Integrated Management of Union Catalogues and Researchers' Bibliographies within COBISS.Net

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IZUM
Institut informacijskih znanosti, Maribor

• By the Decision of the Slovenian Government IZUM was established as a non-profit public institution with the role of:
  — the information service for research, education and culture
  — the national bibliographic service (National COBISS Centre)

• Based on the establishment of COBISS.Net and the free exchange of bibliographic records, created in library information systems (LIS) of Bosnia and Herzegovina, Montenegro, Macedonia, Slovenia, Serbia and Bulgaria, as well as on the agreements with the line ministries of certain countries, IZUM acts as:
  — the regional centre for the development of integrated library systems and current research information systems

Milestones of IZUM (1)

• 1984: In the University Library in Maribor the first machine readable bibliographic record is created and the automated loan developed by RCUM (Computer Centre of the University in Maribor) is implemented

• 1987: The Presidency of the then Association of the Yugoslav National Libraries accepts the concept of shared cataloguing as the common basis of the LIS of Yugoslavia

• 1988: The Federal Secretariat for the development elects RCUM as the developer of the Scientific and Technological Information System of Yugoslavia

• 1990: RCUM is transformed into the Institute of Information Science of the University of Maribor (IZUM)
Milestones of IZUM (2)

- 1991: IZUM promotes COBISS as the upgrade of the shared cataloguing system; due to the breakup of Yugoslavia, 55 libraries outside Slovenia stop participating in the shared cataloguing system
- 1992: The Slovenian Government issues a decree, on the basis of which IZUM splits from the University of Maribor
- 1993–2003: Libraries from the former Yugoslav countries (except Croatia) gradually start renewing the cooperation with IZUM in establishing LIS on the COBISS platform
- 2003: Agreement on the establishment of the COBISS.Net network is signed

IZUM: Staff and Budget

- 110 employees (IT professionals and librarians)
- Annual income: EUR 7.0 million
  - 90% from the state budget, 10% from other resources
  - EUR 1.0 million for foreign databases and service licences
  - EUR 700,000 for purchasing equipment
- Specific budgetary resources allocated for the support to development of the libraries in the region
  - EUR 900,000 (2009)
COBISS.Net

Regional network of national library information systems and current research information systems

Information infrastructure for science, education and culture

Support to knowledge and intercultural dialogue

Project of regional development cooperation

Number of participating libraries:
- Slovenia: 393
- Serbia: 117
- Macedonia: 43
- Bosnia and Herzegovina: 40
- Montenegro: 26
- Bulgaria: 1

Total number (30 April 2010): 620
IZUM offers to libraries within COBISS.Net

- Organisational solutions and software support to set up the national LIS system and to automate library functions
- Methodology and software to set up the national research information system (CRIS) and to manage researchers' bibliographies
- Consulting, training programmes and technical support
- Assistance in obtaining funds for development projects
COBISS

Co-operative online bibliographic system and services

• An organisational model of joining libraries into a national LIS with shared cataloguing
  — National COBISS Centre (library information agency)
  — libraries as full members or associated members
• Library automation software (COBISS2, COBISS3) with multi-language user interfaces
  — cataloguing, acquisitions, loan, etc.
  — OPAC, researchers' bibliographies
• LIS of the participating countries: COBISS.SI, COBISS.BH, COBISS.MK, COBISS.SR, COBISS.CG and COBISS.BG.

COBISS

Standardised processing of bibliographic resources

• Cataloguing rules by E. Verona (PPIAK)
• COMARC format for data exchange
  — COMARC/A, COMARC/B (UNIMARC-based)
• Example of General List of Subject Headings
  — COBISS.SI General List of Subject Headings - SGC (2000-+)
  — bi-lingual: Slovene, English
  — phase I: translation and adaptation of Sears (17th Ed.)
  — phase II: upgrading and restructuring based on LCSH and Rameau
Current research information systems

- National databases:
  - Research organisations
  - Research groups
  - Researchers
  - Research projects
- CERIF (Common European Research Information Format)
- Direct link to the COBISS bibliographic system through researcher's codes
- Various applications for the quantitative evaluation of R&D results

