLA PRESIDENTIAL ELECTIONS

## Claudia Lux wins IFLA Presidential election (2007-2009)



Claudia Lux, Director General, Zentral- und Landesbibliothek Berlin (ZLB), Germany, has been voted President-elect by IFLA members.

Claudia Lux will begin her two-year term as President-elect during the IFLA conference in Oslo this August. She will succeed Alex Byrne as President in August 2007 for a two-year term.

## IFLA GOVERNING BOARD ELECTION (2005-2007)

In the elections for the new IFLA Governing Board, the following candidates were successful:

**Bob McKee** (United Kingdom),  
**Barbara J. Ford** (United States),  
**Shawky Salem** (Egypt) (2nd term),  
**Zhang Xiaolin** (China),  
**Gunnar Sahlin** (Sweden),  
**Réjean Savard** (Canada),  
**Sang-Wan Han** (Korea, Rep. Of),  
**Adolfo Rodriguez Gallardo** (Mexico),  
**Vinyet Panyella** (Spain) (2nd term),  
**Tiiu Valm** (Estonia) (2nd term).

## IFLA &amp; WIPO - ACCESS TO KNOWLEDGE (A2K) TREATY (cont.)

**Intervention by IFLA**, Inter-Sessional Intergovernmental Meeting on a Development Agenda for WIPO 2nd Session, Geneva, June 20-22, 2005  
<http://www.ifla.org/III/clm/p1/A2K-2.htm>

**Joint statement of IFLA and eIFL (Electronic Information for Libraries)**, Permanent Committee on Cooperation for Development Related to Intellectual Property (PCIPD), 4th Session, Geneva, April 14-15, 2005  
<http://www.ifla.org/III/clm/p1/A2K-3.htm>

**Statement by IFLA**, Inter-Sessional Intergovernmental Meeting on a Development Agenda for WIPO 1st Session, Geneva, April 11-13, 2005,  
<http://www.ifla.org/III/clm/p1/A2K-4.htm>

## News from ICABS

ICABS is the IFLA-CDNL Alliance for Bibliographic Standards. This column consists of selections from the **ICABS Activity Report August 2004 - January 2005**

available at:

<http://www.ifla.org/VI/7/annual/ICABS-Report01-2005.pdf>.

## BRITISH LIBRARY (BL)

*Selections from the report by C. Brazier, A. Danskin and A. MacEwan*

## Web Archiving

The BL's Web Archiving Programme has implemented one of its major strands with the start of operations of the UK Web Archiving Consortium (UKWAC), where the BL is a partner along with the national Archives, the National Library of Scotland, National Library of Wales, the Wellcome Trust, and JISC. This is a 2 year project designed to archive c. 6000 sites of UK interest in various fields using the PANDAS software designed by the NLA. The work runs in parallel to the library's existing intake of digital materials on a voluntary basis under a code of practice agreed with UK publishers in 2000. Digital ingest, collection management, access and preservation is being developed in line with the regulations to be established under the newly expanded legal deposit legislation. Work on a smart crawler is also continuing with the IIPC (International Internet Preservation Consortium).

## DIE DEUTSCHE BIBLIOTHEK (DDB)

*Selections from the report by Renate Gömpel*

## VIAF cooperative

The goal of the VIAF project is to prove the feasibility of one model 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

## IFLA NEWS

**News from ICABS** (cont.)

responsible for the VIAF cooperative. Another important partner in this project is OCLC. The project is divided into 4 stages: 1. Linking existing records; 2. Build the server - Search and retrieval; 3. Ongoing Maintenance - OAI Harvesting; 4. End user applications – Display. At the present stage 1 of the project the Library of Congress and DDB are examining the results of the first matching of records to test the algorithm applied and to analyse the record elements used for the matching process. Further testing is planned.

**KONINKLIJKE BIBLIOTHEEK (KB)**  
*selections from the report by Ingeborg Verheul*

**Digital preservation**

KB will write a state-of-the-art assessment on the use of standards in digital archiving, based on the experiences of the worlds leading library institutions in the field of digital preservation. The KB-ICABS report will mainly be based on desk research, focusing on recent publications and research. Based on the experiences of the KB four specific questions on standardisation in the field of long-term archiving of electronic resources will be the main focus of the research. These questions concern: 1. the use of standards in the international library field on developing, implementing and managing electronic repositories; 2. standardisation on organizational aspects and work flow within digital preservation; 3. the use of standards in the research on the development of digital preservation strategies, for both preservation and permanent access and 4. the need for new standards on the development of future strategies. The report will be available in the summer of 2005.

**NATIONAL LIBRARY OF AUSTRALIA (NLA)**  
*selections from the report by Pamela Gatenby*

**Web harvesting**

The Library joined the International Internet Preservation Consortium (IIPC) in July 2003 and has been actively involved in its work since then. In close cooperation with the Bibliothèque nationale de France, we led a Working Group to investigate the identification, acquisition, storage and display of

publications and web sites that are database driven. A tool named Xinq has been developed to enable the automatic production of access interfaces for archived databases. Xinq will be made available open source through the IIPC. Based on its experience in creating the PANDORA Digital Archiving System (PANDAS), in November 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.

**Automated deposit and archiving of online government resources**

The Commonwealth Metadata Pilot Project aims to improve access to Australian government information published online by automating the contribution of metadata to the national bibliographic database provided through the Kinetica service, and by automating the archiving of content associated with the metadata in *PANDORA: Australia's web archive*. Data is converted from its original format to the MODS standard and then to MARC format for loading onto the national database.

**Other activities:**

Explore more cost-effective ways for creating resource discovery metadata for web resources selected for archiving, by a review of standards and international approaches to metadata creation for web resources. The results will be made available through PADI. It is expected that this action will conclude in late-2005.