Current research information systems
(10 May 2010)

<table>
<thead>
<tr>
<th>No. of entities</th>
<th>Slovenia</th>
<th>Serbia</th>
<th>Macedonia</th>
<th>Montenegro</th>
<th>BiH</th>
<th>Albania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research organisations</td>
<td>818</td>
<td>150</td>
<td>78</td>
<td>24</td>
<td>78</td>
<td>8</td>
</tr>
<tr>
<td>Researchers</td>
<td>13,638</td>
<td>8,075</td>
<td>2,010</td>
<td>942</td>
<td>1,677</td>
<td>667</td>
</tr>
</tbody>
</table>

The E-CRIS systems in Serbia, Macedonia, Montenegro, Bosnia and Herzegovina, and Albania are still in a pilot stage.
Contractual relations

• **Agreement on the establishment of the COBISS.Net network** and the free exchange of bibliographic records, created in LIS of Bosnia and Herzegovina, Montenegro, Macedonia, Slovenia, Serbia and Bulgaria

• **Agreements** concluded between IZUM and national libraries (National COBISS Centres – NCC) on **the implementation of the COBISS system** in individual countries

• **Agreements on full membership of libraries** in national LIS, concluded between interested libraries and a national library (NCC)

• **Agreements concluded between IZUM and line ministries, agencies and universities** on setting up national E-CRIS systems
### Libraries in COBISS.Net (1)

(10 May 2010)

<table>
<thead>
<tr>
<th>Library type</th>
<th>Slovenia</th>
<th>Serbia</th>
<th>Macedonia</th>
<th>Montenegro</th>
<th>Bosnia and Herzegovina</th>
<th>Bulgaria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Public</td>
<td>60</td>
<td>51</td>
<td>24</td>
<td>11</td>
<td>16</td>
<td>0</td>
<td>162</td>
</tr>
<tr>
<td>Academic</td>
<td>73</td>
<td>41</td>
<td>10</td>
<td>9</td>
<td>18</td>
<td>0</td>
<td>151</td>
</tr>
<tr>
<td>Special</td>
<td>124</td>
<td>23</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>163</td>
</tr>
<tr>
<td>School</td>
<td>135</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>136</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>393</strong></td>
<td><strong>117</strong></td>
<td><strong>43</strong></td>
<td><strong>26</strong></td>
<td><strong>40</strong></td>
<td><strong>1</strong></td>
<td><strong>620</strong></td>
</tr>
</tbody>
</table>

### Libraries in COBISS.Net (2)

<table>
<thead>
<tr>
<th>COBISS.Net</th>
<th>System established</th>
<th>Number of libraries</th>
<th>Users of COBISS applications</th>
<th>Bibliographic records in COBIB</th>
<th>Summary holdings data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovenia*</td>
<td>1987</td>
<td>393</td>
<td>2,292</td>
<td>3,671,033</td>
<td>15,860,609</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>1998</td>
<td>40</td>
<td>174</td>
<td>298,930</td>
<td>528,129</td>
</tr>
<tr>
<td>Macedonia</td>
<td>2001</td>
<td>43</td>
<td>239</td>
<td>449,704</td>
<td>1,025,860</td>
</tr>
<tr>
<td>Serbia</td>
<td>2003</td>
<td>117</td>
<td>768</td>
<td>2,145,496</td>
<td>3,834,978</td>
</tr>
<tr>
<td>Montenegro</td>
<td>2003</td>
<td>26</td>
<td>112</td>
<td>192,116</td>
<td>303,435</td>
</tr>
<tr>
<td>Bulgaria*</td>
<td>2010</td>
<td>1</td>
<td>42</td>
<td>740,514</td>
<td>574,431</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>620</strong></td>
<td><strong>3,627</strong></td>
<td><strong>7,497,793</strong></td>
<td><strong>22,127,442</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Slovenia: 705,614 name authority records and 27,700 subject headings records
* Bulgaria: 108,869 name authority records and 15,683 subject headings records
**Exchange of bibliographic records**

**11 November 2004 – 10 May 2010**

<table>
<thead>
<tr>
<th>COBISS.Net</th>
<th>Downloaded from COBI.B.SI</th>
<th>Downloaded from COBI.B.SR</th>
<th>Downloaded from COBI.B.MK</th>
<th>Downloaded from COBI.B.CG</th>
<th>Downloaded from COBI.B.BH</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>COBISS.SI</td>
<td>-</td>
<td>6,946</td>
<td>688</td>
<td>175</td>
<td>371</td>
<td>8,180</td>
</tr>
<tr>
<td>COBISS.SR</td>
<td>22,225</td>
<td>-</td>
<td>2,053</td>
<td>2,787</td>
<td>5,292</td>
<td>32,357</td>
</tr>
<tr>
<td>COBISS.MK</td>
<td>11,083</td>
<td>21,855</td>
<td>-</td>
<td>51</td>
<td>290</td>
<td>33,279</td>
</tr>
<tr>
<td>COBISS.CG</td>
<td>3,860</td>
<td>95,743</td>
<td>164</td>
<td>-</td>
<td>1,028</td>
<td>100,795</td>
</tr>
<tr>
<td>COBISS.BH</td>
<td>5,560</td>
<td>28,065</td>
<td>139</td>
<td>277</td>
<td>-</td>
<td>34,041</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42,728</strong></td>
<td><strong>152,609</strong></td>
<td><strong>3,044</strong></td>
<td><strong>3,290</strong></td>
<td><strong>6,981</strong></td>
<td><strong>208,652</strong></td>
</tr>
</tbody>
</table>

**Bibliographic records in COBI.B.SI**

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of bibliographic records</td>
<td>3,671,033</td>
<td>100%</td>
</tr>
<tr>
<td>Monographs and other completed works</td>
<td>2,202,818</td>
<td>60%</td>
</tr>
<tr>
<td>Serials</td>
<td>184,001</td>
<td>5%</td>
</tr>
<tr>
<td>Articles and other component parts</td>
<td>618,175</td>
<td>17%</td>
</tr>
<tr>
<td>Performed works</td>
<td>68,041</td>
<td>2%</td>
</tr>
<tr>
<td>Number of records with at least one author with the researcher’s code</td>
<td>1,035,697</td>
<td>28%</td>
</tr>
</tbody>
</table>

Registering of bibliographies within COBISS.SI is mandatory for Slovenian researchers!
Creators of bibliographic records for researchers' bibliographies

<table>
<thead>
<tr>
<th>Created by library</th>
<th>No. of records</th>
<th>Percentage share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>154,319</td>
<td>14.9</td>
</tr>
<tr>
<td>Academic</td>
<td>517,849</td>
<td>50.0</td>
</tr>
<tr>
<td>Special</td>
<td>293,102</td>
<td>28.3</td>
</tr>
<tr>
<td>Public</td>
<td>32,107</td>
<td>3.1</td>
</tr>
<tr>
<td>School</td>
<td>2,071</td>
<td>0.2</td>
</tr>
<tr>
<td>Other (former Yugoslavia)</td>
<td>36,249</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,035,697</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Classification of bibliographic units in COBISS

- Bibliographic records relevant for bibliographies include the data on researcher's code, research organization's code and document/work type.
- Classification of bibliographic units is based on the uniform typology (definition) of documents/works:
  - Articles and other component parts (1.xx) 21 types
  - Monographs and other completed works (2.xx) 28 types
  - Performed works - events (3.xx) 7 types
- Examples of types of documents/works (1.01 Original Scientific Article, 1.02 Review Article, 1.04 Professional Article, 2.01 Scientific Monograph, etc.)
- Classification of units is done by authors or experts on the subject, whereas the classification is verified by specialised information centres for individual science disciplines.
ARTICLES AND OTHER COMPONENT PARTS

1.01 Original Scientific Article
An original scientific article is only the first-time publication of original research results in a way that allows the research to be repeated and the findings checked. As a rule, it follows the IMRAD (Introduction, Methods, Results and Discussion) scheme for experimental research, or it is organised in a descriptive way for descriptive scientific areas. The article must be published in a scientific journal with a peer-review system of accepting articles and must be peer-reviewed. The peer-review system must be evident from the instructions for authors.