**LIBRARY OF CONGRESS**, *selections from the report by Sally McCallum*

**MARC 21 and its XML derivatives**

MARCXML, also available from the web site, provides a lossless pathway from MARC 21 to MARC in XML and then back. Several transformations were updated that move data to and from MARCXML and other XML metadata schemas such as MODS, Dublin Core, ONIX (bibliographic data content) - all downloadable from the web site. MADS, the authority data companion to schema for bibliographic data, MODS, was revised in late 2004. A new version was prepared and released for review in February 2005.

**MAINTAINING ACCESS TO DIGITAL COLLECTIONS**

Session 150, organized by the ICABS  
**Thursday, 18 August 2005**

08.30 – 10.30h

**Z39.50 and SRW/SRU**

Work continued on Z39.50 Next Generation (ZING) services: SRU and SRW. The ZING Editorial Board is developing an Update service at the request of several users. Their approach is to profile the use of standards and practices, including web standards and special ones (like METS), for this new service. METS is of special interest because compound documents are a component of the service. A first step toward formal standardization of SRU and SRW was made by the registration of those protocols with NISO. They were approved in October 2004.

**Metadata and XML metadata schemes**

The work of the PREMIS WG, an international task force developing core data elements for the preservation of material, completed its draft report and data dictionary in February 2005. This 18 month effort builds on the work of earlier groups and experiments such as CEDARS, NLA initiatives, NEDLIB, and others. The goal of the group was to define the elements and evaluate alternative strategies for encoding and managing preservation metadata. A schema for using the element list in METS documents is now under preparation. Version 1.4 of METS was released in late 2004 .

**NATIONAL LIBRARY OF PORTUGAL (NLP)**  
*selections from the report by F. Campos*

The NLP is responsible for the IFLA UNIMARC Core Activity. The Permanent UNIMARC Committee (PUC) finished the UNIMARC/Holdings Format and the revision of UNIMARC/Authorities Manual, posted on IFLANET in February. The UNIMARC Core Activity will held a session during the Oslo Conference on "MARC and XML derivatives: the state of the art" (see page 7). The NLP is also planning the international conference "UNIMARC & Friends", to be held in Lisbon, March 2006 (see next page).

## BACK PAGE

## FORTHCOMING CONFERENCES



IFLA has been heavily involved in the preparations for the World Summit on the Information Society, the first phase of which was held in Geneva, December 2003. The second phase will be held in Tunis, 16-18 November 2005.

**Promoting the global information commons. A statement by IFLA to WSIS Tunis PrepCom2.**

By Alex Byrne, IFLA President-elect.  
Available at:  
<http://www.ifla.org/III/wsisis/wsisis-24Feb05.html>.

**IFLA's three pillars and WSIS**, by Alex Byrne, IFLA President-elect . Available at:  
<http://www.ifla.org/III/ThreePillars-full.pdf>.



**WSIS pre-Summit conference: "Libraries - the Information Society in Action"**, Bibliotheca Alexandrina of Alexandria, Egypt, 10-11 November 2005.

This WSIS pre-conference will present some of the best practices from libraries around the world on the areas of health, education and training, media literacy, preserving of cultural heritage and disaster preparedness. See the Draft agenda at:  
<http://www.bibalex.org/wsisaalex/agenda.htm>.

**WORLD BOOK CAPITAL 2007**

Bogotá (Colombia) was chosen by the Selection Committee of the World Book Capital 2007, made up of representatives of the International Publishers Association (IPA), the International Booksellers Federation (IBF), IFLA and UNESCO. More information at:  
<http://www.ifla.org/III/announce/2007WorldBookCapital-en.htm>

**FUTURE WLIC**

World Library and Information Congress - 72nd IFLA General Conference and Council  
Seoul, Korea, August 2006

**Theme: Libraries: Dynamic Engines for the Knowledge and Information Society**

<http://www.ifla.org/IV/ifla72/index.htm>

*In recent years, society has been changing rapidly with the onset of a new digital era and rapid developments in information technology and digital communications.*



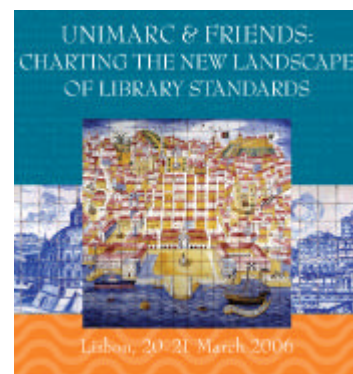
World Library and Information Congress: 73rd IFLA General Conference and Council  
Durban, South Africa,  
August 2007

Theme: Libraries for the future: progress, development and partnerships

<http://www.ifla.org/IV/ifla73/index.htm>



**UNIMARC CORE ACTIVITY**



International conference

**UNIMARC & FRIENDS  
CHARTING THE NEW LANDSCAPE OF  
LIBRARY STANDARDS**

LISBON  
20-21 March 2006

With the expansion of the WWW in the last decade, libraries have been facing a multiplicity of challenges in the changing network infrastructure and in new types, genres and forms of information resources and information services. This has motivated novel approaches in terms of metadata and the rethinking of models underpinning bibliographic retrieval services. Furthermore, with the evolving technology of the WWW environment new requirements and opportunities have emerged for the ways in which bibliographic data is encoded, transmitted and reused.

The objective of this Conference is to disclose the current state of the art of new conceptual models and data specifications with implications for the future of MARC standards.

The conference will explore topics such as trends in the revision of ISBDs, cataloguing codes, FRBR and FRANAR models, non-MARC metadata schemes and Web based transmission standards.

Venue: Calouste Gulbenkian Foundation, Lisbon, Portugal

Organisation: IFLA UNIMARC Core Activity (<http://www.ifla.org/VI/8/up.htm>)