Conference contributions, even if published in a scientific journal, do not fall into this category, but must be put into the categories 1.06 or 1.08.

1.02 Review Article
A review article is an overview of the latest works in a specific subject area, the works of an individual researcher or a group of researchers with the purpose of summarising, analysing, evaluating or synthesising the information that has already been published. A review article ……

Quantitative evaluation of bibliographic indicators in Slovenia

- Bibliographies are evaluated when researchers apply for tenders issued by the Slovenian Research Agency (SRA) and when they are elected to university titles
- Methodology for the evaluation of bibliographic indicators of research performance (categorisation and rating by points) is defined by the regulations of SRA and universities
- Procedures related to the bibliographic unit categorisation and rating by points are automated, and are based on the interlinking of the SICRIS, COBISS.SI and WoS information systems
- Evaluation results are available to the public within the SICRIS system through researchers' and program/project groups' web pages
Categorisation of bibliographic units in terms of quantitative evaluation

- **Articles** are categorised based on the journal impact factor, on whether they are indexed in different databases, on the number of citations, etc.
- **Monographs** are categorised based on the publisher, scope, etc.
- **Conference proceedings** are categorised based on the type and the importance of the conference
- **Patents** are categorised based on the country granting a patent and/or the type of testing
- ...

### MATRIX EVALUATION MODEL

<table>
<thead>
<tr>
<th>Classification</th>
<th>A1</th>
<th>A2</th>
<th>B1</th>
<th>B2</th>
<th>C1</th>
<th>C2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.01 Original Scientific Article</td>
<td></td>
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<tr>
<td>1.02 Review Article</td>
<td></td>
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<tr>
<td>1.03 Short Scientific Article</td>
<td></td>
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<tr>
<td>1.06 Published Scientific Conference Contribution (Invited lecture)</td>
<td></td>
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<tr>
<td>1.08 Published Scientific Conference Contribution</td>
<td></td>
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</tr>
<tr>
<td>1.16 Independent Scientific Component Part in a Monograph</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>2.01 Scientific Monograph</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2.02 Professional Monograph</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>2.24 Patent</td>
<td></td>
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</tr>
</tbody>
</table>

Dr. Matej Brešar [08721]

Bibliografski kazalci raziskovalne uspešnosti (2005-2010)

Kategorizacija po metodologiji ARRS - naravoslovje
### Članki in drugi sestavni deli

   Kategorija: I A3 (Z1); tipologijo je verificiral OSICN
točk: 40, št. avtorjev: 2

   [http://dx.doi.org/10.1017/S0305004105008801] [COBISS SI-ID 13984601], [ICR, Web]. št. citatov do 6.5.10: 8, brez avtorstev: 6, nominalno št. citatov: 11
   Kategorija: I A2 (Z1); tipologijo je verificiral OSICN
točk: 85-45, št. avtorjev: 1

   Kategorija: I A3 (Z1); tipologijo je verificiral OSICN
točk: 2609, št. avtorjev: 2

   [COBISS SI-ID 13381221], [ICR, Web]. št. citatov do 10.3.09: 2, brez avtorstev: 0, nominalno št. citatov: 0
   Kategorija: I A3 (Z1); tipologijo je verificiral OSICN
točk: 5619, št. avtorjev: 2
Bibliographic units in Web of Science
(2005 - 2010)

Bibliographic units in Web of Science
(per 1,000 inhabitants)
Other services for end users in Slovenia

- **COBISS/OPAC**
- Service *My Library* (View material on loan, Renew loan periods, Reserve and Ordering material)
- *Library compensation service* for authors whose works are available for loan in public libraries
- Reference service *Ask a Librarian*
- *Web-based training*

www.cobiss.si
Merci pour Votre Attention!